

TREATMENT DECISION MAKING ON INSULIN FOR TYPE  
2 DIABETES: AN ANALYSIS OF ACTIVITY AND  
ACCOUNT

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FACULTY OF LANGUAGES AND LINGUISTICS  
UNIVERSITY OF MALAYA  
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ACCOUNT**

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**FACULTY OF LANGUAGES AND LINGUISTICS  
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**TREATMENT DECISION MAKING ON INSULIN FOR TYPE 2 DIABETES:  
AN ANALYSIS OF ACTIVITY AND ACCOUNT**

**ABSTRACT**

Low adoption of insulin therapy for type 2 diabetes leaves many patients at risk of complications. A patient decision aid (PDA) was developed to facilitate informed and shared decision making (SDM) in consultations about starting insulin (DMIT Group, 2012). However, there is limited interactional data about PDA use and treatment decision making in Malaysia. This study applies Theme-oriented Discourse Analysis (Roberts & Sarangi; Sarangi, 2010a, 2010b) to study treatment decision making about insulin as activity and account, by analyzing two types of discursive data: doctor-patient consultations and research interviews with doctors and patients. Data were transcribed using Jefferson notation for the consultations and standard orthography for the interviews. Activity Analysis was applied to the consultations, beginning with mapping of whole consultations and followed by closer analysis of talk, to examine doctors' and patients' practices in using the PDA and negotiating treatment decisions. Accounts Analysis was then used to analyse the rhetorical practices of doctors and patients in constructing accounts of treatment decision making in the interviews. Activity Analysis of the consultations showed that the main consultation phases were Assessment and Treatment, with Assessment serving the rhetorical function of supporting doctors' recommendations. Consultations were mostly doctor-driven, becoming longer and more iterative when patients had not read the PDA or resisted insulin. Doctors asked questions about the PDA to determine if patients were "informed" and used the PDA to provide information about insulin only if patients had not read it. Otherwise, doctors initiated talk on treatment by eliciting patient perspectives. Although they elicited patient participation, doctors' questions also constrained patient responses and their selective PDA use had implications for SDM. Treatment negotiation was largely driven by doctors' questions while patient

responses conveyed resistance directly or indirectly. Negotiations ended on shared footing with either the patient accepting insulin or the doctor accepting the patient's preferred treatment. In displays of professional or personal responsibility, doctors and patients deployed different meanings of control in their accounts: the biomedical measure of sugar control, controlling the disease, controlling the self, controlling the patient and controlling the decision. Doctors and patients used various discursive and rhetorical devices, including character work, event work and contrast, to construct their accounts. Doctors' accounts foregrounded their attempts to gain the patient's acceptance of insulin, while aligning their practices with patient-centred ideals. While doctors and patients invoked the patient's ultimate control over his health, patients who accepted insulin conveyed a loss of control. Conversely, those who refused insulin emphasised their control over their diet and blood sugar, which legitimised their treatment choice. Findings show that doctors' practices while using the PDA can facilitate or constrain patient knowledge and choice in decision making. However, pursuing patient acceptance may not contradict SDM principles, as insulin is the medically recommended treatment in this context and all the decisions eventually ended on shared footing. Because patients may have negative perspectives towards insulin, including viewing it as a loss of control, insight into interactional practices can aid doctors in managing potential conflicts during treatment decision making.

Keywords: treatment decision making, patient decision aid, insulin, Malaysia, discourse analysis.

**MEMBUAT KEPUTUSAN TENTANG RAWATAN BERKAITAN INSULIN  
UNTUK DIABETES JENIS 2: ANALISIS AKTIVITI DAN AKAUN**

**ABSTRAK**

Tahap rendah dalam penggunaan insulin untuk diabetes jenis 2 di Malaysia memberi dampak risiko komplikasi. Sebuah bantuan membuat keputusan untuk pesakit (*patient decision aid*) telah disediakan untuk membantu pembuatan keputusan berkaitan insulin (DMIT Group, 2012). Walau bagaimanapun, data interaksi tentang penggunaan bantuan membuat keputusan dan pembuatan keputusan tentang rawatan di Malaysia amat terhad. Kajian ini meneliti pembuatan keputusan rawatan berkaitan insulin, dari segi aktiviti dan akaun. Berasaskan pendekatan Analisis Wacana Berorientasikan Tema (*Theme-oriented Discourse Analysis*), dua jenis data telah dikumpulkan: 11 perundingan doktor-pesakit dan 7 temubual penyelidikan (3 doktor dan 4 pesakit). Data ditranskripsi dengan notasi Jefferson (perundingan) dan ortografi standard (temubual). Analisis Aktiviti digunakan untuk data perundingan, bermula dengan pemetaan perundingan diikuti oleh analisis wacana. Analisis Akaun kemudiannya diaplikasi kepada data temubual untuk mengenalpasti amalan wacana dan retorik doktor dan pesakit di dalam akaun mengenai pengalaman membuat keputusan berkaitan insulin. Fasa utama perundingan doktor-pesakit adalah fasa Penilaian dan Rawatan, di mana fasa Penilaian memainkan fungsi retorik untuk menyokong cadangan rawatan doktor. Perundingan doktor-pesakit kebanyakannya didorong oleh doktor, dan menjadi lebih panjang dan berulang jika pesakit belum membaca bantuan membuat keputusan atau menentang insulin. Doktor menanyakan soalan mengenai bantuan membuat keputusan untuk menentukan sama ada pesakit “maklum” dan seterusnya menggunakan bantuan membuat keputusan untuk memberi maklumat hanya jika pesakit belum membacanya. Jika pesakit sudah membacanya, doktor memulakan perbincangan mengenai rawatan dengan bertanya tentang perspektif pesakit. Walaupun soalan-soalan doktor menggalakkan penglibatan pesakit, soalan-soalan mereka juga menghadkan jawapan pesakit. Penggunaan bantuan

membuat keputusan secara selektif juga memberi implikasi untuk pembuatan keputusan “bersama”. Rundingan pembuatan keputusan tentang rawatan sebahagian besarnya didorong oleh soalan-soalan doktor, manakala respon pesakit menyampaikan penolakan insulin secara langsung atau tidak langsung. Rundingan berakhir dengan keputusan “bersama”, sama ada pesakit menerima insulin atau doktor menerima rawatan pilihan pesakit. Dalam memaparkan tanggungjawab profesional atau peribadi, doktor dan pesakit menggunakan konsep “kawalan” (*control*) dari segi makna yang berbeza: kawalan gula, mengawal penyakit, mengawal diri, mengawal pesakit yang tidak terkawal dan mengawal keputusan. Akaun doktor memaparkan usaha untuk menyakinkan pesakit menerima insulin, dan pendekatan kepada penjagaan yang berpusatkan pesakit. Walaupun pesakit digambarkan sebagai mengawal kesihatannya, pesakit yang telah menerima insulin juga menyampaikan perasaan seolah hilang kawalan. Sebaliknya, pesakit yang menolak insulin menekankan kawalan diri mereka dalam mengawal pemakanan dan tahap gula darah. Dapatan menunjukkan bahawa amalan interaksi doctor semasa menggunakan bantuan membuat keputusan boleh menggalak atau menghadang pengetahuan dan pilihan pesakit dalam membuat keputusan rawatan. Walau bagaimanapun, usaha doktor dalam menggalakkan pesakit untuk menerima insulin mungkin tidak bercanggah dengan prinsip pembuatan keputusan bersama, kerana insulin adalah rawatan yang disyorkan dalam konteks ini dan semua keputusan berakhir secara bersama. Kerana pesakit mungkin menganggap penerimaan insulin sebagai kehilangan kawalan, pemahaman lebih mendalam tentang amalan perbualan dapat membantu para doktor dalam mengendalikan konflik yang mungkin timbul semasa membuat keputusan tentang rawatan berkaitan insulin.

Katakunci: keputusan tentang rawatan, bantuan membuat keputusan, insulin, Malaysia, analisis wacana.

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## LIST OF SYMBOLS AND ABBREVIATIONS

CA	:	Conversation Analysis
DA	:	Discourse Analysis
HCP	:	Healthcare professional
RQ	:	Research question
SDM	:	Shared decision making
PDA	:	Patient decision aid
UMMC	:	University Malaya Medical Centre
[ ]	:	Overlapping turns
=	:	No discernible interval/silence between turns
(.),	:	Discernible silence but less than 0.2 of second
(0.2)	:	Silence within turns or in talk
.	:	Closing intonation
,	:	Slightly rising intonations
?	:	Rising intonation
ː, wo:rd	:	Elongation of preceding sound
<u>Word</u>	:	Emphasis
WORD	:	Spoken more loudly
°word°	:	Spoken more softly
↑, ↓	:	Marked increase/decrease in pitch
Hhh	:	Outbreath
.hh	:	In breath or laughter
Hah, heh etc.	:	Laughter
£word£	:	‘Smiley’ voice
<word>	:	Talk is drawn out
>word<	:	Talk is speeded up
((word ))	:	Transcriber’s notes
(), (word)	:	Transcriber unable to hear or uncertain

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## CHAPTER 1: INTRODUCTION

This thesis investigates the social practice of treatment decision making about insulin for type 2 diabetes through the analysis of doctor-patient consultations and research interviews with doctors and patients who have type 2 diabetes. This introductory chapter presents an overview of the study and its purpose, while also providing background information about the research context and how this study is designed. The first section presents the research problem (Section 1.1), followed by a discussion of the overall purpose of the study and its objectives in Section 1.2. An overview of the methodology, including the theoretical orientation of the study and research method, is then presented (Section 1.3). Section 1.4 presents the contextual background to the study, considering the clinical and institutional contexts, and the perspectives of doctors and patients, in relation to treatment decision making on insulin. The research gaps which this study aims to address are then discussed briefly (Section 1.5), after which the significance and limitations of the study are presented in Sections 1.6 and 1.7, respectively. The chapter concludes with an outline of the thesis (Section 1.8).

### 1.1 Research Problem

The prevalence of type 2 diabetes, which has tripled over the past three decades and is currently estimated at 17.5% of Malaysians (Tee & Yap, 2017), along with the poor control of this condition (Feisul & Azmi, 2013), indicates that its management has significant physical, social and financial implications for individuals and society. As with other chronic diseases that are largely managed by patients in their daily lives, partnership between doctor and patient is a key aspect of managing type 2 diabetes. It is unsurprising, therefore, that talk between doctors and their patients has been linked to successful management of this condition (Corser, Holmes-Rovner, Lein, & Gossain, 2007; Zolnierek & DiMatteo, 2009).

During doctor-patient consultations about type 2 diabetes, patients are educated about how to manage their condition and treatment decisions are made about interventions to control patients' sugar level, with the aim of minimising complications risk. Early interventions for type 2 diabetes include lifestyle change and oral medication, but the progressivity of diabetes means that many patients eventually face the decision about whether or not to start insulin. However, research has identified a wide range of patient, professional and systemic barriers to the initiation of insulin, including patient resistance, which is widely documented including in Malaysia (Benroubi, 2011; Ng, Lai, Lee, Azmi, & Teo, 2015; Hassan et al., 2013).

The high stakes involved in the treatment of diabetes in Malaysia have prompted large-scale efforts by the Ministry of Health to improve prevention and treatment. This includes research which investigates clinical outcomes of medications for type 2 diabetes as well research exploring various patient factors. Recent studies reflect a growing awareness of patient-centred approaches among Malaysian doctors, for example, feasibility studies of the patient-centred Chronic Care Model (Bujang, 2017; Hussein, Taher, Singh, & Swee, 2015) and studies about psychosocial aspects of patients' illness experience, such as quality of life, diabetes-related distress and social support (Chew, Mohd-Sidik, & Shariff-Ghazali, 2015; Daher, AlMashoor, & Winn, 2016; E. L. Lee, Wong, Tan, & Sheridan, 2017).

Prompted by the low adoption of insulin in Malaysia, patients' perspectives towards insulin have also been explored (Hassali et al., 2014; Hassan et al., 2013; Y. K. Lee, Low, & Ng, 2013; Tan, Asahar, & Harun, 2015), and attention has been given to treatment decisions involving insulin, for example, patients' decision making preferences (Y. K. Lee, Low, Lee, & Ng, 2015) doctors' views on barriers (P. Y. Lee, Lee, & Ng, 2012) and



the development of a patient decision aid called “*Making Choices: Should I Start Insulin?*” (DMIT Group, 2012; E. L. Lee et al., 2017; Y. K. Lee & Ng, 2017).

However, the literature does not shed much light on the talk between Malaysian doctors and their patients with type 2 diabetes, which is essentially the process by which treatment decisions about insulin are achieved. Since insulin can help prevent complications when other treatment options cannot control a patient’s blood sugar, doctor-patient consultations in which these decisions are made can be considered critical encounters that impact a patient’s long-term health.

## **1.2 Research Purpose and Objectives**

The overall purpose of this study is to provide medical practitioners with insight into the social practice of treatment decision making about starting insulin, guided by two research objectives:

**Objective 1:** To ascertain how doctors and patients make treatment decisions using a patient decision aid (PDA) on starting insulin; and

**Objective 2:** To describe how doctors and patients make meaning of their experiences of treatment decision making about insulin

These objectives underpin the current investigation into treatment decision making on insulin, focussing not only on the process by which it is performed, but also on how participants make meaning of their treatment decision making experiences. Two types of data are therefore required for analysis: the talk between doctors and patients during treatment decision making in consultations and the talk of doctors and patients about treatment decision making in research interviews. A qualitative, rather than quantitative approach, is thus deemed preferable, to enable examination of the collaborative process of decision making between doctors and patients and the discursive construction of their

treatment decision making experiences. The theoretical orientation of the study is described in the following section, followed by an overview of the methodology used.

### **1.3 Overview of Methodology**

This study employs a discourse analytic approach within the field of Applied Linguistics, which examines language as social action rather than as a stand-alone phenomenon. Discourse analysis encompasses a wide range of approaches, which nevertheless share some common theoretical assumptions. This section on methodology will therefore begin with a description of the basic assumptions about language and interaction which underpin the research design of this study.

#### **1.3.1 Theoretical Assumptions**

Discourse analysis grew out of Garfinkle's ethnomethodological approach to research, which is grounded in the assumption that meaning is created in social interaction and action, rather than existing independently of language use (Potter, 1996). Ethnomethodology emphasises the value of studying micro-level practices as the means by which larger social actions and social structures are achieved. These ideas were eventually developed into various approaches, including discourse analysis, which holds the view that social structures and social practices are constructed through discourse. Discourse analytic approaches include Conversation Analysis (CA), which is concerned with interactional structures and patterns and other Discourse Analytic (DA) approaches, which take a broader analytical perspective, drawing on sociological and linguistic concepts such as identity, face and power to consider the larger social context surrounding the talk.

Despite their differences, discourse analytic approaches share their conceptualisation of language as social action, and as context-bound and context-renewing, along with their emphasis on micro-level practices as the means by which social life and social selves are

achieved. These assumptions inform the methodology of this thesis, which is discussed next.

### 1.3.2 Overview of Research Method

This thesis applies Theme-Oriented Discourse Analysis (Roberts & Sarangi, 2005; Sarangi, 2010a, 2010b) to doctor-patient consultations in which a PDA about starting insulin is used and research interviews with doctors and patients with type 2 diabetes. Theme-Oriented Discourse Analysis is a flexible and interpretive approach that enables the analysis of talk both at turn level and at the level of entire interactions. According to Sarangi (2010a) the thematic approach applies concepts and frameworks from sociology and linguistics (analytic themes) to explicate discursive practices in relation to concerns in professional domains (focal themes), which makes it appropriate for the research context. Moreover, the approach can encompass Activity Analysis, Accounts Analysis and Conversation Analysis, among other methods.

This study employs Activity Analysis and Accounts Analysis, within Theme-oriented Discourse Analysis (Roberts & Sarangi, 2005; Sarangi, 2010b), to address the two research objectives described earlier. First, to ascertain how doctors and patients make treatment decisions using a PDA on starting insulin (Objective 1), Activity Analysis is applied to the doctor-patient consultations, guided by three Research Questions (RQ):

**RQ1:** *How is talk organised in the activity of routine visits for type 2 diabetes when a patient decision aid (PDA) on starting insulin is used?*

**RQ2:** *How do doctors use a PDA on starting insulin to facilitate shared decision making (SDM) during routine visits for type 2 diabetes?*

**RQ3:** *How do doctors and patients negotiate treatment decisions on starting insulin during routine visits for type 2 diabetes?*

Second, to describe how doctors and patients make meaning of their treatment decision making experiences (Objective 2), Accounts Analysis (Arribas-Ayllon, Sarangi, & Clarke, 2008b; Sarangi, 2010b) is utilised to examine doctors' and patients' accounts of their treatment decision making experiences as elicited in the research interviews. This analysis is guided by the fourth research question:

**RQ4:** *How do doctors and patients construct accounts about their experiences of treatment decision making on insulin therapy for type 2 diabetes?*

Table 1.1. summarises the application of Theme-Oriented Discourse Analysis in this study, providing information about the type and quantity of data and analytical method used to address each research question.

**Table 1.1: Application of Theme-Oriented Discourse Analysis**

No.	Research Question	Data	Method within Theme-oriented Discourse Analysis
RQ1	How is talk organised in the activity of routine visits for type 2 diabetes when a PDA on starting insulin is used?	11 recorded consultations Doctors and Patients w/diabetes	Activity Analysis <i>-Structural, Interactional &amp; Thematic mapping</i>
RQ2	How do doctors use a PDA on starting insulin to facilitate SDM during routine visits for type 2 diabetes?		<i>-Discourse Analysis, drawing on Conversation Analysis</i>
RQ3	How do doctors and patients negotiate treatment decisions on starting insulin during routine visits for type 2 diabetes?		<i>-Discourse Analysis, drawing on Conversation Analysis</i>
RQ4	How do doctors and patients construct accounts about their experiences of treatment decision making on insulin therapy for type 2 diabetes?	7 semi-structured interviews with: a) Doctors-3 b)Patients w/diabetes-4	Accounts Analysis <i>-Discourse Analysis of discursive and rhetorical practices in accounts</i>

The first three research questions focus on the performance of treatment decision making within the activity of routine visits for type 2 diabetes, in other words, the recorded doctor-patient consultations. The first question approaches the talk from a broad

perspective, mapping the structure, interaction and themes across whole consultations (RQ1). The next two questions examine the turn-level practices of doctors and patients, first, examining the use of the PDA within the SDM model (RQ2); and second, investigating negotiation of treatment decisions when patients resist insulin. The analysis for these two questions applies theme-oriented discourse analysis, which considers discursive and rhetorical practices of participants within the interactional trajectory of decision making, drawing heavily on Conversation Analysis to examine interaction on a turn-level.

In view of the limitations of focusing on a single encounter, it was deemed necessary to look beyond the consultations to investigate how doctors and patients make meaning of their experiences of treatment decision making on insulin in research interviews. In examining doctors' and patients' accounts, the aim was to include the perspectives of individual doctors and patients, and consider other contextual elements of treatment decision making such as the illness trajectory and broader social context surrounding chronic illness. The fourth research question (RQ4), therefore, focuses on the discursive and rhetorical practices used by doctors and patients to construct their treatment decision making experiences. Besides, utilising interviews may enable the capturing of themes that manifest differently outside the consultation.

When considered together, the four research questions aim to provide a comprehensive analysis of this professionally-situated social practice, by utilising discourse *of* and discourse *about* treatment decision making on insulin. Treatment decision making on insulin, like any social practice, is situated within a particular context, which influences how participants make meaning of and respond to each other's actions. This contextual background will be described in the following section.

## **1.4 Background to the Study**

This study investigates how doctors and patients collaboratively make decisions about whether the patient is going to start using insulin to manage their type 2 diabetes. Therefore, the focus of the study is on an interactional encounter between a professional and a patient that occurs within the institutional context of healthcare. The following subsections will briefly discuss these contextual aspects of the study, beginning with the clinical and institutional contexts and followed by the perspectives of individual doctors and patients.

### **1.4.1 Clinical Context: Management of Type 2 Diabetes in Malaysia**

Treatment decisions about starting insulin occur within the trajectory of managing type 2 diabetes, which is a chronic condition affecting the endocrine system that regulates hormone production, including the production of insulin, in the body. Diabetes affects the body's reaction to insulin, which normally functions to regulate glycaemic (or blood sugar) level. High sugar levels are linked to complications such as heart disease, stroke, eye problems and nerve damage. Management of diabetes, therefore, involves applying interventions to maintain the blood sugar at levels which minimise risk, according to measurements such as haemoglobin a1c (HbA1c), which normally ranges between 4% and 6%.

National guidelines for managing type 2 diabetes recommend an HbA1c level of between 6.6% and 7.0% for most patients with type 2 diabetes (Ministry of Health (MOH), 2015, p. 12). However, the National Diabetes Registry reports that type 2 diabetes is poorly controlled in Malaysia, with a mean HbA1c of 8.1% and only 23.8% of patients achieving HbA1c targets (Feisul & Azmi, 2013). This means that many patients are at risk of developing complications if their sugar levels remain uncontrolled.

Interventions for type 2 diabetes include lifestyle change, namely involving diet and exercise; oral medications, which increase insulin production or the body's sensitivity to insulin; and insulin therapy, which is delivered via a fine injection called the "insulin pen". As the disease progresses, insulin may be recommended if lifestyle changes and oral medications can no longer control sugar levels. For some patients, this may be years or even decades after the initial diagnosis while other patients, whose condition does not respond to lifestyle change or oral medications, may be advised to start insulin shortly after being diagnosed.

The patients involved in this study have had diabetes for varying lengths of time, but are all considered to have sustained high sugar levels. In other words, they have not achieved HbA1c targets and other treatments may no longer be effective or may not be an option for various reasons. Therefore, insulin therapy has been recommended. In the consultations analysed in this study, doctors and patients discuss, during the patient's routine diabetes visits, whether the patient will begin insulin therapy. The consultations were collected as part of a larger study to develop and test a patient decision aid (PDA) about starting insulin (DMIT Group, 2012). The use of PDAs as a decision support tool is tied to the shared decision making (SDM) model, which reflects the ethical principles that influence current medical practice. This institutional context is discussed in the following section.

#### **1.4.2 Institutional Context: PDAs, SDM and Patient-Centred Care**

The PDA used in the study was developed as part of the Decision Making in Insulin Therapy research project (<https://dmit.um.edu.my/book>), headed by researchers at Primary Care Department of the Medical Faculty at University Malaya (DMIT Group, 2012; P. Y. Lee et al., 2016; Y. K. Lee, Low, et al., 2013). The PDA was developed as a

decision making tool to help patients who are considering insulin make an informed decision.

This focus on decision making is closely related to the shift towards patient-centred care as the ideal model of medical practice. In contrast with doctor-controlled paternalism and the biomedical emphasis in evidence-based medicine, patient-centred care advocates a biopsychosocial model, which gives equal emphasis to the doctor's biomedical perspective and the patient's psychological and social perspectives (Bensing, 2000). Valerie Billingham's (1998) words "nothing about me, without me" are often quoted to convey the essence of patient-centred care, as a paradigm shift from focusing on disease to focusing on the patient and family. Mead, Bower and Hann (2002) identify four elements of patient-centredness: attentiveness to psychosocial aspects, eliciting patients' concerns, communicating a sense of partnership and encouraging patient involvement in decision making.

SDM, which emphasises the partnership and sharing of information between doctors and patients, is widely considered the preferred model of patient-centred decision making (Barry & Edgman-Levitan, 2012; Charles, Gafni, & Whelan, 1999; Stacey et al., 2011). In contrast with paternalistic or informed decision making, SDM involves a two-way flow of information, during which doctors provide patients with medical information and patients inform doctors about their values, expectations and preferences, and the treatment decision is made by doctor and patient together (Charles et al., 1999). Although there is a substantial body of literature on SDM dating back approximately thirty years, SDM is a relatively new topic of research in Malaysia (Y. K. Lee & Ng, 2017; Ng et al., 2013). This is largely limited to research conducted in the medical departments of public university-based hospitals, which includes the development of patient decision aids



(PDAs) and other decision support tools for conditions such as type 2 diabetes, prostate cancer and breast cancer (Y. K. Lee & Ng, 2017).

Patient decision aids (PDAs) in various formats, including print and digital, are increasingly used as a way to implement SDM (O'Connor et al., 2007). PDAs aim to provide information and “create a conversation” about treatment decisions in various clinical contexts (Montori, Breslin, Maleska, & Weymiller, 2007). The development of these decision aids is motivated by potential clinical and psychological benefits that can be gained from involving patients in decisions.

The PDA used in this study, a 13-page printed booklet titled “*Making Choices: Should I Start Insulin?*”, was designed according to the Ottawa Decision Support Framework (DMIT Group, 2012). The PDA is available in four languages (English, Malay, Mandarin and Tamil) to cater to Malaysia’s multilingual population (<https://dmit.um.edu.my>). Implementation is supported by an accompanying guidebook for healthcare professionals (HCPs) and workshops conducted in various settings.

**Table 1.2: PDA Content**

<b>Page</b>	<b>Section</b>
3	What are your concerns
5	Information about diabetes and treatment
6	About insulin therapy
7	Knowing your blood sugar
8	What are your choices?
10	Advantages & disadvantages of the treatment options
12	Knowing the facts
13	What is important to me?
14	Do you need more support
15	What is your decision?

The PDA covers patient concerns about insulin, information about diabetes and insulin, comparison of treatment options, assessment of patient knowledge, and

clarification of patient options, before finally prompting the patient's choice at the end of the booklet, as shown in Table 1.2. Six treatment options to control the blood sugar are discussed: doing nothing, strict diet and exercise, insulin therapy, additional oral medication, other non-insulin injections, and alternative treatment options.

The PDA content reflects the SDM model, which can be described as comprising three analytical stages: information exchange, deliberation on treatment and the decision itself (Charles, Gafni, & Whelan, 1997; Charles et al., 1999). However, while SDM is generally accepted as the ideal patient-centred decision making model, there have been mixed findings about how it may be implemented in practice and what benefits it offers. The substantial amount of literature on SDM includes several studies which demonstrate how SDM and other patient-centred approaches are operationalised over turns of talk (e.g., Collins, Drew, Watt, & Entwistle, 2005; Landmark, Gulbrandsen, & Svennevig, 2015; Landmark, Ofstad, & Svennevig, 2017; Toerien, Shaw, & Reuber, 2013; Weidner, 2012). These studies indicate that clinical context may necessitate different decision making practices and that the details of talk may have different implications for patient-centred decision making. Specifics of the decision, for example, whether it involves more than one equivalent option (preference sensitive) or one clinically recommended option, are also a factor (Elwyn, Gwyn, Edwards, & Grol, 1999). In addition, the scarcity of interactional data on PDA use in consultations (e.g., Abadie et al., 2009; Kaner et al., 2007; Wyatt et al., 2014) raises questions about how they may be better implemented to fulfil their aims of supporting patient-centred decision making.

### **1.4.3 Doctors' and Patients' Perspectives of Managing Chronic Illness**

The emphasis on the medical encounter in research on patient-centred decision making means that important factors, such as the illness trajectory, socio-demographic factors, and the individual doctors and patients involved, may be overlooked (Clayman,

Gulbrandsen, & Morris, 2017; M. Edwards, Davies, & Edwards, 2009; Gulbrandsen et al., 2016).

An underlying theme in the literature on doctors' and patients' perspectives of managing type 2 diabetes is that of "control", which is tied to the biomedical measure of blood sugar control by which the condition is managed. Patients' narratives and experiences emphasise their efforts to self-regulate their conditions through dietary practices, physical activity, medicine consumption and self-care practices (Lawton et al., 2008; Lawton, Ahmad, Peel, & Hallowell, 2007). Moreover, patients' accounts of self-management relate to a broader sense of control over their lives (Warren, Canaway, Unantenne, & Manderson, 2013). Studies on doctors' perspectives show the other side of the coin, where the patient's self-management is largely framed as an issue of compliance. In other words, doctors' descriptions of their interactions with patients who have type 2 diabetes generally centre on their efforts to modify the patient's behaviour to achieve better health outcomes (Loewe, Schwartzman, Freeman, Quinn, & Zuckerman, 1998; Lutfey, 2005).

The experiences and perspectives of doctors and patients also show their orientations to broader discourses, namely those related to morality and health (Broom & Whittaker, 2004) and the bioethical principle of patient autonomy (Shortus, Kemp, McKenzie, & Harris, 2013). While the perspectives of Malaysian doctors and patients about starting insulin have been investigated, existing research largely utilises thematic analysis from a clinical perspective (P. Y. Lee et al., 2012; Y. K. Lee et al., 2012). Therefore, the meaning making practices of Malaysian doctors and patients in talking about their experiences about treatment decision making on insulin are largely unexplored.

## **1.5 Research Gap**

Following the review of literature relevant to the study (see Chapter 2), three research gaps have been identified; namely related to the location of the research site in Malaysia, the use of the PDA to implement patient-centred decision making, and the clinical context of type 2 diabetes as a chronic disease. These three aspects will be discussed in the following sections.

First, despite the prevalence of type 2 diabetes in Malaysia, there is limited information about how Malaysian doctors and patients make decisions about insulin in doctor-patient consultations, particularly in relation to patient-centred decision making approaches such as SDM. The way these doctors and patients make meaning of their experiences is also relatively understudied.

Second, although PDAs are increasingly used as a means of implementing SDM, there is limited information showing how they are used in doctor-patient talk. Moreover, the literature indicates the need for more information about patient-centred decision making in various clinical contexts, including that of type 2 diabetes.

Third, the collaborative management of type 2 diabetes, including treatment decisions about insulin, is achieved in doctor-patient consultations, yet among the extensive literature on doctor-patient consultations in various countries, there is limited discursive information about how talk is structured in chronic care consultations.

## **1.6 Significance of the Study**

Type 2 diabetes is a global health concern, and one of particular significance in Malaysia, where its prevalence has increased significantly and treatment success appears limited (Chen, Magliano, & Zimmet, 2012; Institute of Public Health, 2015). The low adoption of insulin in Malaysia has prompted research on various aspects of insulin

initiation but the process by which decisions on insulin are made is largely unexplored. This study, therefore, investigates a clinical context of great significance and offers a discursive perspective that is not represented in local studies about initiating insulin to treat type 2 diabetes.

This study is situated within a growing body of research at the intersection of health and social sciences, which uses discourse analytic methods to investigate treatment decision making in light of patient-centred approaches. By explicating the collaborative achievement of treatment decisions on insulin by doctors and patients, this study adds to existing discursive evidence showing how patient-centred decision making may be implemented in different clinical contexts, while also offering a view into the “blackbox” of PDA use in doctor-patient consultations.

Moreover, the inclusion of the voices of doctors and patients in the analysis orients to the need for a broader, more person-centred approach to research on patient-centred decision making, which considers the various factors beyond the doctor-patient consultations such as social, relational and existential factors (Clayman et al., 2017; Gulbrandsen et al., 2016; Rapley, 2008). The Malaysian context of the study, further, presents the opportunity to consider the implementation of SDM in a context in which patient-centred decision making is relatively novel.

### **1.7 Limitations of the Study**

In keeping with Theme Oriented Discourse Analysis (Roberts & Sarangi, 2005; Sarangi 2010a, 2010b), this study aims to provide “thick description” of treatment decision making on insulin for type 2 diabetes in a specific research context. The small sample size of eleven doctor-patient consultations and seven interviews enables a detailed analysis of the discourse, capitalising on the richness of the data for a closer perspective into treatment decision making on insulin. Therefore, the findings cannot be generalised

outside the immediate context of the study. However, the broader implications of the findings may be of relevance to treatment decision making on insulin in other clinical settings.

Moreover, participants were selected through convenience sampling, based on those who consented, and purposively selected to ensure diversity in health care setting (for the consultations) and perspectives towards insulin (for both consultations and interviews). Therefore, variations in clinical setting and participant profiles may have influenced some of the practices observed.

As discourse analysis is essentially an interpretive approach, the findings of this study are also subject to the potential influence of observer's paradox (i.e., questions about authenticity of data collected in research settings), participant's paradox (i.e., the activity of participants in observing the observer) and analyst's paradox, (i.e., ensuring that analysis is informed by professional's insights into their practice) (Sarangi, 2004, 2010b). However, years of observational research have indicated that participants do eventually behave naturally while being recorded in healthcare settings (Sarangi, 2010b). Moreover, through continued engagement and collaboration with members of the professional context, which includes sharing the findings, joint publications and continued collaborations on other projects, effort has been made to remain oriented towards professional concerns throughout the analytical process, including considering their input on clinical aspects of the interactions and interpretations of the talk while writing the analytical chapters (see Chapter 3).

## **1.8 Outline of the Thesis**

There are eight chapters in this thesis on treatment decision making about insulin for type 2 diabetes. This introductory chapter has presented an overview of the study,

including the research problem and purpose, the methodology and a brief description of the contextual background to the study.

The following chapter (Chapter 2) will present a review of literature relevant to the study, before identifying the research gaps which the study aims to address. Chapter 3 then discusses the methodology used in this study, including the theoretical framework, the data collection and transcription, and the analytical methods of Activity Analysis and Accounts Analysis, within Theme-oriented Discourse Analysis.

Four analytical chapters present the findings of this study, addressing each of the four research questions in turn. Chapters 4, 5 and 6 report the findings from the application of Activity Analysis to the doctor-patient consultations, beginning with structural, interactional and thematic mapping to describe the organisation of talk in routine visits for type 2 diabetes (Chapter 4). The next two chapters discuss the findings from Discourse Analysis of the consultations, which draws on Conversation Analysis to describe the use of the PDA to facilitate SDM (Chapter 5) and the negotiation of treatment decisions (Chapter 6). Chapter 7 then presents the findings from Accounts Analysis of the research interviews with doctors and patients to describe how they construct accounts about treatment decision making on insulin.

Chapter 8 concludes the thesis with a summary of the findings and a discussion of their implications.

## CHAPTER 2: LITERATURE REVIEW

This chapter presents a review of the literature to situate the present study within literature relevant to treatment decision making on insulin, as well as research relevant to the analytical orientation of this study. The studies discussed in this chapter were identified through a search of academic databases including field-specific collections, such as CINAHL, BioMed Central and the SocIndex on EBSCOhost, and publisher-specific databases including SAGE, and Taylor & Francis Online. Google Scholar was also used to capture older titles and those which may not be indexed in larger databases such as those mentioned above. Initial searches used the general keywords “treatment decision (making)”, “insulin” and “doctor-patient consultations/interaction/talk”, before the focus was narrowed by location (“Malaysia”), patient centred concepts (e.g. “patient decision aid”, “shared decision making”) and analytical approach, (e.g. “qualitative/discourse”, “accounts”).

This chapter is divided into two parts: the review of studies relevant to the healthcare context and the discussion of studies which inform the analytical approach of this thesis. The first section considers the clinical context of insulin initiation in Malaysia (Section 2.1). This is followed by a discussion of research on shared decision making and patient decision aids, within the concept of patient-centred care which has come to be accepted as an ideal throughout the institution of healthcare (Section 2.2). Research on doctors’ and patients’ perspectives of managing type 2 diabetes around the theme of “control” is then discussed, followed by a brief discussion of research on moral and ethical discourse surrounding health and healthcare (Section 2.3).

The discussion then turns to the analytical context of this study (Section 2.4), which is oriented within research that applies discursive approaches to investigate the performance



and construction of healthcare, health and illness by doctors and patients. Finally, Section 2.5 concludes by listing the research gaps which this study aims to address.

## **2.1 Clinical Context: Type 2 Diabetes in Malaysia**

Type 2 diabetes affects an estimated 2.8 million Malaysians, or one in five Malaysians over thirty (Institute of Public Health, 2015). The long-term complications of diabetes include blindness, heart disease and kidney failure, and the burden of managing diabetes falls largely on the public healthcare system, which currently treats 80 percent of patients with diabetes.

Efforts of the Malaysian government to tackle type 2 diabetes include large-scale prevention and treatment programmes, through public hospitals and healthcare clinics, and public awareness programmes which aim to improve prevention efforts by educating Malaysians on how to prevent diabetes. In the Malaysian clinical practice guidelines for the management of type 2 diabetes (Ministry of Health, 2015), encouraging patient compliance to medical advice is a key focus. Moreover, recent research on type 2 diabetes in Malaysia reflects the patient-centred turn in medicine, for example, through consideration of the Chronic Care Model which emphasises the empowerment of patients to self-manage their conditions (Bujang, 2017; Hussein et al., 2015) and exploration of psychosocial aspects of managing type 2 diabetes (e.g. Chew et al., 2015; Daher et al., 2016; E. L. Lee et al., 2017).

Prompted by the low adoption of insulin in Malaysia, which stands at 7.2% of diabetes patients in comparison to 38% in the US (P. Y. Lee, Lee & Ng, 2012), studies have also focused on various aspects of insulin initiation. General barriers to insulin initiation including patients' fears of injections, and misconceptions about insulin; limitations in the knowledge and skills of healthcare professionals (HCPs) and limited consultation time are also relevant to the local context (Hassali et al., 2014; Hassan et al., 2013; Ng et al.,

2015; Y. K. Lee, Low, & Ng, 2013; Tan et al. 2015). Other issues in the local context are lack of collaboration between public and private sectors, limited support from various stakeholders, and language and cultural barriers (Ng et al., 2015; P.Y. Lee et al., 2012).

As mentioned in Chapter 1 (1.1), local studies have focused on treatment decision making about insulin, including research that explores the decision making role preferences of patients (Y. K. Lee, Low, Lee, & Ng, 2015) and research that aims to improve the decision making process through the development of a patient decision aid called “*Making Choices: Should I Start Insulin?*” (E. L. Lee et al., 2017; Y. K. Lee & Ng, 2017). However, as mentioned earlier, there is limited information describing how treatment decision making is performed by Malaysian doctors and patients in consultations. The small number of studies about doctor-patient talk in Malaysia involve consultations in acute care (Bagheri, Ibrahim, & Habil, 2012, 2015; Haron & Ibrahim, 2013) or focus on various other aspects, such as the use of interpreters (Frederics, 1996), while the few studies about consultations involving patients with diabetes mainly utilise quantitative methods (e.g. Yen, 2006a, 2006b).

In addition to socio-cultural context, ideas about how doctors and patients should talk to each other are influenced by changes in the broader institution of healthcare. The following section will, therefore, discuss the institutional context of this study, focusing on shared decision making and the use of PDAs, within the concept of patient-centred care.

## **2.2 Institutional Context: Patient-Centred Decision Making**

This section summarises literature about “patient-centred care”, as the currently accepted healthcare paradigm, with particular attention to the shared decision making (SDM) model, and the use of patient decision aids (PDAs) to implement SDM and patient-centred decision making.

### 2.2.1 Patient-Centred Care

The shift towards patient-centred care began more than four decades ago in Western healthcare, as a response to conditions including limited success of guidelines in changing patient behaviours, limited resources, and changing ideas about the doctor-patient relationship and the rights of patients (Bauman, Fardy, & Harris, 2003). By placing patients, rather than disease, as the focus, patient-centred care contrasts against the traditional paternalistic approach, which was seen as emphasising medical authority and expertise. In a patient-centred approach, power is shared between doctor and patient. Moreover, patient-centred care advocates a “whole person” biopsychosocial approach to medicine, as opposed to emphasising only the biomedical aspects (Bensing, 2000).

Patient-centred care is advocated on two grounds: ethics and potential benefits. Firstly, patient-centred care is considered the most acceptable approach from an ethical perspective, as it is centred around the principle of respect for the patient’s fundamental right to autonomy (Rodriguez-Osorio & Dominguez-Cherit, 2008). Secondly, patient-centred care has been linked to clinical and psychological benefits for patients, for example, improved HbA1c levels (Parchman, Zeber, & Palmer, 2010) and better satisfaction among patients with diabetes (Moran, Bekker, & Latchford, 2008).

Mead, Bower and Hann (2002) identify four elements of patient-centredness: attentiveness to psychosocial aspects, eliciting patients’ concerns, communicating a sense of partnership and encouraging patient involvement in decision making. It can therefore be concluded that patient-centred care is largely constructed through doctor-patient talk and is particularly relevant to chronic care, as doctors and patients collaboratively manage the patient’s condition.

Elwyn, Lloyd, et al. (2014) propose a communicative model of “collaborative deliberation” which is compatible with the principles of patient agency and autonomy and

empathic practice and can encompass a range of future-oriented deliberations, goal-setting, action planning and motivational interviewing, and shared decision making. Patient-centred decision making has also been discussed in terms of “patient participation” and “patient involvement”. In considering patient-centred treatment decision making, the current thesis makes reference to SDM as this model focuses specifically on treatment decision making and encompasses notions of patient participation and involvement.

### **2.2.2 Shared Decision Making**

Shared decision making is now widely accepted as the ideal model of patient-centred decision making (Barry & Edgman-Levitan, 2012; Charles et al., 1999; Stacey et al., 2011). Like other patient-centred approaches, SDM has been defined in various ways in the literature. However, among the most widely cited is the definition proposed by Charles et al. (1997), who specify four characteristics of SDM: 1) the decision making process involves at a minimum both doctor and patient, who 2) share information with each other, 3) participate in the process by expressing treatment preferences and 4) agree on the decision made

Charles et al. (1999) contrast between paternalistic, shared and informed decision making, according to information flow and who makes the final decision. The paternalistic and informed models involve a one-way flow of information from physician to patient, the main contrast being that in the former, the physician makes the decision while in the latter, the patient makes the decision (Charles et al., 1999). In contrast, SDM involves a two-way flow of information between doctor and patient. Three analytically distinct stages of SDM can therefore be identified: information exchange, deliberation about treatment options and deciding on the treatment to implement (Charles et al., 1999).

In the first stage, information communicated from doctor to patient may include scientific/medical information on the disease, the treatment options and their advantages and disadvantages. On the other hand, the patient may communicate matters about their health history, lifestyle, social life, values, beliefs, concerns and knowledge of disease or treatment. The deliberation stage involves the expression and discussion of treatment preferences, while the third stage of deciding on a chosen treatment is the outcome of information exchange and deliberation. These three stages may occur simultaneously or in an iterative manner (Charles et al., 1999). Moreover, adapting Charles et al.'s SDM approach to chronic care, where treatment decisions are mostly carried out by patients and are less urgent than in acute care, Montori, Gafni and Charles (2006) propose an additional analytical stage, "establishing an ongoing partnership", as a prelude to information exchange, deliberation on treatment and the decision.

#### **2.2.2.1 Models and Principles of SDM**

Despite general consensus about the principles of SDM, information showing how doctors may operationalise it in talk is relatively scarce (Elwyn et al., 2012). This is demonstrated in Table 2.1, which presents examples of SDM frameworks and models. For example, the stages/concepts of steps such as "deliberation" (Charles et al., 1999) and "partnership" (Makoul & Clayman, 2006) do not specify how these steps play out in the doctor's consulting room.

**Table 2.1: SDM Models and Frameworks**

<b>Description</b>	<b>Author(s)</b>
Analytical Stages of SDM 1. <i>Information exchange</i> 2. <i>Deliberation</i> 3. <i>Decision making</i>	Charles et al. (1999)
20 common elements of SDM, in 481 papers, including: <i>values/preferences, options, partnership, patient participation</i>	Makoul & Clayman (2006)
Elements of SDM 1. <i>Recognising and acknowledging that a decision is necessary</i> 2. <i>Knowing and understanding the best available evidence</i> 3. <i>Incorporating the patients' values and preferences into the decision</i>	Légaré & Witteman (2013)
Action-oriented and provides language examples. 1. <i>Introducing choice (choice talk)</i> 2. <i>Describing options (option talk)</i> 3. <i>Helping patients explore preferences &amp; make choices (decision talk)</i>	Elwyn et al. (2012)

In proposing their talk-based model, Elwyn et al. (2012) describe the implementation of SDM as the doctor or HCP taking actions which “confer agency” (p. 1363) to their patients, by performing actions to provide the necessary information and to support the decision-making process (Elwyn et al., 2012, p. 1363). Their three-step model is summarised in Table 2.2.

**Table 2.2: Elwyn et al.’s Three-Step SDM Model (2012)**

Choice talk	<ul style="list-style-type: none"> <li>• Step back</li> <li>• Offer choice</li> <li>• Justify choice - preferences matter</li> <li>• Check reaction</li> <li>• Defer closure</li> </ul>
Option talk	<ul style="list-style-type: none"> <li>• Check knowledge</li> <li>• List options</li> <li>• Describe options – explore preferences</li> <li>• Harms and benefits</li> <li>• Provide patient decision support</li> <li>• Summarise</li> </ul>
Decision talk	<ul style="list-style-type: none"> <li>• Focus on preferences</li> <li>• Elicit preferences</li> <li>• Move to a decision</li> <li>• Offer review</li> </ul>

**Source:** Elwyn et al. (2012)

Elywn's three-step model is positioned at the "deliberation on treatment" stage of SDM. Through a process of engaging in "choice talk", "option talk" and "decision talk", doctors and patients move from expressing initial preferences to establishing informed preferences, and arrive at a decision (Elwyn et al., 2012). This model also provides examples of the talk that might be involved at each step. For example, doctors can "offer choice" by telling patients "there is good information about how these treatments differ that I'd like to share with you" (Elywn et al., 2012, p. 1393). Moreover, although the steps in the model may appear to be doctor-centred, this is a reflection of the model's aim of providing doctors with talk-based instruction on implementing SDM. Moreover, in newer versions of the model, "team talk" replaces "choice talk" (Elywn, Dehlendorf, et al., 2014), to emphasise the partnership between doctor and patient, so that patients do not feel they are making the choice alone. While the American English language phrases offered in the model (Elwyn et al., 2012) may need to be adapted to different settings, the talk-based model provides useful guidance for doctors, for example, in a large-scale programme to implement SDM in the UK's national health system (Joseph-Williams et al., 2017).

#### **2.2.2.2 Implementing SDM**

The many studies examining the implementation of SDM include those focused on measuring and describing SDM in consultations and those which attempt to link SDM in consultations to other outcomes. In the chronic care context, SDM has been tied to improved outcomes and long-term effects of the decision (Joosten et al., 2008) in addition to better adherence (Wilson et al., 2010). However, other studies have found tenuous links between SDM and clinical outcomes (Shay & Lafata, 2014). These conflicting findings may be partly due to variations in how SDM is measured across studies, which often use quantitative methods, as discussed next.

(a) *Measuring SDM in Consultations: Coding Studies*

Over twenty instruments have been developed to measure the extent to which patients are involved in treatment decision making. Earlier instruments focussed on the perspectives of patients or doctors collected before or after the medical encounter, such as the Decision Attitude Scale and Decision Regret Scale (Elwyn et al., 2001) and the COMRADE scale (A. Edwards et al., 2003). More recent SDM measures include both doctors' and patients' perspectives, with several also using observer measures of recorded consultations, for example, the widely-used OPTION scale (Scholl, Kriston, Dirmaier, & Härter, 2015).

Building on a long tradition of coding studies of doctor-patient consultations, the OPTION (Observing Patient Involvement) scale was developed to measure SDM in consultations, based on a list of communicative SDM competencies (Elwyn, Edwards, Kinnersley, & Grol, 2000; Elwyn, Tsulukidze, Edwards, Légaré, & Newcombe, 2013). The scale lists 12 observable SDM behaviours, for example, “the clinician identifies a problem...”; “the clinician explains the pros and cons of options...” and “an opportunity for deferring a decision is provided”. A review of 33 studies using the OPTION scale found that doctors did not make much effort to involve patients in decisions unless an intervention was used or the consultation duration was longer (Couët et al., 2015).

New instruments continue to expand on the dimensions of SDM in earlier research, for example, the Dyadic OPTION scale includes the perspectives of doctors and patients and an observer's assessment of the encounter (Melbourne et al., 2011). The DEEP-SDM coding system measures patient behaviour, in terms of self-efficacy, preferences and values, expectation and understanding, and considers the illness trajectory (Clayman, Makoul, Harper, Koby, & Williams, 2012). This instrument also codes the degree of sharedness of the decision, on a nine-point spectrum (Clayman et al., 2012). Building



from the 12-item OPTION scale, MAPPIN' SDM utilises observer, doctor and patient perspectives, and includes the collaborative behaviour of doctors and patients, to provide a more comprehensive measure of SDM (Kasper, Hoffmann, Heesen, Köpke, & Geiger, 2012).

The specifics of instruments used to measure SDM give insight into how medical studies conceptualise SDM. Moreover, the use of quantitative methods suits the outcome-oriented nature of medical research, by enabling the identification of associations between SDM and clinical, behavioural or other patient-reported outcomes. Also, such studies are replicable and can produce generalisable findings. However, quantitative approaches have limitations in explicating SDM considering the interactional nature of talk, as shown by a growing number of discourse analytic studies. These are discussed in the next section.

**(b) *Describing SDM in Consultations: Discourse Analytic Studies***

Studies investigating how SDM and patient-centred decision making are achieved in talk have largely utilised Conversation Analysis (e.g. Collins et al., 2005; Landmark et al., 2015; Landmark, Ofstad, et al., 2017; Toerien et al., 2013; Weidner, 2012). These studies mostly focus on specific interactional practices over a few types of turns, for example, the delivery and receipt of treatment recommendations, doctors' elicitation of patient preferences, and pre-sequences to delivering recommendations. One exception is Quirk et al.'s (2012) study in psychiatric care, which examines the trajectory of treatment decisions and concludes that SDM was present in all 92 consultations as mutual agreement was achieved in all decisions. However, varying levels of pressure were applied by the doctor, leading to open, directed or pressured decisions (Quirk et al., 2012).

In their systematic literature review, Land, Parry and Seymour (2017) summarise the findings of 28 CA studies in various clinical contexts including acute primary care,

oncology, paediatric visits, and diabetes visits. As shown in Table 2.3, the review categorises the findings according to four elements of treatment decision making sequences: broaching decision making, putting forward a course of action, committing or not committing to a particular action, and responses to resistance or withholding of commitment by the patient (Land et al., 2017).

**Table 2.3: Communicative Practices that Facilitate/Hinder SDM in CA Studies**

<b>Element of Treatment Decision Making</b>	<b>Communicative Practice</b>
Broaching decision making (prior to decision point)	1. Flagging up 2. Eliciting patient perspectives 3. Encouraging patient agreement 4. Patient lobbying for specific treatment
Putting forward the course of action (the commitment point)	5. Single option 6. Ruling out a single option 7. Multiple options
Committing or not	8. Committing 9. Withholding commitment 10. Active resistance
HCP responses to patient resistance or withholding of commitment	11. Pursue agreement without changing course 12. Modify the potential course of action 13. Leave the decision open

**Source:** Land, Parry, & Seymour (2017)

They conclude that decision making is performed as a shared effort, although with varying levels of sharedness, and suggest that SDM can be achieved even when there is only one option through interactional practices that promote patient participation (Land et al., 2017).

Several articles based on a CA study of patient involvement in 300 consultations in a Norwegian hospital demonstrate how decisions are performed in secondary care, identifying practices that comply and conflict with patient-centred decision making (Landmark et al., 2015; Landmark, Ofstad, et al., 2017; Landmark, Svennevig, Gerwing, & Gulbrandsen, 2017; Landmark, Svennevig, & Gulbrandsen, 2016). For example, doctors' presentation of invasive and non-invasive options favours a particular option although the patient is handed the ultimate right to make the decision (Landmark et al.,

2014). Patients, however, resist the recommendation by claiming to lack knowledge and handing the deontic rights to the doctor, which forms an inverted deontic authority instead of a 'shared' decision (Landmark et al., 2014).

Contradictions are also observed in the doctors' engagement with patient preferences and perspectives, whereby doctors use formulations of patient stance and preferences to elicit, check and assess patients' preferences (Landmark et al., 2016; Landmark, Ofstad, et al., 2017). However, when accompanied by deprecative language these formulations delegitimise patients' preferences and if/then constructions reduce patients' response options to affirmation or negation (Landmark et al., 2016; Landmark et al., 2017). The studies by Landmark and colleagues demonstrate the complexities of performing patient centred decision making in secondary care, where patient-centred principles may not always be achieved, and add further evidence that decision making practices are tied to clinical context. Moreover, Landmark et al. (2014) demonstrate how epistemics, which refers to the management of knowledge, and deontics, which refers to the right to determine a future course of action, are negotiated between doctors and patients in the context of treatment decision making

In a study of decision making in type 2 diabetes, Koenig, Wingard, Sabee, Olsher and Vandergriff (2014) use CA within Grounded Practical Theory, showing how doctors' recommendations of insulin are tailored to the patient's disease trajectory (Koenig et al., 2014). If patients are approaching the point when "treatment intensification" is needed, the recommendation is indirect, and benchmarking is used to encourage the patient's self-management. However, if patients have already reached the treatment intensification point, like those in the present study for whom insulin has already been recommended, the doctor emphasises the medical agenda through benchmarking, before making an

explicit recommendation and eliciting patient concerns about insulin. This ‘interactional sensitivity’ can be considered as a patient-centred practice (Koenig et al., 2014).

However, analysing talk in a single encounter of a patient’s illness trajectory has its limitations when it comes to studying treatment decision making. Using ethnographic data, Rapley (2007) demonstrates how “distributed decision making” is an ongoing event which involves more than one consultation, different people, types of interactions, technologies and epistemic resources. This distributed nature of treatment decisions may explain why some studies have failed to identify SDM performance when examining single encounters (Rapley, 2007).

The findings of these discursive studies exemplify some of the practices in decision making, while demonstrating the significance of the details of talk in implementing or investigating patient-centred decision making. Moreover, a particular interactional practice cannot be considered to be patient-centred without considering the interactional context, from the surrounding turns of talk, to the clinical and broader contexts.

### **2.2.2.3 Challenges in Implementing SDM**

In addition to mixed findings about its benefits, research has reported low levels of SDM in consultations (Campion & Langdon, 2004; Clayman et al., 2012; Pilnick & Dingwall, 2011). This may be linked to certain challenges in implementing and measuring SDM.

Patient barriers can be broadly categorised as relating to patient knowledge or patient power, through characteristics such as literacy and education, age, ethnicity and health conditions (Joseph-Williams, Elwyn, & Edwards, 2014; Légaré & Witteman, 2013). Barriers reported by doctors include time constraints and lack of applicability of SDM due to patient characteristics or clinical context (Gravel, Légaré, & Graham, 2006;

Légaré, Ratté, Gravel, & Graham, 2008). Also, systemic factors influencing the implementation of SDM include continuity of care as a barrier/facilitator; use of resources, including human resources and tools, such as decision support tools and computerised patient information systems; healthcare context and socio-political implications (Joseph-Williams et al., 2014; Légaré & Witteman, 2013). Moreover, doctors' and patients' orientations to broader social dimensions, including power, control and authority, may also inhibit SDM. For example, patients who view their doctors in a position of authority may limit their participation for fear of being seen as difficult (Frosch, May, Rendle, Tietbohl, & Elwyn, 2012).

It has also been argued that SDM research emphasises the medical encounter over the individual doctor and patient and overlooks the illness trajectory and factors external to the consultation (Clayman et al., 2017; M. Edwards et al., 2009; Gulbrandsen et al., 2016). A “person” (rather than “patient”) centred approach is advocated, which recognises that autonomy is relational, rather than given, and subject to patient and life-world factors (Gulbrandsen et al., 2016).

Efforts to improve SDM performance often utilise interventions, for example, education programmes, printed matter and digital programmes to be used by doctors, patients or both together (Légaré et al., 2010). Of these, training for healthcare providers and the use of patient decision aids (PDAs) are considered especially effective (Légaré & Witteman, 2013). The following section will discuss the use of PDAs.

### **2.2.3 Patient Decision Aids**

PDAs, which may be delivered in various forms, including printed matter, DVDs and videos, and online digital programmes (Agoritsas et al., 2015) have been used in the US, UK and other developed countries to support treatment decision making in various clinical contexts. For example, the UK's National Health System's Right Care website

lists twenty-eight decision aids for conditions such as osteoarthritis, depression and gallstones, with many currently being updated to reflect new evidence (<https://www.england.nhs.uk/rightcare/shared-decision-making/>) . PDAs differ from patient education materials in that they explicitly refer to a particular decision, provide information about options, including advantages and disadvantages, and assist patients in clarifying values related to outcomes of each option (Légaré & Witteman, 2013).

While traditional PDAs were designed mainly for the patient's use at home or in the waiting room, more recent PDAs also aim to "create a conversation" (Montori et al., 2007) by supporting patients in talking about treatment options, weighing benefits and risks, and expressing concerns, values and preferences with their doctor. The opportunity to discuss concerns is important in the case of treatment options such as insulin, which are linked to negative perceptions, fears and psychological resistance.

#### **2.2.3.1 Benefits of PDA Use**

PDAs are recommended as a way to implement SDM, but they have had varying success, with more studies showing improved decisional and psychological/affective patient outcomes, for example, reducing decisional regret, in comparison to clinical benefits, for example, lower HbA1c levels (Légaré et al., 2010).

Findings are also mixed regarding PDAs for type 2 diabetes, which include PDAs for decisions about anti-hyperglycaemic drugs (Breslin, Mullan, & Montori, 2008), goal-setting (Denig, Dun, Schuling, Haaijer-Ruskamp, & Voorham, 2012), starting insulin (Bradley et al., 2011; Brown, Bradley, Ng, Colwell, & Mathers, 2014; Ng, Mathers, Bradley, & Colwell, 2014), treatment intensification (Bailey et al., 2015) and statin drugs (Abadie et al., 2009; Weymiller et al., 2007). For example, issue-card decision aids encouraged face-to-face communication and could be adapted to individual patients, but HbA1c level and adherence did not improve (Breslin et al., 2008; Mullan et al., 2009).

Also, a PDA for rural patients only improved decision quality (Branda et al., 2013). However, Weymiller et al. (2007) found that a PDA for statin drug choice may have improved adherence to medication, showing that PDAs can offer clinical benefits.

In addition to perceiving the benefits of PDA use, doctors may find PDAs time-consuming or have conflict with the content that can lead to limited or unprescribed use (Wildeboer, du Pon, Schuling, Haaijer-Ruskamp, & Denig, 2018). Moreover, patients and doctors may differ on their opinions about a particular PDA, for example, about the difficulty of its content (P. Y. Lee et al., 2016) and about how thoroughly it was used in the consultation (Brown et al., 2014). The adoption of PDAs into routine practice beyond research contexts has been limited due to time constraints and other practical reasons, to which one solution has been shorter formats such as topic cards and visual presentation of information, for example, OPTION Grids (Elwyn, Lloyd, et al., 2013).

### **2.2.3.2 Implementing PDAs in Doctor-Patient Consultations**

Of the many studies investigating PDA use, few describe how PDAs are used in talk between doctors and patients (Abadie et al., 2009), relying largely on data collected outside the consultation (Dolan & Frisina, 2002) or quantitative analysis of consultations (Kaner et al., 2007). These studies have identified some aspects of PDA use, including associations between physician/provider training and patients' desire to use PDAs (Hirsch et al., 2011), client participation and consultation length (Kim et al., 2005).

Examination of communicative behaviour has largely focused on doctors, for example, that they gave fewer details about treatment options to older and less-educated patients (Hirsch, Keller, Krones, & Donner-Banzhoff, 2011), they dominated the talk prior to decision making (Kaner et al., 2007) and did not consistently use PDAs as prescribed (Abadie et al., 2009; Wyatt et al., 2014). Moreover, doctors' "unprescribed" PDA use included not using the PDA at all, giving inaccurate information and using PDAs to

support personal bias (Abadie et al., 2009). These variations in practice have implications on patient knowledge and involvement in the decision.

A few observational studies depict details of PDA use in doctor-patient talk. For example, use of a PDA for prenatal diagnosis of Down's syndrome was linked to the patients' expression of cognitive and emotional strategies (Bekker, Hewison, & Thornton, 2003). However, improved decisions required longer consultations, which may be less rewarding for the professionals (Bekker et al., 2003). A mixed methods study of two PDAs for type 2 diabetes, found that the PDAs were used as "flexible artifacts" at different steps in decision making and according to the decision making roles of doctors and patients (Tiedje et al., 2013). This created a space for discussion, and therefore made the PDAs applicable across decision making models (Tiedje et al., 2013). Brown et al. (2014) found that the use of a PDA about starting insulin depended on how the patient responded to the potential decision. If the patient had not made a decision before the consultation, the PDA was used to support arguments, set the agenda, or change the subject, particularly in longer discussions about diabetes and lifestyle (Brown et al., 2014).

#### **2.2.4 Treatment Decision Making with a PDA on Insulin in Malaysia**

As mentioned earlier, the PDA used in this study is part of a larger research effort focusing on decision making in insulin therapy (<https://dmit.um.edu.my>) (DMIT Group, 2012), which includes various studies related to the development of the PDA described in Chapter 1 (1.4.2).

Although Ng et al. (2013) found a scarcity of data on SDM in Malaysia, a keyword search identified a small number of papers on SDM and other patient centred aspects of treatment decision making (Abdullah et al., 2013; Y. K. Lee, Low, et al., 2013; Mah, Muthupalaniappen, & Chong, 2016; Ngadimon, Islahudin, Hatah, Shah, & Makmor-



Bakry, 2015), including the use of PDAs and other support tools for conditions such as type 2 diabetes (P. Y. Lee et al., 2016) prostate cancer (Cheong et al., 2016) and breast cancer (Abdullah et al., 2013). This indicates growing awareness of SDM and its implementation in Malaysia.

In developing and testing the PDA on insulin, interviews with patients, HCPs and other stakeholders were investigated. Patient values about starting insulin include insulin-specific values framed according to patients' life philosophies and priorities and sociocultural factors, such as religious and family background (Y. K. Lee, Low, et al., 2013). Professionals may also have negative attitudes to insulin and be influenced by previous guidelines (P. Y Lee et al., 2013). Moreover, their practices in initiating insulin are based on their perceptions, rather than objective evaluation of patients' psychosocial factors, such as self-care ability and quality of life, and more experienced specialists were more cautious about prescribing insulin than medical officers (Y. K. Lee et al., 2012). Systemic barriers include resource limitations, and language and communication barriers (Y. K. Lee, Low, et al., 2013).

Feedback about the PDA was also collected, revealing that patients and professionals differed on the PDA content, with health care providers (HCPs) concerned about comprehensibility, quantity and complexity of the information, particularly for low-literacy patients even though patients described the PDA as simple and clear (P. Y. Lee et al., 2016). While HCPs focused the benefits of insulin, patients focused on the impact of insulin on their lives and wanted to know about practical issues such as side-effects (P. Y. Lee et al., 2016). The use of the PDA in regular practice is impacted by a lack of SDM culture, role boundaries, continuity of care and consultation time, and a reminder network was suggested to promote its use (Tong, Lee, Ng, & Lee, 2017).

Y. K Lee et al. (2013) found that HCPs provide information about the nature of diabetes and complications risk when counselling patients to start insulin, in addition to addressing misconceptions and injection-related issues. However, they also attempt to persuade patients to accept insulin, for example, by downplaying risks, which could have long-term effects on adherence if patients feel they have been misled (Y. K Lee et al., 2013). Moreover, patients' decision making role preferences indicate that idea of collaborative decision making is still unusual in this context (Y. K. Lee et al., 2015). In view of these findings, additional versions of the PDA have since been created, along with a digital version (<https://dmit.um.edu.my/book>).

These studies provide information about the context in which the PDA was developed and used but does not explain much about how it is used during treatment decision making. This gap is also relevant to the larger context of doctor-patient talk in consultations for type 2 diabetes (see 2.1).

Section 2.2 has discussed research involving the institutional context in which treatment decision making on insulin occurs, namely concerning the SDM model and PDAs. The literature describes some practices in implementing patient-centred principles in doctor-patient talk, as well as some of the arising challenges. The following section discusses research which studies the management of type 2 diabetes from the perspectives of doctors and patients.

### **2.3 Doctors' and Patients' Perspectives: Managing Type 2 Diabetes**

In the discussion thus far, the perspectives of doctors and patients have largely remained peripheral aspects of the literature. However, treatment decision making on insulin occurs within the chronology of professional and personal experience in managing type 2 diabetes. The perspectives of doctors and patients are, therefore, an important aspect of the research context. This section, therefore, discusses qualitative studies on the

perspectives of doctors and patients in managing type 2 diabetes and other chronic conditions.

There have been many studies examining perspectives of patients and doctors concerning aspects of type 2 diabetes management. To illustrate, a keyword search on the EBSCO HOST Psychology and Behavioural Sciences Collection for “type 2 diabetes” “experiences/perceptions/attitudes/views/feelings” and “qualitative or discourse/discursive” returns 716 titles for “patients” and 585 titles for “doctors, physicians or medical practitioners,” out of thousands of titles when quantitative studies are included. Studies on the perspectives of patients with type 2 diabetes cover numerous topics, including the patients’ management of their conditions, interactions with healthcare providers (HCPs) and the healthcare system, social networks, and orientations to the self, disease and others. Comparatively fewer topics are addressed in studies of doctors’ perspectives, including characterisations of patients and their experience, disease explanations, and interactions with patients and the healthcare services. To narrow the focus of this immense body of literature, the following section considers research on doctors’ and patients’ perspectives of type 2 diabetes against the theme of ‘control’.

There is a rich store of theoretical and conceptual work which approaches control and its related concepts from various perspectives, including psychology (e.g., Ajzen, 2002; Skinner, 1996), sociology (e.g., Hirschi, 2004), and critical discourse analysis (e.g., Van Dijk, 2015). However, a theoretical conceptualisation of control is beyond the scope of this study. The term “control” is used here in a broad sense to refer to the power to influence a particular action, whether applied to the self or to others. Control relates to the context of this study on many levels, from the clinical outcome of blood sugar control and patients’ self-regulating practices, to the balance of power negotiated discursively between doctor and patient in treatment decision making, and the bioethical concept of

patient autonomy underlying patient-centred care. In the following section, research on doctors' and patients' perspectives is discussed according to different aspects of control.

### 2.3.1 Control in Doctors' and Patients' Talk About Diabetes

Control is a salient theme in discourse about diabetes (Broom & Whittaker, 2004; Warren et al., 2013). Treatment success is often measured through the biomedical measurement of glucose control, which in turn is tied to efforts to control one's diet and exercise. Stein (1985, p.116) describes this "contest for control" as follows:

"What is from the physician's perspective a problem of compliance (that is, a struggle for control) is from the diabetic's a struggle for self-discipline. In the treatment of diabetes, the goal is (after Freud) to replace the pancreas with the ego."

While current management of diabetes favours terms such as empowerment and self-regulation, over control and compliance, these patient-centred terms are nevertheless anchored to certain assumptions about an individual's control over his or her life. Moreover, use of such terms tend to be limited to academic and professional discourse, while in the talk of laypeople, such notions are often simply described using the word "control". Warren et al. (2013) distinguish between three meanings of control in the context of type 2 diabetes: physiological control of the blood sugar, the more abstract control of thought and behaviour necessary to achieve physiological control and a broader sense of control related to agency and autonomy over one's health and life. The following discussion will therefore be divided along these meanings of control: *controlling the disease*, *controlling the self*, and *controlling the patient*.

### 2.3.1.1 Controlling the Disease

The literature on patients' perspectives and narratives of their self-management practices cover various topics such as medicine consumption, self-monitoring of blood sugar, and self-care (Ferzacca, 2000; Graffigna, Barello, Libreri, & Bosio, 2014; Hinder & Greenhalgh, 2012). Matters related to food and eating are particularly significant in patients' experiences, with research documenting their practices, challenges and orientations towards managing their dietary intake as part of managing diabetes (Hamilton, 2003; Lawton et al., 2008; O. Parry, Peel, Douglas, & Lawton, 2005; Peel, Parry, Douglas, & Lawton, 2005; Shahar et al., 2016; Stephens, Rook, Franks, Khan, & Iida, 2010). In addition to personal orientations, patients invoke the social dimensions of eating as a family activity (Peel et al., 2005), or as essential to community participation (Lawton et al., 2008), presenting a conflict between balancing health needs against social needs. Yet encouragement from family members, especially spouses, also support patient's attempts at dietary control (Shahar et al., 2016; Stephens et al., 2010). Failure or "cheating" was accounted for in different ways, including normalising cheating to mobilise identities, such as that of a compliant patient (Peel et al., 2005), reflecting the moral dimensions of food control.

Various elements shape a patient's construction of self-management, including illness trajectory and cultural context, through linguistic and philosophical expressions of control in different context (Abdoli, Ashktorab, Ahmadi, Parvizi, & Dunning, 2008; Lawton et al., 2007; Lundberg & Thrakul, 2012; Naemiratch & Manderson, 2006). Moreover, patients' accounts of diabetes causality and by extension, their orientations to self-management, show cultural influences, with different patient groups deploying biomedical, religious, as well as internally or externally focused descriptions about the cause of their diabetes (Abdoli et al., 2008; Lawton et al., 2007). Overall, patients'

accounts and perspectives reveal commonalities and variations in their experiences and meaning-making practices in talking about their attempts to control diabetes.

### **2.3.1.2 Controlling the Self**

Studies about chronic illness describe the disruption experienced by patients through every aspect of their lives (Bury, 1982; Townsend, Wyke, & Hunt, 2006). Patients' metaphorical descriptions of living with type 2 diabetes, such as being chased by a tax collector and being a slave of the disease (Graffigna et al., 2014), orient to loss of control. Accepting the use of insulin, moreover, is seen as further loss of control (Polonsky & Jackson, 2004). However, adaptation can help mitigate the disruptions to their lives and sense of control. For example, patients use alternative therapies to regain a sense of control (Warren et al., 2013) and describe excessive self-discipline to convey the identity of a responsible patient (Broom & Whittaker, 2004).

Achieving and conveying a sense of control within the constraints of chronic disease involve multiple factors. Campbell et al. (2003) identify six key concepts by which patients achieve well-being, balance and a sense of control, including time and accumulated experience, self-trust, being less subservient to providers of care and strategic non-compliance with medication. The "strategic non-compliance" that characterises patients' self-management practices (Campbell et al., 2003) is built on knowledge and experience over time and presents an alternative view to non-compliance as a coping strategy. Patients adapt their self-management practices based on what they consider acceptable present circumstances, rather than idealised futures (Ferzacca, 2000).

In fact, the future may present a daunting prospect to patients with progressive illness. In future-oriented stories of diabetes complications, patients construct their experience as "the chase" from inescapable illness circumstances, which they would eventually lose (Pilon, Bailey, Montgomery, & Bakker, 2011). This conflicting message that aspects of

their illness are within their control, but not completely, is a feature of chronic disease experiences (O. Parry et al., 2005).

In conveying a sense of control, patients deploy or orient to moral discourses (Brandt & Rozin, 2013; Leichter, 1997; Williams, Freedman, & Deci, 1998), particularly the social expectation to remain healthy and productive (Broom & Whittaker, 2004). Thus, deploying characterisations of self-discipline facilitates the repairing of the “spoiled identity” of diabetes (Broom & Whittaker, 2004) or the culpability of having a chronic “lifestyle” disease (L. H. Clarke & Bennett, 2013; Greenhalgh et al., 2011). However, orienting to the expectation that patients should manage their conditions successfully may cause patients to prioritise presenting a picture of wellness over addressing the symptoms and limitations caused by chronic illness (Townsend et al., 2006).

### **2.3.1.3 Controlling the Patient**

From the doctors’ perspective, patients’ self-management of diabetes is primarily framed as an issue of compliance, invoking the other-oriented control that is part of doctors’ relationships with their patients. While the perspectives of doctors in managing type 2 diabetes and other chronic diseases are less researched than those of patients, several studies depict how they describe their practices and challenges in the service of improving the patient’s clinical outcomes.

Doctors’ clinical construction of disease also reveals the conflicting message of control versus inevitability in chronic disease. Loewe et al. (1998) find pessimistic descriptions of advanced stages of diabetes in doctors’ narratives, which contradict their emphasis on the ability and responsibility of patients to mitigate these eventualities. In narrating efforts “to control [their] out of control patients” (Loewe et al., 1998, p. 1271) doctors talk about educating patients but their stories convey a rhetoric of statistics and fear. Moreover, the

doctors' talk of negotiation and partnership mingles with characterisations of themselves as authority figures or adversaries (Loewe et al., 1998).

Although doctors may deploy stances other than the “partner” role that is advocated in SDM, these stances may not always be oppositional to the patient, for example, those of “salesperson”, “educator”, “detective”, “negotiator” or “cheerleader” (Lutfey, 2005). These diverse stances belie the hybrid nature of interactions with patients, which shifts between discursive functions, such as educating, motivating, counselling and persuading, and necessitates the use of different frames and epistemic resources. While this displays the doctor's sensitivity to the individual patient's health and psychosocial factors, these adjustments are ultimately oriented towards improving patient adherence (Lutfey, 2005).

This other-oriented control inherent in doctors' interactions with chronically ill patients poses ethical tensions to doctors, as regards patient-centredness. Shortus et al. (2013) found that delivering the best care in treating type 2 diabetes, or “doing the right thing” was a primary concern for doctors, with varying emphasis on “treating to target” versus “personalised care.” Some doctors prioritised guidelines about biomedical targets, such as HbA1c levels, over involving patients in every decision, according to the ethical principle of beneficence (doing good), while others prioritised patient involvement and preferences throughout all aspects of their care, orienting primarily to the ethical principle of patient autonomy (Shortus et al., 2013). Moreover, doctors may also make moral judgements about their patients in evaluating their symptoms, as found in a re-analysis of five studies of general practitioners' accounts of chronic illness (May et al., 2004).

These studies reveal some of the practical challenges from the individual professional's perspective of chronic disease, in addition to institutional discourses involving biomedical evidence or bioethical principles that doctors deploy when making meaning of their practices. To conclude the discussion of doctors' and patients'



perspectives, the following section will briefly describe moral and ethical notions surrounding health and healthcare.

### **2.3.2 Morality and Ethics in Health and Healthcare**

The previous section has mentioned the moral and ethical dimensions of doctors' and patients' descriptions about managing diabetes and chronic illness, which invoke ideas of right or wrong or good or bad. Broadly speaking, morality relates to cultural codes about what is acceptable in society and is imposed individually, while ethics relates to codes of conduct in a specialised area or group of people, and are imposed externally in relation to idealised principles. Therefore, morals and ethics are normative and situated notions that influence people's understandings and responses in particular social contexts. The following sections will very briefly discuss the moral dimension of health and the ethical principle of patient autonomy, as relevant to the research context.

#### **2.3.2.1 Morality and Health**

The complex relationship between morality and health is well-researched, including studies which describe micro-level moral performances and orientations in medical and health discourses (e.g., Broom & Whittaker, 2004; Clarke & Bennet, 2012; Greenhalgh et al., 2011) and research which engages on these topics at a broader level, such as governmentality and genealogical studies (Galvin, 2002; Rose, 2007). The expectation that individuals should practice a healthy "clean" lifestyle has a long tradition, from its theological roots in religious doctrines and early concepts of illness as the result of supernatural forces, to more recent discourses of "healthism" that derive from evidence linking lifestyle practices to disease (Brandt & Rozin, 2008; Galvin, 2002; Leichter, 1997; Williams, 1998).

Moral notions of health have also been linked to capitalistic ideals, whereby individuals should be productive and participate in social and economic life (Galvin,

2002). The reverse side is the culpability of those who develop chronic disease, or fail to appropriately manage their conditions (Clarke & Bennett, 2012; Galvin, 2002). Moreover, the change in focus from treatment to prevention in government policies and programmes targeting chronic disease shifts the burden of responsibility for health from the state to the individual (Galvin, 2002; Leichter, 2003). However, this responsibility also presumes that individuals have, and are able to exercise, control over their lives and health.

### **2.3.2.2 Autonomy and Responsibility in Patient-Centred Care**

The respect for the patient's fundamental right to autonomy is a key principle underlying the concept of patient-centred care that permeates throughout the healthcare system (Sarangi, 2007b), including government policies in developed nations, marketing materials for private healthcare marketing and talk doctor-patient consultations, for example, in the use of the PDA on insulin in this study. Arribas-Ayllon et al. (2008c) discuss the emergence of patient autonomy as a key ethical principle in Western healthcare, amidst a healthcare system besieged by financial limitations and consumer discontent. Bioethical patient autonomy, which is interpreted largely as self-determination, is a simplified derivation of Kant's proposal of autonomy as means by which morality would be self-legislated in a liberal society (Arribas-Ayllon et al., 2008c). The introduction of the notion of patient autonomy affected the liberalisation of healthcare from medical authority (Arribas-Ayllon et al., 2008c), alongside larger social change.

Autonomy, however, is accompanied by choice and responsibility (Sarangi, 2007b). Therefore, the concept of patient autonomy and its implementation through patient-centred approaches transmits to patients a greater responsibility, for example, to participate in healthcare decisions and self-manage their condition. This requires

acquisition of specialised knowledge and may leave patients feeling abandoned (Sarangi, 2007b). Moreover, efforts to translate the principle of autonomy in real practice are subject to competing moral and ethical concerns (Shortus et al., 2013), the influence of psychosocial and demographic factors on a patient's autonomy (Gulbrandsen et al. 2016) and questions about the applicability of these approaches outside the liberal Western contexts (Fan, 1997; Schicktanz, Raz, & Shalev, 2010; Tsai, 2001).

Section 2.3 has summarised research that utilises the perspectives, experiences and voices of doctors and patients to investigate the management of type 2 diabetes and other chronic diseases. The theme of control encompasses salient concerns in the professional and person/patient experience, from the biomedical measure of sugar control, to the patient's attempts to control their condition through self-management practices and the ways in which they attempt to regain or project an overall sense of control (2.3.1.1, 2.3.1.2). Doctors' orientation to controlling the disease is by definition other-oriented and involves the complex practices by which they try to modify patient behaviour (2.3.1.3). The voices of doctors and patients also reveal the discourses surrounding the context of chronic illness, which include moral ideas about health and the ethical principle of patient autonomy (2.3.2).

For patients with type 2 diabetes, the social expectation that individuals should be healthy may present tensions between dealing with their disease and trying to project a picture of wellness. Moreover, the notion of "strategic non-compliance" as a means of adapting self-management to their individual needs (Campbell et al., 2003) implies that patients may struggle between complying with medical advice and maintaining a sense of control. For doctors, their professional responsibility for the patient's health may cause ethical tensions between respecting patient autonomy and trying to encourage patient compliance. While Malaysian doctors' and patients' perspectives of starting insulin have

been investigated (2.3.4), the meaning making practices and orientations of doctors and patients in this context remain unexplored. The present study, therefore, presents an opportunity to study treatment of type 2 diabetes from the perspectives of doctors and patients in a non-western setting in which patient-centred concepts such as SDM are relatively new.

The analytical orientation of the study, which approaches treatment decision making from a discursive perspective, builds on the findings of numerous studies which use discourse analytic methods to study matters related to doctor-patient talk and experiences of doctors and patients. These studies will be discussed in the following section.

#### **2.4 Analytical Context: Treatment Decision Making in Talk**

Ethnographic studies utilise multiple types of data in investigations of a particular social context, for example, Lutfey's (2005) study of two diabetes clinics, which utilises observation, examination of documents, recorded consultations and interviews with doctors, and Hinder and Greenhalgh's (2012) study of diabetes patients in a diverse UK community, which utilises observation, field notes and interviews. Discourse analytic studies apply a similar flexibility towards the types of discursive data selected for analysis, including various sorts of texts and talk, "naturally occurring interaction" as well as research interviews.

Following Sarangi's (2010b) conceptualisation of discourse as "activity" and as "account," the following sections will discuss the findings of relevant studies involving the activity of doctor-patient consultations and accounts in research interviews.

##### **2.4.1 Analysing Doctor-Patient Talk in Consultations**

Analysis of doctor-patient talk in consultations can employ quantitative approaches, i.e. coding studies, or qualitative approaches such as discourse analysis and conversation

analysis (CA). Quantitative coding, for example, studies using Roter Interactional Analysis System (RIAS), have contributed substantial knowledge about interaction in doctor-patient consultations. Yet reducing interaction into discrete quantifiable codes has its limitations considering the collaborative and highly nuanced nature of talk, a limitation that can be addressed by using qualitative approaches such as discourse analysis. This section will discuss discourse analytic findings about doctor-patient consultations.

#### **2.4.2 Organisation of Doctor-Patient Consultations**

Treatment decision making occurs within the doctor-patient consultation, which is a professionally situated encounter between doctors and patients with the goal of addressing a particular medical problem. Early research into doctor-patient consultations includes Byrne and Long's influential study of over 2000 consultations (1976). Although still referred to in present day medical textbooks and research articles. Byrne and Long's six consultation phases, for example, "establishing relationship and "discovering reason for visit," are considered doctor-centric (Pawlikowska, Leach, Lavalley, Charlton, & Piercy, 2007).

Discourse analytic studies have conceptualised the doctor-patient consultation in different ways, including as a genre (Ten Have, 1989), a project (Robinson, 2003) or as a professionally-situated activity type (Sarangi, 2010a). Although these conceptualisations have their distinctions, they all identify a series of medically-oriented phases that make up doctor-patient consultations and shape speakers' comprehension and production of talk (Robinson, 2003). Examples of phases are "establishing the reason for the visit", "delivering the diagnosis" and "making treatment recommendations" (Robinson, 2003) or "treatment", "symptoms" and "diagnosis" (Sarangi, 2010b). In the context of this study, treatment decision making takes place after the recommendation is made.

However, the phases and activities proposed in the aforementioned studies refer to acute primary care consultations, in which a new medical problem is being presented and often treated, within the first consultation. The organisation of phases in follow-up visits and those in chronic care consultations have been less widely investigated. In describing the sequential organisation of out-patient pharmacy visits, the following broad structure is proposed: approach, arrival, delivery, work-up, close-implicature and exit (Pilnick, 2001). Talk in follow-up visits in oncology, which requires more prolonged treatment and thus may more closely resemble the chronic context, can be categorised as initial greetings, assessment and discussion of the patient's condition, discussion and prescription of treatment/and or further investigation, casual insertions, issues of bureaucratic management, and final exchanges (Díaz, 2000).

Ainsworth-Vaughn (2003) argues, however, that phases may not be the most salient organisation of discourse in doctor-patient consultations, given the variations in phases observed across consultations. Doctor-patient consultations involve hybrid speech formats, including medical speech formats and those of a conversational nature, including stories and small talk (Ainsworth-Vaughn, 2003). Also, research into doctor-patient consultations can be seen as orienting to the balance of power between doctor and patient, whether implicitly or explicitly (Ainsworth-Vaughn, 2003). Power in this context, can be distinguished as control over emerging discourse or control over future action (Ainsworth-Vaughn, 2003). In this sense, treatment decision making involves both types of power, in that the discourse during the process of decision making is moving towards determining a future action.

The notion that interactional trajectories, such as that of doctor-patient consultations, are more complex than the sequential organisation of turns (and phases, on a broader level) is highlighted in Sarangi's (2004; 2010a; 2001b) Activity Analysis approach, which

considers a whole interaction as structured through a complex interplay of form and content, including structural, interactional and thematic organisation. Sarangi's (2010a) development of Levinson's (1979) notion of "Activity Type", therefore offers a conceptualisation of doctor-patient consultations, and other interactions, that can encompass the common prototypical features as well as variations across consultations.

An activity type is any goal-defined, socially-constituted event with constraints on participants, settings and allowable contributions and can include pre-structured sequences, norms and conventions for turn-taking (Levinson, 1979). As a culturally-recognised activity, participants have a shared understanding of the goals of the activity and what it involves. Considered as an activity type, doctor-patient consultations can be described as structured according to phases, sub-phases and turns, with variations occurring as the result of specific thematic and interactional features of an individual consultation (Sarangi, 2010a).

### **2.4.3 Interactional Structure of Treatment Decision Making**

Section 2.3.2.2 on implementing SDM in doctor-patient talk has discussed the findings of Conversation Analytic (CA) studies investigating patient-centred treatment decision making. This section will summarise the interactional aspects of treatment decision making, as identified in CA studies.

CA focuses on interaction at the turn-level, generally limiting analysis to patterns observed over specific types of turns. Earlier studies have described treatment decision making as beginning with the delivery of a treatment recommendation, which is conceptualised as institutional advice-giving (Heritage & Sefi, 1992). As an advice-giving turn, recommendations are oriented to by patients as proposals, making acceptance or rejection the next relevant action (Heritage & Sefi, 1992; Stivers, 2005a).

Stivers (2005) shows that in the context of treatment recommendations, acceptance is required for the interaction to progress. Yet, patients may resist the recommendation actively or passively, leading doctors to pursue acceptance in various ways, resulting in a negotiation which prolongs the treatment decision making process (Heritage & Sefi, 1992; Koenig, 2011; Stivers, 2005a, 2005b, 2006). This view of treatment decision making as achieved through a three-part “proposal-(negotiation)-acceptance” structure is generally supported by earlier CA studies in acute primary care (Stivers, 2005a, 2006; Koenig, 2011).

More recent studies in other clinical contexts have indicated that the interactional structure of treatment decision making may be more nuanced than the three-part structure, particularly in consideration of patient-centred approaches (Landmark et al., 2014; Toerien et al., 2013; Weidner, 2012), as summarised in Section 2.3.2.2. However, in their review of CA studies on patient-centred decision making, Land et al. (2017)’s categorisation of four elements of decision making may address this problem, by distinguishing the elements according to their occurrence before or after the “commitment point” (see Table 2.3, in 2.3.2.2). The first element, broaching decision making, occurs before this point, and includes practices such as flagging the upcoming decision, eliciting patient perspectives and encouraging patient agreement, which may account for some of the practices that conflict with the three-part structure. The remaining three elements of decision making are the commitment point, which involves putting forward the course of action; committing or not committing; and HCP responses to patient resistance. Putting forward the course of action, is essentially the “recommendation”, but can involve one or more options, while the remaining two elements, committing or not and HCP responses to resistance, encompass “acceptance” and “negotiation”. Therefore, the three-part-structure of treatment decision making is compatible with the talk during and after the commitment point.



The differing perspectives on the applicability of the three-part structure indicates the need for more information on treatment decision making practices in various clinical contexts, including that of chronic conditions such as type 2 diabetes.

#### **2.4.4 Analysing Accounts about Treatment and Illness**

Various qualitative approaches utilise interviews to investigate perspectives of individuals in a particular research context, including those that synthesise interview data into categories of thematic content and those that approach interview responses as representations of stable mental or psychological constructs. A discourse analytic approach to examining talk in interviews is concerned with *how* participants construct a particular topic or event discursively alongside *what* is being talked about. Within this approach, the accounts of doctors and patients enable examination of their meaning making practices, and how ideas, characters and events are recruited and constructed to serve particular rhetorical functions.

Here we can distinguish between stories, or narrative accounts, which are also examined within sociological investigations of the illness experience (Bury, 2001; Lawton, 2003) and accounts, as action-oriented explanations which serve various rhetorical purposes including justifying, excusing, defending (Antaki, 1988). Therefore, accounts can be viewed as the strategic construction of versions of reality, which are morally oriented (Arribas-Ayllon, Sarangi, & Clarke, 2008a; Arribas-Ayllon et al., 2008b, 2008c; Arribas-Ayllon, Sarangi, & Clarke, 2009; Scott & Lyman, 1968). Focusing on health and illness, Radley and Billig (1996) demonstrate that accounting for one's health is a necessary part of talking about health in general.

The discursive analysis of patient accounts has revealed the practices and devices by which patients construct their illness experience and moral selves within it (Hamilton, 2003; Lawton et al., 2007; Mackenzie & Scully, 2007; Malson, Finn, Treasure, Clarke,

& Anderson, 2004). Meaning making practices and rhetorical tensions in patients' accounts provide insights into the patient experience which may inform professional practice, for example, that causal construction of diabetes of patients from different cultural backgrounds, whether biomedical or fatalistic, may be reflected in their self-management practices (Lawton et al., 2007), and that patients attribute the construction of "the eating disordered patient" to themselves as well as to healthcare professionals (Malson et al., 2004). Furthermore, the structure of reasoning in accounts on non-adherence give an idea of challenges patients with diabetes face in implementing their knowledge about dietary control into their life-worlds (Hamilton, 2003), which may inform counselling practices.

Turning to professional's accounts, studies have demonstrated how professionals balance morally-contentious aspects of their profession, using complex practices, such as contrast, reported speech and character work, and interactional moves to construct professional accountability (Arribas-Ayllon et al., 2009). Moreover, analysing accounts demonstrates the mobilisation of "interpretive repertoires" (Wetherell & Potter, 1988) to support claims and discount alternative perspectives about problematic aspects of their professional practice (Seymour-Smith, Wetherell, & Phoenix, 2002).

The analysis of professional and patient accounts therefore enables identification of their discursive and rhetorical practices and how they deploy moral, ethical and ideological discourses, in a particular professional context.

## **2.5 Research Gap**

This chapter has presented an analysis of the literature which informs this study of treatment decision making on insulin. Literature from various fields, including medicine, sociology and discourse studies have been discussed to outline the existing knowledge

about the research context and the analytical orientation of this study. Based on analysis of the available literature, three research gaps are identified.

First, although the prevalence of diabetes in Malaysia has prompted numerous studies which aim to improve the successful management of the condition, there is limited information about how doctors and patients with type 2 diabetes in Malaysia make decisions about starting insulin. Moreover, the lack of discursive research on these doctors' and patients' perspectives leaves their meaning-making practices relatively unstudied (Section 2.1, 2.2.4). Discursive analysis of doctors' and patients' performance and construction of decision making on insulin may provide insight into insulin initiation.

Second, amidst the literature regarding implementation of patient-centred decision making approaches such as SDM and the related use of PDAs, there is limited information showing how PDAs are implemented in doctor-patient talk (2.2.3). Moreover, studies have demonstrated the nuances of treatment decision making over turns of talk, indicating the influence of clinical context on the performance of SDM (2.2.2.2). Therefore, further investigations are needed to explicate how PDAs may be used during treatment decision making in various clinical contexts, including that of type 2 diabetes.

Third, treatment decision making on insulin and the collaborative management of type 2 diabetes are negotiated within doctor-patient consultations on type 2 diabetes, yet there is limited discursive information about how talk is structured in doctor-patient consultations outside acute primary care (Section 2.4.2). This information could inform training and practice in chronic care, which is becoming more necessary with the increase of chronic disease.

When considered as a whole, the review of the literature in this chapter reflects the complex range of factors surrounding treatment decision making on insulin, which

indicates the need for a broad approach to its investigation. In consideration of this, the current study utilises a flexible and interpretive discourse analytic approach, which will be discussed in the next chapter (Chapter 3).

## **2.6 Summary**

This second chapter of the thesis has discussed the literature relevant to this study, including the clinical, institutional, and professional and personal contexts of individual doctors and patients with type 2 diabetes, which surround treatment decisions about insulin. Research which informs the analytical approach of this study was also presented.

Section 2.1 contextualised the study against the clinical and situational context in Malaysia, identifying gaps in the research on doctor-patient talk about starting insulin and managing type 2 diabetes in the local context. The institutional context of the study was then discussed in Section 2.2, which summarised the literature on SDM and PDAs as a means of implementing patient-centred care. Section 2.3 summarised literature which employs doctors' and patients' perspectives to investigate their experiences of treating and living with type 2 diabetes and other chronic illnesses (2.3.1), including the moral and ethical discourses which surround their professional and personal lives (2.3.2). Next, the literature which informs the analytical approach was discussed, summarising findings from discursive studies of doctor-patient consultations (2.4.2, 2.4.3) and doctors' and patients' accounts (2.4.4).

The final section in this chapter (Section 2.5) listed the research gaps identified through the review of literature, which inform the aims and objectives of this study, as well as decisions about methodology, which will be discussed in the following chapter (Chapter 3).

## CHAPTER 3: METHODOLOGY

The previous chapter presented a review of the literature, based on which directions for investigation in this study were identified. The present chapter will describe the methodology of this study. The first section presents an overview of the methods, explaining the theoretical orientation of this study, its overall purpose and how each of the four research questions will be addressed (Section 3.1). The next section describes the research method, starting with the preliminaries to data collection, including field visits, ethical review and interview guide preparation (Section 3.2). Then the data collection methods, including details of the recorded consultations and interviews, and transcription methods, are discussed (Section 3.2). Finally, the analytical framework of the study is described, with details of the analytical method used for each research question (Section 3.3), before the chapter ends with a discussion of the strengths and limitations of the selected analytical approach (Section 3.3.4).

### 3.1 Overview of Methodology

The review of literature in the area of managing type 2 diabetes has led to the identification of three research gaps, related to the lack of information about how Malaysian doctors and patients perform and construct treatment decision making on insulin, limited information about the implementation of patient decision aids (PDAs) to facilitate shared decision making (SDM) and patient-centred decision making in doctor-patient consultations, and the limited information about how talk is organised in consultations about chronic care. Besides, the literature suggests that factors beyond the immediate doctor-patient consultations are important in understanding the complexities of treatment decision making, particularly within a patient-centred approach.

In view of this, the current study utilises a flexible and interpretive discourse analytical approach that is applicable to data collected inside and outside doctor-patient

consultations. As mentioned in the introduction chapter, discourse analytic approaches take a constructivist perspective, viewing society and social practices as constructed through discourse. Therefore, the study aims to provide a description of how treatment decision making on insulin therapy is constructed by doctors and patients, firstly as a situated practice in doctor-patient consultations, and secondly, in their accounts of treatment decision making. As stated earlier, the four research questions which will guide the analytical process of this study are as follows:

**RQ1:** *How is talk organised in the activity of routine visits for type 2 diabetes when a PDA on starting insulin is used?*

**RQ2:** *How do doctors use a PDA on starting insulin to facilitate SDM during routine visits for type 2 diabetes?*

**RQ3:** *How do doctors and patients negotiate treatment decisions on starting insulin during routine visits for type 2 diabetes?*

**RQ4:** *How do doctors and patients construct accounts of their experiences of treatment decision making on insulin therapy for type 2 diabetes?*

The first three research questions focus on treatment decision making as performed within the activity of routine visits for type 2 diabetes, in other words, recorded doctor-patient consultations. These questions focus on the practices of doctors and patients in the consultations; firstly, looking at the structure of talk in whole consultations; secondly, with emphasis on the professional context, in considering the use of the PDA within the SDM model; and finally, considering how treatment decisions are negotiated when patients resist the treatment recommendation.

In view of the limitations of focusing on a single encounter in research on treatment decision making (Clayman et al., 2017; Gulbrandsen et al., 2016; Rapley, 2008), it was deemed necessary to include the perspectives of individual doctors and patients with type 2 diabetes. Therefore, the fourth research question (RQ4) aims to describe how individual doctors and patients construct their experiences of treatment decision making in research interviews, examining their discursive practices and orientations to broader moral and ethical discourses. Moreover, utilising research interviews may enable the capturing of thematic concerns that manifest differently outside the consultations.

This combination of research questions aims to provide a more comprehensive description of treatment decision making about insulin therapy as a social practice, focusing on both discourse *of* treatment decision making as well as discourse *about* treatment decision making. Therefore, two types of spoken data were used for this study: recorded consultations and research interviews. The procedures for the collection of this data will be described later in this chapter (Section 3.2), but first, an overview of the analytical approach and framework used in the study is presented.

### **3.1.1 Analytical Approach and Theoretical Assumptions**

This study employs a discourse analytic approach within the field of Applied Linguistics, which examines language as social action, rather than as a phenomenon. This conceptualisation of language carries certain assumptions about language and interaction which underpin the research design and analytical orientation of this study.

Wittgenstein's philosophical theory emphasises the action-oriented and context-dependent nature of language, introducing a pragmatic focus which refuted the traditional philosophical view of language as an abstract system functioning to represent reality (Wittgenstein as cited in Potter, 2005). Wittgenstein's metaphorical descriptions of "language as a toolkit" and "language as a game" emphasise the context-specific function

of language, based on the human activity in which it is embedded. “Describing an object”, “giving orders” and “guessing riddles” are examples of language games in which rules and meanings of language use are understood by participants in relation to a particular activity (Wittgenstein as cited in Levinson, 1979). The shift from conceptualising meaning as existing independently of language use was also a key feature of the symbolic interactionist school of thought in sociology. Symbolic interactionism emphasises that meaning is created in social interaction and action, an assumption which influenced Garfinkel’s ethnomethodological approach to research (Potter, 2005).

The introduction of ethnomethodology highlighted the value of studying micro-level practices, as the means by which social actions and social structures are achieved. Garfinkel’s “bottom up” approach to studying social order stood in contrast to the traditional “top down” perspective, which conceived of social order as produced by larger structures that exist independently of everyday events (Maynard & Clayman, 2003). Focusing specifically on talk, ethnomethodological research by Sacks, Schegloff and Jefferson eventually grew into Conversation Analysis (CA). CA, which aims to identify normative structures and patterns in talk, began with studies of ordinary conversation. However, many CA studies have since been conducted in institutional (professional) settings (Heritage & Maynard, 2006). CA focuses on interactional features, and views talk as context-dependent and context-renewing. This is related to the process by which the current turn, which is shaped by the previous turn, then shapes the next turn. Factors beyond the talk, for example, issues of gender or age, however, tend to be addressed only so far as explicitly visible in the talk.

In contrast, other kinds of Discourse Analysis (DA) take a broader approach to analysing talk, drawing on various concepts from sociology, psychology and linguistics such as face, alignment, power and positioning. The work of sociologist Erving Goffman



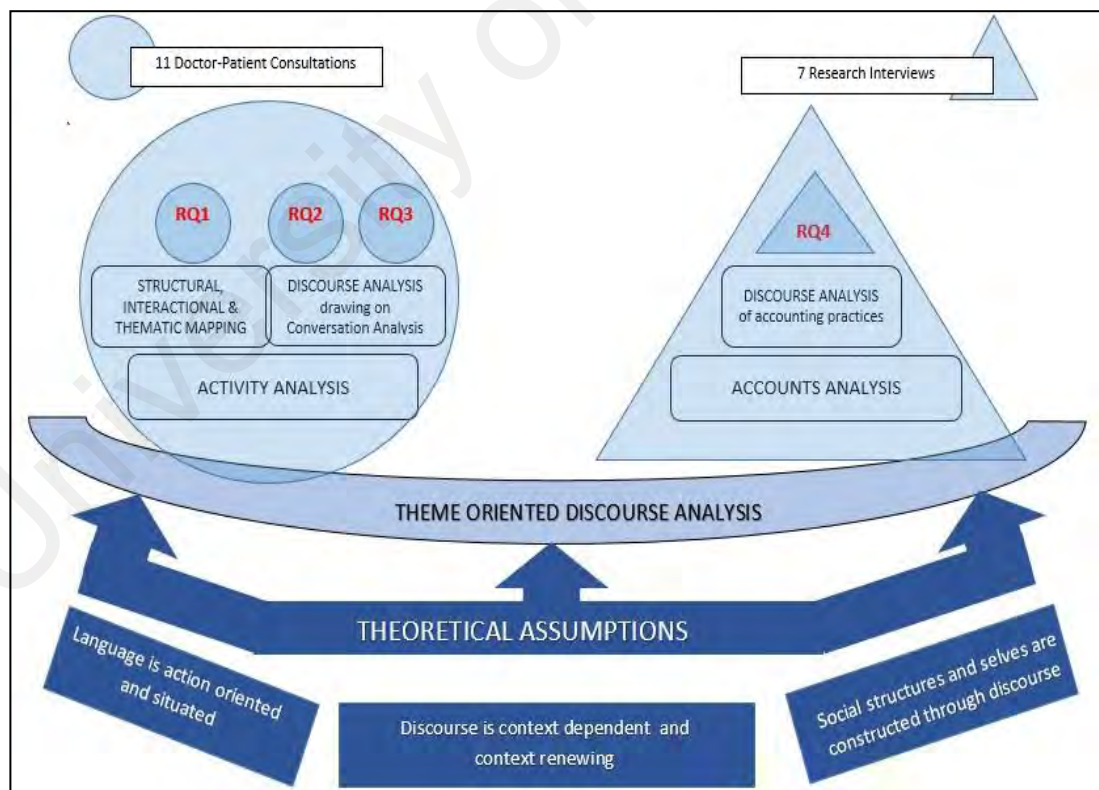
is reflected in many DA studies, through concepts such as face, framing and footing, and speaker roles, which are part of his dramaturgical approach to language as performance of Self (Goffman, 1955, 1974, 1979). Goffman's work has been influential in the study of face-to-face interaction, particularly his concept of the "interaction order", or the interaction between two or more people as a unit of analysis in itself. Goffman's work utilised analysis at the micro-level but also considered the larger social contexts of these interactions. For example, the aspect of performance by which a speaker selects certain roles, frames and footing in order to play a particular role in front of an audience orients to the larger social contexts of a particular interaction, while the concepts of face, impression management and stigma and spoiled identity refer to the speakers' orientation to morality and social expectations.

Despite their differences, the philosophical and sociological work described above share the assumptions of language as social action, and as context-bound and context-renewing, in addition to the emphasis on micro-level practices as the means by which social life is achieved. These assumptions inform the methodological and analytical approach of the present thesis, as a discourse analytic study.

The literature review chapter has described some of the insights obtained through discourse analysis of the talk of doctors and patients in consultations and interviews. In view of this, several discourse analytic approaches were considered before Theme-Oriented Discourse Analysis (Roberts & Sarangi, 2005; Sarangi 2010a) was selected. This approach was considered suitable for its flexibility to enable the explication of talk in doctor-patient consultations beyond the interactional level of turns and to include the perspectives of individual doctors and patients in research interviews. The ability to use multiple data sources was considered favourable in the effort to approximate "ecological validity" (Cicourell, 2007; Sarangi, 2007a). Moreover, within this approach, analysis

includes analytic themes from sociology and linguistics and focal themes of concern in professional domains (Roberts & Sarangi, 2005; Sarangi, 2010b). This alignment towards the professional context was considered particularly appropriate.

To briefly outline the analytical approach, this study applies Theme-oriented Discourse Analysis (Roberts & Sarangi, 2005), within which Activity Analysis (Sarangi, 2005, 2010a) and Accounts Analysis (Arribas-Ayllon et al. 2008c; Sarangi, 2010b) are utilised to examine how doctors and patients make treatment decisions in consultations during which a PDA on insulin is used, and to examine doctors' and patients' accounts of treatment decision making during research interviews, respectively. Figure 3.1 presents an overview of the analytical approach used in this study, along with its underlying theoretical assumptions.



**Figure 3.1: Overview of Analytical Approach**

As shown in Figure 3.1, while the first three research questions (RQ1, RQ2, RQ3) focus on doctor-patient consultations as an activity type, the fourth research question (RQ4) utilises data from research interviews, in which doctors and patients account for their experiences in relation to treatment decisions about starting insulin. This combination of Activity Analysis and Accounts Analysis within a theme-oriented approach takes its direction from the conceptualisation of discourse as activity and as account (Sarangi, 2010a), in the attempt to provide a comprehensive description of treatment decision making on insulin in Malaysia.

Table 1.1 in the Introduction chapter, has presented an overview of the application of Theme-Oriented Discourse Analysis in this study, listing the type and quantity of data and analytical method used to address each research question. To recap, the first three research questions utilise Activity Analysis, which includes mapping of whole consultations, to examine the organisation of talk in routine visits for type 2 diabetes (RQ1), and closer analysis of talk and interaction, using Discourse Analysis incorporating Conversation Analysis, to explicate the discursive, interactional and rhetorical practices in PDA use (RQ2) and the negotiation of treatment decisions, within the treatment decision making trajectory (RQ3). The final research question (RQ4) applies Accounts Analysis to data collected through research interviews, examining how doctors and patients construct accounts about treatment decision making on insulin. This analysis explicates discursive and rhetorical practices, and orientations to broader discourses. The next section (Section 3.2) discusses the methods by which the data were collected and transcribed, while details of the analytical methods used to address each research question will be presented in Section 3.3.

## **3.2 Research Method**

This section provides an overview of the research method, covering the preliminary stage of data collection during which field visits and interview preparation were conducted (3.2.1). The ethics review process is then described, followed by a discussion of the data collection methods and the details of the data (3.2.2). Finally, the method used to transcribe the data is described in detail (3.2.3).

### **3.2.1 Preliminaries: Field Visits and Interview Preparation**

This section describes the field visits and preparation of interview questions during the early stages of the study.

#### **3.2.1.1 Field Visits**

To better understand the context of the study, I made an initial visit to the primary care clinic or RUKA (*Rawatan Utama Kesihatan Am*) at University Malaya Medical Centre in February 2013. This is one of the three settings where the consultations were recorded as well as the setting in which the interview participants received or provided health care. During the visits, I observed how the clinic functions from the waiting room and met with nurses, doctors and the diabetes nurse educator.

Insights gained over additional visits throughout data collection and through continued collaboration with the research team at UMMC's Primary Care Department gave me further understanding of the professional context. This included meeting with the research team to discuss findings, attending a workshop for HCPs on using the PDA and even participating as an actor in a video to train doctors to use the PDA. Moreover, I continue to attend a monthly research interest group, the Decision Making Coffee Club, which involves clinicians and other researchers working in the area of treatment decision making.

Outside the hospital context, I attempted to engage with the academic discourse in the medical field, including sharing preliminary findings at a regional medical conference on treatment decision making and preparing a co-authored paper with the DMIT research team for submission to a journal in medicine or healthcare (see List of Publications and Papers Presented). This led to invaluable feedback on preliminary findings from the research team and other HCPs, which has contributed to the development of this thesis. It is hoped that this engagement with the professional context has enabled me to achieve a better grasp of the aims, concerns and practical challenges that are relevant to the research context.

#### **3.2.1.2 Preparation of interview questions**

After preliminary visits and literature review, a question guide was prepared for the semi-structured interviews with doctors and patients. Interview questions aimed to elicit participants' accounts about their experiences of treatment decision making on insulin, as well as on the topic of SDM, PDAs and doctor and patient roles. The interview questions were reviewed and approved by my supervisor and by the ethics review board of University Malaya Medical Centre.

#### **3.2.2 Ethics Review Process**

Application for ethics approval began during this stage. First, approval to view and utilise the recorded consultations was applied for under the existing DMIT project, *Developing and Pilot-Testing an Intervention for Patients with Type 2 Diabetes who are Making Decisions about Insulin therapy*, conducted by researchers at the Department of Primary Care Medicine at the Medical Faculty, University Malaya. IRB review approval was received in April 2013 (IRB No. 982.32, Appendix A).

For the interviews, ethics approval was obtained in March 2015 (MECID-20152 1064-Appendix B). The ethics review process began with the preparation of Consent Forms

(Appendix C), and Participant Information Sheets (PIS) for the two participant groups (Appendix D), submitted along with the interview guide (Appendix E). Following the procedure for ethics review applications at the Faculty of Languages and Linguistics, ethics approval was initially applied for via University Malaya Research Ethics Committee (UMREC) in December 2014. This was rejected in February 2015, with instructions to refer to University Malaya Medical Ethics Committee (UMMEC) because the study involved patients. A new application was submitted to UMMEC in Feb 2015, with approval given on 16 March 2015.

Throughout the research process, participant confidentiality has been maintained throughout the process of data collection, transcription and analysis, which includes anonymising all the transcripts by removing any names or details which may reveal participant identities and storing the audio and video data in a separate, password encrypted hard drive, and limiting the data extracts in publications and presentations to selected excerpts from written transcripts.

### **3.2.3 Data Collection**

This sub-section describes the collection of the two types of data used in this study: doctor-patient consultations and research interviews.

#### **3.2.3.1 Consultations**

As mentioned earlier, the recorded consultations were part of a study conducted at the Medical Faculty (DMIT study) to develop and test a Patient Decision Aid on insulin. To test how the PDA could be implemented, healthcare professionals, including doctors, nurses and a pharmacist, were asked to use the PDA in consultations. All healthcare professionals were trained to use the PDA, which could be used at any stage of decision making: pre-consultation, by the patient alone/with family, or in-consultation, with the healthcare professional.

Consultations were conducted between November 2012 and April 2013 in three health care settings: private clinics, public community clinics and the primary care clinic of a teaching hospital at a public university, in Seremban, Kuala Lumpur and Petaling Jaya, Malaysia. Consultations were audio recorded, with supplementary video recording where possible. Convenience sampling was conducted, according to participants who consented to participate, and secondly, aiming for a high variance in settings and participant demographics and a total of 16 consultations were recorded. For the present study, four consultations involving nurses and pharmacists were excluded to focus only on interaction between doctors and patients. Of the remaining 12 doctor-patient consultations, one was excluded because the patient had already started using insulin, leaving the final data set of 11 consultations (see Table 3.1).

Table 3.1 provides details of the doctor-patient consultations analysed in this study, including setting, duration and language, as well as the demographic profiles of the doctor and patient. Given the difference in patient numbers and continuity of care in public and private healthcare, setting could impact doctor-patient interaction in terms of time available for the consultation and the doctor-patient relationship. Setting also has implications on the qualifications and training of doctors, who may be general practitioners, with varying years of experience, medical officers, or newly-qualified doctors, specialists or trainee specialists, with clinical postgraduate qualifications. The predominance of female doctors seen in this data is quite common in Malaysian primary care, particularly in the public sector.

**Table 3.1: Details of the Doctor-Patient Consultations**

NO	CODE	SETTING	DOCTOR PROFILE	PATIENT PROFILE	LANGUAGE	LENGTH min, sec
1	A1	Private Clinic 1	General Practitioner, Indian, F	Indian, M, 51, No formal education	BM +English	13:41
2	A2	Private Clinic 2	General Practitioner, Malay, F	Malay, F, 61, Secondary School	BM +English	7:44
3	A3	Private Clinic 2		Malay, M, 69, University Degree	English	12:26
4	A4	Private Clinic 2		Indian, F, 73 Primary School + Husband	English +Tamil	05:02
5	B5	Community Clinic 1	Medical Officer Malay, F	Indian, F, 37 Diploma	BM	40:13
6	B7	Community Clinic 1	Medical Officer Malay, F	Chinese, M, 68, Primary School	BM +Cantonese	21:56
7	B8	Community Clinic 2	Medical Officer Malay, F	Indian, F, 70 Secondary School	English	21:04
8	B15	Community Clinic 3	Medical Officer Indian, F	Indian, F, 50, Secondary School	English	19: 03
9	C11	RUKA UMMC*	Clinician Chinese, F	Indian, F, 54, Primary School	English	10:55
10	C14	RUKA UMMC*		Chinese, M, 57, Diploma	English	18:56
11	C12	RUKA UMMC*	Clinician Indian, M	Chinese, F, 69 Info. not available	English	06.47

\*Video recording available

As shown in Table 3.1, the consultations involved participants from the three major ethnic groups in Malaysia: Malay, Chinese and Indian, where ethnicity is considered significant due to linguistic reasons. Some patients may not be fluent in the language used in the consultations, which was English or Malay or a mixture of the two. In two consultations, a third language (Tamil and Cantonese) was used minimally. The PDA is available in all four languages, but patients' education level may have implications on



their health care literacy or approach towards self-education. Patients had varying levels of education, from no formal education (1) and primary school (3), to secondary school (3), diploma (2) and degree (1). There were four male and seven female patients, with 10 of the 11 patients aged between 50 and 69 years old and the remaining patient aged 37. Patients had been diagnosed with diabetes for varying durations, but had all received recommendations to start insulin, due to high blood sugar levels. Consultations varied in length, from five minutes and six seconds to roughly twenty-one minutes and fifty-six seconds. An exception was Consultation B5, incidentally the one with the 37-year-old patient, which lasted forty minutes and thirty seconds.

### **3.2.3.2 Interviews**

After ethics approval was obtained in March 2015, I began conducting interviews with two groups of participants: doctors who treat patients with type 2 diabetes (n=3); and patients with type 2 diabetes who had made a decision about insulin therapy in the last twelve months (n=4).

Three doctors and four patients were selected from those at the Primary Care clinic at UMMC, with the assistance of Prof Ng Chirk Jenn, principal investigator of the DMIT study and the Clinical Investigation Unit. Interviewing began in April 2015 and was conducted at the primary care department of UMMC (doctors and patients), with the exception of one interview which was conducted at the participants' home, upon his request. All participants were given an RM50 travel/participation allowance.

After the first four interviews with two doctors and two patients were completed in May 2015, there were challenges in recruiting participants, particularly patients who had recently started insulin. Two patients whose details were obtained from the Clinical Investigation Unit were invited to participate, but declined participation. Finally, the third doctor and patient were interviewed in September and October 2015, respectively while

the final patient was recruited with assistance from the diabetes nurse educator and interviewed in November 2015. Except for interview number 4 (Patient D), which was conducted in Malay, interviews were conducted in English. Table 3.2 lists the details of interviews.

**Table 3.2: Details of Interviews**

NO	GROUP	DATE	LENGTH	CODE	PARTICIPANT PROFILE
1	PATIENT	150414	35: 56	PA	M, Chinese, 63, Diploma/Degree, Refused insulin
2.	PATIENT	150428	33:11	PB	F, Malay, 70, Degree Refused insulin
3.	PATIENT	151004	33:09	PC	M, Indian, 65, Postgraduate Started insulin
4.	PATIENT	151117	32:16	PD	F, Malay, 46, Secondary school Started insulin
5.	DOCTOR	150414	38:53	DRA	F, Malay, in specialisation training 7 years of medical practice
6.	DOCTOR	150428	35:27	DRB	F, Malay, in specialisation training 15 years of medical practice
7.	DOCTOR	150901	49:28	DRC	F, Indian, GP 20 years of medical practice

All four patients had made a decision about insulin within the last four months, with Patients C and D having started insulin two months and two weeks before the interviews, respectively. Doctors A and B were undergoing postgraduate training to qualify as family medicine specialists, which involved postings to community clinics outside the city, while Doctor C was a general practitioner with over twenty years of experience.

### 3.2.4 Transcription

Following the collection of data, the recorded consultations and interviews were transcribed. The transcription process began with multiple listenings and viewings of the data in order to get an overall feel for the main themes and interactional/discursive features of the data. Transcripts were then produced to support the process of analysing and presenting the findings. Describing the approach to transcription within the framework of Theme-oriented Discourse Analysis, Roberts and Sarangi (2005, p. 633) explain that transcription is done "...at different levels of fine-ness..." depending on the

analytic theme(s) selected. In view of this, different transcription methods were used according to the analytical aims involving the consultation data and the interview data, respectively. These are described in the following sections.

#### **3.2.4.1 Consultations**

The recorded consultations were transcribed using Jefferson's method of transcription, as is widely used in CA and other discourse analytic studies (J. M. Atkinson & Heritage, 1999; Jefferson, 2004), including extensions developed by Hepburn and Bolden (2013) to represent paralinguistic features such as laughter. This method indicates details of turn-taking in the talk, through the use of turn numbers and overlap markers. For video data, participants' non-verbal interaction, such as smiling, and physical actions, such as opening the PDA, were also transcribed.

The notations in Jefferson's transcription system add details of *how* talk is conveyed, which includes accompanying physical actions for video data, to the standard orthographic rendition of *what* is said (Hepburn & Bolden, 2013). The conventions include notations for representing temporal and sequential relationships, to show the timing aspect of segments of talk (for example, latching, overlaps, gaps and pauses) (Hepburn & Bolden, 2013). In addition, aspects of speech delivery, (e.g., intonation, emphasis and volume) and other features (e.g., aspiration, laughter and crying) are represented. Table 3.3 lists the symbols used for transcribing the consultations.

The measurement of silence, categorised as gaps, which occur between turns or pauses, which occur within a turn, is indicated in many CA studies silence using a number in brackets to the nearest tenth of a second, relative to the speed of speech, for example, (0.2). This involves using a phrase, most commonly "none, one thousand, one, one thousand, two..." and repeating it according to the speed of the last preceding turn

(Hepburn & Bolden, 2013). If the next turn starts right after ‘none’, silence is marked as (0.2), if it starts after ‘none, one’, it is marked as (0.5) and so on.

**Table 3.3: Transcription Symbols**

[ ]	Overlapping talk
=	No discernible interval/silence between turns
(.),	Discernible silence but less than 0.2 of second
(0.3)	Silence within turns or in talk
.	Closing intonation
,	Slightly rising intonation
?	Rising intonation
:, wo:rd	Elongation of preceding sound
<u>Word</u>	Emphasis
WORD	Spoken more loudly
°word°	Spoken more softly
↑, ↓	Marked increase/decrease in pitch
Hhh	Outbreath or laughter
.hh	In breath or laughter
Hah, heh etc.	Laughter
£word£	‘Smiley’ voice
<word>	Talk is drawn out
>word<	Talk is speeded up
((word ))	Transcriber’s notes
(), (word)	Transcriber unable to hear or uncertain

**Source:** Jefferson, 2004; Hepburn & Bolden, 2013

In this study, however, silence was measured in absolute time, using a digital audio programme called Audacity. This method of measuring silence has also been used in other CA studies (Hepburn & Bolden, 2013) and was deemed appropriate for several reasons. Firstly, in performing the interactional mapping, the measure of turn duration rather than word count was considered necessary (see 3.3.1.2), which required the utilisation of computer aided measurement for reasons of accuracy and practicality. Therefore, pauses were measured during the process of measuring turn duration, to the second decimal point, for example, (0.51). These absolute measures do not consider the length of silence relative to the tempo of the talk making them less accurate when considering the context-dependence of talk. However, as the current study applies CA tools and concepts within a discourse analytic approach, such close attention to interactional features was not a

primary focus of the study, which also considers discursive and rhetorical practices and the overall interactional trajectory. Sub-section 3.4.2.1 describes the application of CA within the current study in more detail.

As the data were collected in the multilingual Malaysian setting, transcription method also the representation of translated talk and particular features of Malaysian English and Malay, which are described in the next sub-sections.

(a) ***Translated Talk***

Since several consultations were conducted partly, or completely in Malay, Malay talk was translated into English to make the data more accessible. Initially, the consultation data in Malay was transcribed using the three-line method used in CA research to present data in languages other than English (Hepburn & Bolden, 2013). This involves presenting 1) the talk in the original language, 2) a morpheme-by-morpheme English translation and 3) an idiomatic English translation to convey the meaning of the original, as shown in the following example.

<b>Turn</b>	<b>Speaker</b>	<b>Talk</b>
007	P2	<i>kata I tengok kawan-kawan I pun &gt;smua&lt;</i> say I see friends, my even >all< like, I see all my friends, even <i>ape ni: macam susah ah kan?</i> what's this, like difficult er, right? what d'you call it, it seems difficult, right?

However, as analysis progressed, it became apparent that the three-line method provided details which were unnecessary for the analysis required to address Research Question 2, on use of the PDA (Chapter 5) and Research Question 3, on treatment negotiation (Chapter 6). These additional details also affected the clarity of presentation of the Malay language data excerpts. This is because morpheme-by-morpheme analysis of interaction was not a focus of the study. Moreover, in most of the selected data extracts, the order of words in English and Malay did not differ significantly. Therefore, it was

decided that the Malay data should be presented with a single line of English translation as shown in the following example:

Turn	Speaker	Talk
007	P2	<i>kata I tengok kawan-kawan I pun &gt;smua&lt;</i> like, I see all my friends, even <i>ape ni: macam susah ah kan?</i> what d'you call it, it seems difficult, right?

The other languages used to a lesser extent in the consultations, namely Cantonese and Tamil, were translated in different ways. The Cantonese words for “doctor”, “injection” and “diabetes” were used a few times by the doctor in Consultation B7 when conversing with a first-language Cantonese speaker in Malay. Since these were isolated occurrences, the meaning of the word was indicated in double brackets in the transcripts and explained if necessary in the analysis. In Consultation A4, the patient speaks a longer string of words in Tamil to her husband, when she has trouble understanding the doctor’s question in English. This turn in Tamil is not translated due to the unintelligibility of the audio. However, in terms of the analytical focus, this omission was considered not to seriously impact the findings (see Excerpt 5.2, in sub-section 5.1.2.1).

(b) ***Features of Malaysian Talk***

In transcribing the consultations, effort was made to retain the features of talk in Malaysian English and Malay, including varying varieties of Malaysian English, the use of particles such as “*lah*”, “*ke/kah*”, and “*ah*” to perform different pragmatic functions and the mixing of languages (Baskaran, 2008; Bell & Sert, 1989; Cheng, 1995; 1994; Goddard, 1994; Kuang, 2017).

The English used in the consultations represent the wide range of Malaysian English (MalE) sub-varieties, from the more standard form seen in Excerpt 3.1 to the colloquial version in Excerpt 3.2. These variations have been attributed in part to the education level of speakers, English proficiency and first language (Baskaran, 2008). For example, the

patient in Excerpt 3.1 is an engineer while the patient in Excerpt 3.2 has completed secondary school education and speaks Tamil as a first language. Doctors, like other Malaysians, may switch between varieties of English depending on who they are talking to. In the transcripts of colloquial Malaysian English, translation was not provided as the meaning of the talk was considered to be apparent, despite the non-standard grammatical structures used, for example, “Rice how much you eat?”.

### Excerpt 3.1: Example of Malaysian English (1)

Turn	Speaker	Talk
038	P3	so, at the moment, I cannot make a decision to go for insulin or <u>not</u> ,
039	DR2	right
040	P3	<b>e:r so: even in this booklet,(0.86)they show a guideline <u>where my: (0.67) sugar glucose level, is at the borderline [as ]as <u>well</u></u></b>
041	DR2	[right]
042	DR2	right
043	P3	erh <u>so:</u> if I were to decide no:;w (0.56) I will not use it, at the moment <b>lah.</b>

### Excerpt 3.2: Example of Malaysian English (2)

Turn	Speaker	Talk
36	DR8	rice how much you eat?
37	P11	rice, (.) only little bit only
38	DR8	little bit
39	P11	m:h
40	DR8	how many scoops?
41	P11	ah, two spoon
42	DR8	two spoons la (.) exercise? (0.61)
43	P11	exercise, now I: never do because, I'm: doing, (0.36) morning breakfast (0.89) for people <b>lah</b>

The use of the “lah” particle, which is used for emphasis in the last lines of Excerpts 3.1 and 3.2 serves many functions, including to express solidarity as well as to register an oppositional stance (Bell & Sert, 1989; Goddard, 1994). Moreover, in the Malay talk, various other particles are observed, such as “kah/ke”, “lah” and “ah” used for various pragmatic functions. For example, as shown in Example 3.3, “kah/ke”, serves as a sort of tag question in the speakers’ polar questions.

### Excerpt 3.3: Example of Malay talk (1)

Turn	Speaker	Talk
154	DR4	<i>ada lagi ke benda lain yang uncle ta[kut?]</i> is there anything else you're scared of?
155	P6	[ <i>bo-</i> ] = <i>bo- boleh angkat kah,</i> <i>s'karang</i> (0.53) <b>ca- can I take it now?</b>
156	DR4	<i>mau angkat insulin s'karang ke?;</i> you want to take insulin now? (0.31)
157	P6	<b>ha</b> (.) <i>boleh angkat ka?;</i> ya, can I take it?

The talk also includes various other particles such as “ha” used to indicate affirmation (Excerpt 3.3, turn 157) and “ah”, which takes various meanings depending on context and pronunciation. As shown in Excerpt 3.4 “ah” in the first turn (103) acts as a marker to indicate receipt of new information (similar to “Oh”), while in turn 104, the patient uses “ah” to affirm the doctor’s prior statement (similar to “yes”). In turn 107, “ah” is a hesitation marker (comparable to “er”).

### Excerpt 3.4: Example of Malay Talk (2)

Turn	Speaker	Talk
103	DR3	<b>a::</b> (.) <i>So maknanya sekarang, satu tahun tapi sudah makan ubat yang maksimum lah.</i> Oh. So that means now, it’s one year but you’re already taking maximum medications
104	P5	<b>a:</b> <i>maksimum.</i> ya, maksimum
105	DR3	<b>a:</b> <i>tak boleh tambah lagi kan?</i> ya. You can’t add it anymore right?
106	P5	<b>ha</b> ya
107	DR3	<i>so s'karang ni a::, hari tu kita ade cakap pasa:l: .h mau: start itu insulin kan?</i> so now, er, that day we had talked about, wanting to start insulin, right?

This study does not focus on specific phonological and pragmatic features of these particles, therefore, the accuracy of length and intonation in the markers was not emphasised during transcription. However, the meanings of these particles is relevant to the analysis of treatment decision making, and therefore, care was taken to consider their



pragmatic function, which is reflected in the translation, for example, transcribing “ah” as “yes” or “er” in English. The particle “lah”, however, was left as is in the English transcript for lack of an appropriate English translation.

The use of more than one language in the talk is also a feature of Malaysian interaction (Baskaran, 2008), as shown in the following excerpt from a consultation which is largely conducted in English. For single words or short phrases, the translations were inserted in brackets next to the talk, while the translation of longer phrases was provided under the original talk as done for the Malay language consultations.

### Excerpt 3.5: Example of Codeswitching

Turn	Speaker	Talk
175	DR5	↑what is your main (.) worry or concern about regarding the insulin.
176	P7	o:kɑ:y <sub>o</sub>
177	DR5	what, what is your concern. <b>baru kata insulin kan</b> , a: a lot of people “ <b>Alama::k, itu jarum sangat be[SA:OR</b> ” like that]. <i>what, what is your concern. when you just mention insulin a lot of people say “oh-no! that needle is really BIG”</i>

In keeping with the focus of this study, the main concern in transcribing and translating the talk was the pragmatic functions of the details of talk, and their relevance to the performance of treatment decision making. Where significant, the meanings of particular features of talk, such as the use of particles, are explained further in the analysis.

This section has described the application of Jefferson Notation to transcribe the doctor-patient consultations which are analysed using Activity Analysis (See 3.4.1 and 3.4.2). The following section will describe the transcription of the interviews.

#### 3.2.4.2 Interviews

Since the analysis of accounts in the interview data focuses on rhetorical and discursive practices, rather than features of interaction, a far less detailed transcription method was used. As the following example shows although some interactional features such as

stuttering (*Y-y-you*), incomplete words (*ad-advice*), pauses ((.)) and token acknowledgements (*hmm, mh*) are indicated, the transcription closely resembles standard English/Malay orthography.

Line	Speaker	Talk
34	PC	y-y-you must be m- more inquisitive and in asking questions (.)
35		you it's up to you lah
36	R	hmm
37	PC	it's your body
38	R	mh
39	PC	you got to take care of your body

The preceding sections have described the transcription methods used to create representations of the recorded consultations and publications for use in the analysis, and the presentation of data. Quality of transcription is integral to the reliability and validity of the findings. However, transcription can never be a perfectly accurate rendition of real interaction and decisions about how much detail and what sorts of details to include in transcripts are determined by their relevance to the analysis (Gee, 2014). This included considerations regarding accessibility of the transcripts to others outside the field (Hepburn & Bolden, 2013), particularly those in the medical profession. Within these limitations, effort has been made to ensure accuracy of the transcriptions in terms of content as well as procedural aspects of turn-taking, measures of silence and volume, or hesitations which might indicate resistance or other affective responses.

The excerpts used for analysis went through additional rounds of transcription and checking, while collaboration with co-authors ensured that transcriptions were subject to feedback and input from others. Transcription was thus, an iterative rather than linear process, passing through several levels of analysis using various discourse analytic methods before the Theme-Oriented Discourse Analysis was selected as the approach for this thesis. This will be described in the following section.

### 3.3 Approach and Analytical Framework

As described earlier, the analytical approach used in this study is Theme-oriented Discourse Analysis (Roberts & Sarangi, 2005), comprising Activity Analysis (Sarangi, 2010a) of doctor-patient consultations in which a PDA on insulin is used, and Accounts Analysis (e.g., Arribas-Ayllon et al., 2008a, 2008b, 2008c; Sarangi, 2010b) of doctors' and patients' accounts during research interviews.

Theme-oriented discourse analysis is a flexible and interpretive approach towards analysing discourse in professional settings, citing the need for analytical objectives to be relevant to the professional context. According to Sarangi (2010b), discourse analysis is a “composite activity”, which requires discourse analysts to engage in “thick participation” and “thick description” of the social practice being investigated. Thick participation refers to the analyst's engagement with the site of the study in order to develop the necessary understanding of a particular professional activity, while thick description can be achieved from drawing on various types of data and considering the feedback and input of professionals in the analysis. Sarangi (2010a, p. 413) states that “any interpretation of a slice of data is incomplete both in itself and with regard to the overall context of illness and health care”. “Ecological validity” can therefore be better attained by using a combination of clinic data, interview data, ethnographic fieldwork and other documentary data. The discourse data to be analysed can be further distinguished into two types: discourse as activity and discourse as account (Sarangi, 2010b).

The notion of discourse as activity is built upon Levinson's notion of “activity type”, or the goal-defined characteristic of talk in specific circumstances, for example a job interview, where participants' interaction is constrained by the setting allowable contribution (Levinson, 1979; Sarangi, 2010a). This is especially relevant to professional discourse, such as the context of this study, where the goal of the interaction is clearly

defined and known to participants. In contrast, the notion of discourse as account refers to how participants use discourse in order to account for their actions to others (Garfinkle, 1956 as cited in Sarangi, 2010a). The other-orientation of accounts reflect their moral dimensions, in that they are used when actions are subject to evaluation (Sarangi 2010a).

In this study, the analysis of doctor-patient consultations was approached as an analysis of discourse as activity, applying the method of Activity Analysis to analyse the consultations. Within sequences of talk, participants not only use interactional devices and mechanisms, such as questions and answers, turn-taking and silence, but they may also employ accounts to explain a symptom, justify an action or negotiate for particular treatment.

Accounts are not only found in naturally occurring talk, but also in research interviews, which are also a jointly-constructed activity type (Sarangi 2010a). For this study, however, the analysis of the interview data did not aim to describe the interviews as an activity type, but to analyse the accounting practices of doctors and patients in constructing accounts of their treatment decision making experiences. To do this, the method of Accounts Analysis was used, which will be described in Section 3.3.3.

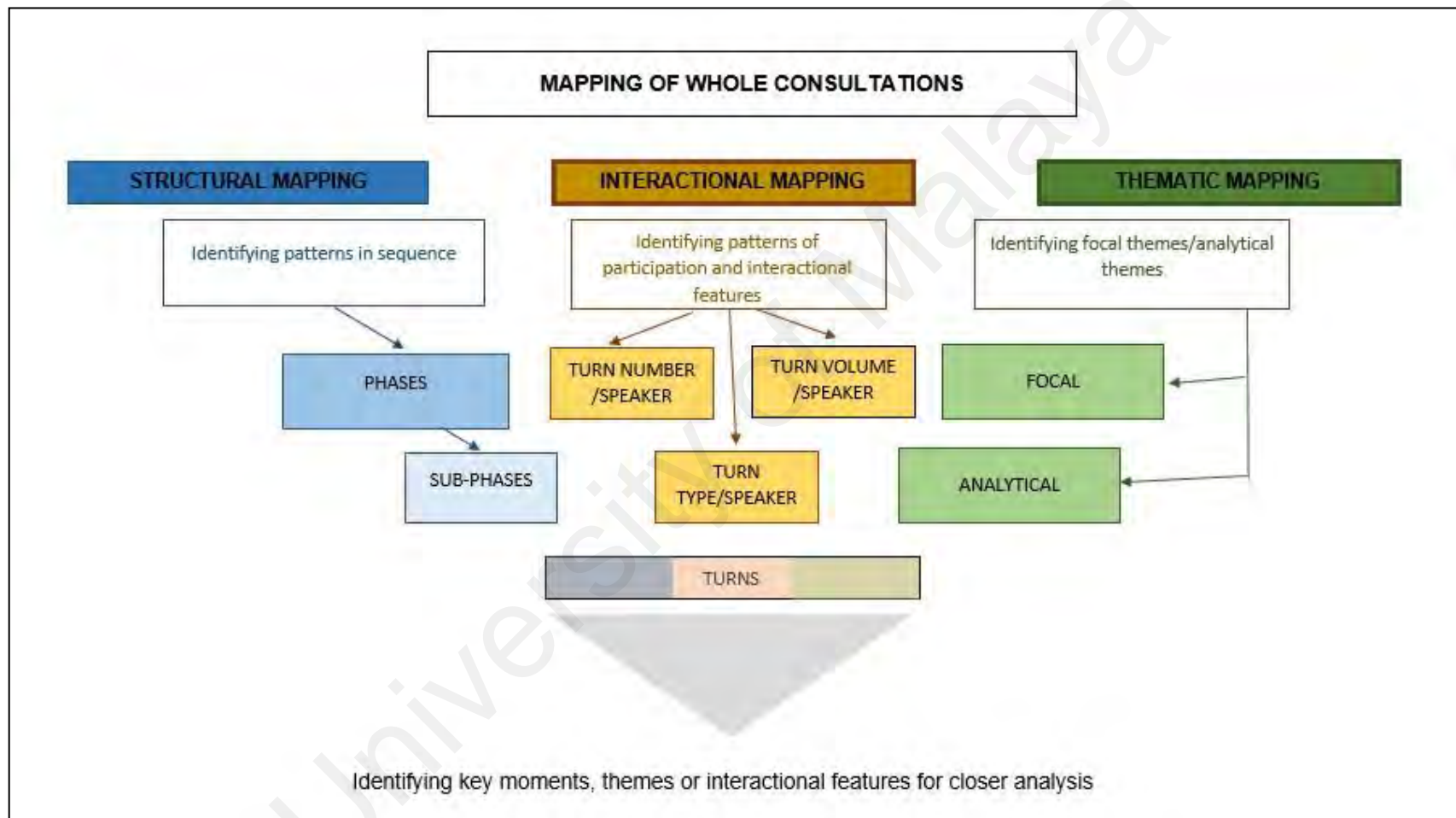
### **3.3.1 Activity Analysis**

Sarangi (2010a) proposes Activity Analysis, as a method which bridges micro-analytical focus of interactional sequences and the macro-aspects of the interaction in its institutional context. The nature of an activity type, as goal-defined and culturally recognised, means that interactions in an activity may have prototypical elements. Moreover, participants have a shared understanding of the goals of the activity and what it involves, which is the “inferential schemata” tied to each activity type (Levinson, 1979). Examples of activity types are a football game or sales presentation, or in the context of this study, the doctor-patient consultations during routine diabetes visits. This broader

notion of “activity” contrasts against the smaller notion of “activities” such as recommending and making a diagnosis in CA studies, and instead bears closer resemblance to Ten Have’s (1989) conceptualisation of doctor-patient consultations as a genre.

Activity Analysis emphasises the mapping of whole interactions as a means of identifying “activity-specific coherence and incoherence as well as critical moments for further detailed analysis” (Sarangi, 2010a, p. 178). As cases of a particular activity type, entire interactions are mapped according to structure, interaction and theme to identify patterns in the data.

The mapping analysis ties the content of the talk to the form of the talk and provides a systematic method of identifying patterns in structure, interaction and themes across whole consultations. Structural mapping ties the content of the talk to sequential order by identifying phases and sub-phases in the talk, while interactional mapping is concerned with the number and type of turns and how these are distributed across speakers. Thematic mapping shows the propositional and procedural content of the talk and includes focal themes which may be addressed explicitly or implicitly, for example, risk, autonomy and decision making and analytical themes, for example, frames and footing, alignment, or face.



**Figure 3.2: Structural, Interactional and Thematic Mapping**

Sarangi (2010b, p. 180) describes Activity Analysis as “an enterprise in interpretive understanding” and positions this approach as “situated between sequential description (as is the case with conversation analysis) and extra-situational explanation (as is the case with critical discourse analysis). As such, Activity Analysis provides a “meso-level” explanation of the overall structure of the interaction, while enabling the identification of focal and analytic themes for closer analysis (as shown in Figure 3.2).

This closer analysis of talk can be performed, for example, using Discourse Analysis or Accounts Analysis to explicate the discursive, rhetorical and/or interactional practices of participants, or using Conversation Analysis to explicate specific interactional practices such as turn-taking or repair, in particular phases or sub-phases of the activity. Previous applications of Activity Analysis have included Storey’s (2012) analysis of discursive and interactional practices in problem-based tutorials with medical students and Halvorsen and Sarangi’s (2015) examination of discourse and activity roles in team-meetings in the oil and gas industry. In the following sub-sections, each type of mapping will be described in more detail, with examples from the present study.

### **3.3.1.1 Structural Mapping**

Structural mapping is concerned with the content of talk, which is linked to specific goals of the activity. The structural map categorises sections of talk as sub-phases and phases which lead up to the accomplishment of the activity concerned. For example, Sarangi (2010a, p. 403) identifies the structural pattern in doctor patient consultations in two different paediatric clinics, as shown in Figure 3.3.

As Figure 3.3 shows, structural mapping involves identifying the sequential order of content throughout the consultations. The structural maps include phases identified in previous studies on doctor-patient consultations, yet the phases appear in a different sequence between Clinics A and B. Such variations within the same activity type can

traced to differences embedded in the flow of interaction and content within each consultation (Sarangi, 2010a). Upon closer analysis Sarangi (2010a) discovers that the doctor in Clinic A prescribed antibiotics, while the doctor in Clinic B did not, leading to the conclusion that consultations in which antibiotics are not prescribed are longer, involving prolonged and more complicated examination, treatment and symptoms assessment.

Clinic A		Clinic B	
Turns	Phase	Turns	Phase
1-4	Opening	1-4	Opening
5-9	Symptoms	2-26	Symptoms
10-14	Treatment	27-31	Treatment
14-16	Symptoms	31-40	Symptoms
16-20	Examinations	41-43	Examinations
20	Diagnosis	44-51	Symptoms
20-28	Treatment	52	Treatment
28-31	Symptoms	53-54	Examination
32-36	Treatment	55	Causal Explanation
37-39	Closing	56-58	Symptoms
		59-63	Examination
		64-65	Non-medical
		66-72	Symptoms
		73-83	Causal explanation
		83-85	Treatment
		86-92	Symptoms
		93	Treatment
		94-98	Symptoms
		99-101	Miscellaneous
		101-115	Treatment
		116-121	Closing

**Figure 3.3: Structural Mapping of Doctor-Patient Consultations**

**Source:** Sarangi (2010a, p.403)

While the examples from Sarangi (2010a) show mapping only at phase level, structural mapping can be further refined by identifying sub-phases within each phase. Using Consultation A1 as an example, the following excerpt (Excerpt 3.1) shows how the structural mapping was performed for the present study.



In performing the structural mapping, the talk was first analysed to identify how the content of each turn fits in with the goal of the professional setting. For example, in turns 27-31 the doctor is delivering the patient's recent test results (sub-phase), which is followed by other sub-phases such as discussion of the patient's treatment history, current medication and current sugar control.

### Excerpt 3.6: Consultation A1-Example of Mapping

Turn	Speaker	Talk	MAPPING-PHASE & (sub-phase)
*27-29	DR1	<i>live:r, (.) liver is also all normal, no problem. .h yang problem satu yang: besar itu biasa punya? He-he ((laughs)) you punya:&lt;H.B.A.1 C,&gt; yang untuk kencing manis, dia: &lt;langsung tak ada kura::ng&gt; masa ini pun nine point ↑one. liver is also all normal, no problem the one big problem, the usual one? ((laughs)) your HbA1c, for diabetes. It hasn't reduced at all even now it's at nine point one</i>	ASSESSMENT - (test results)
30	P1	<i>m::h</i>	
31	DR1	<i>nine point one, kalau ikut de punya ni chart you tengok, it is, diabetes with? poor contro:lh(.) nine point one, according to this chart you see, it is, diabetes with poor control (1.42)</i>	
32	DR1	<i>so memang ini sudah lama punya cerite::: so this is an old story</i>	(treatment history)
33	P1	<i>m:h</i>	
*34-49	DR1	<i>NAME pun (.) faham ini::, Saya pun faham inEhi::, ((laughing voice)) So kita mahu compromise .h macam suda:h .h, dekat ampat tahun kita [a]da:: [ca]kap = kita perlu mau buat in-= ((P1's minimal turns omitted)) you also understand this, I also understand this. so we want to compromise. it's like already almost four years we've been saying, we need to do (in-)</i>	
40	P1	<i>insulin (0.99)</i>	
*41-43	DR3	<i>insulin pun ye:s, tapi ini: saya cuba lain ubat pun sudeh.[s'ka]rang kencing manis punya ubat ada brapa? insulin yes, but I've already tried other medicines. now how many diabetes medications are you taking?</i>	
44-57	omitted as DR1 and P1 discuss current medicines)		
58	DR1	<i>=so itu pun kita dah bagi. tapi m- selepas itu pun kita tengok dia p'nya control? (.) no not very good. i↑sn't it so we've also given that. but after even after that we see the control? no not very good, is it?</i>	(sugar control)
59	P1	<i>Yah</i>	
60	DR1 →	<i>so::, s- s'karang ini yang dia orang ada:: bagi kita:: a:h, ada assistance. Kalau kita perlu mula insulin.(0.2) Sebab itu dia ada ini booklet so, now they've given us er, assistance. If we need to start insulin. That's why they have this booklet</i>	TREATMENT PHASE (PDA)

\*P1's quasi-turns (minimal tokens) omitted for brevity.

These sub-phases are focused towards forming an assessment of the patient's current condition, and are therefore categorised as talk in the Assessment phase. In turn 60, the doctor introduces the PDA to the patient, which also brings up the matter of insulin as a potential future treatment for the patient. This change in focus from the patient's current health status to a potential treatment, is not only a different sub-phase (PDA) but also marks the beginning of a new phase, concerning the patient's future treatment (Treatment phase). The entire consultation was mapped in this manner, resulting in the consultation maps shown in Tables 3.4 and 3.5.

As Table 3.4 indicates the consultation is made up of three phases, Assessment, Treatment and Closing, which occur in a linear manner. Comparing the consultation maps at this level across the eleven consultations provides a broad picture of how the content of consultations is organised sequentially, as will be discussed in Chapter 4. The categorisation of phases, along with examples, will also be presented in Chapter 4.

**Table 3.4: Phase Level Structural Map of Consultation A1**

<b>Turn Nos</b>	<b>Phase</b>
1-59	Assessment
60-255	Treatment
256-260	Closing

Table 3.5 shows an excerpt of structural mapping at the sub-phase level for the same consultation. As can be seen, the 59 turns in the Assessment phase include four sub-phases, with discussion of the patient's test results, treatment history and current medication leading up to an assessment of the patient's sugar control. It is after this point that the PDA is first discussed (turns 60-63), which also marks the beginning of the Treatment phase.

**Table 3.5: Sub-phase Level Structural Map of Consultation A1 (excerpt)**

Turn Nos	Sub-Phase	PHASE
1-32	Test results	ASSESSMENT
33-40	Treatment history	
41-57	Current medication	
58-59	Current sugar control	
60-63	PDA-Introducing the PDA	
64-65	Recommendation to start insulin	TREATMENT
66-84	PT concerns about insulin (PDA pg 3)	
85-86	Treatment decision	
87-116	Insulin & its Functions (PDA pg 5-6)	

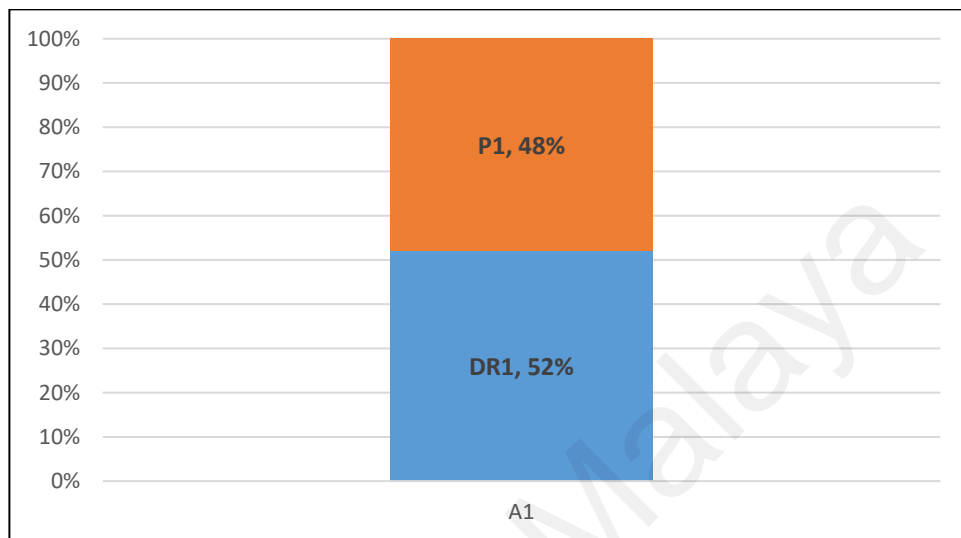
The structural mapping at this phase aids in the identification of similarities and differences in structure within each phase, indicating moments and themes for further analysis. For example, comparing the maps of consultations enables identification of broad patterns in PDA use and treatment decision making, as discussed in Section 4.3 of Chapter 4, which informs the closer analysis of talk during PDA use (Chapter 5) and during treatment negotiation (Chapter 6).

### 3.3.1.2 Interactional Mapping

As Sarangi (2010a) points out, the structural map shows how the phases of the consultation are structured sequentially within the overall activity but does not show the interactional form of how the content is managed, or how the interaction is distributed between participants. Interactional mapping, therefore, aims to identify patterns of participation and key interactional devices. Through this, asymmetries of participation can be identified (Sarangi, 2010b). Mapping involves considering the number and volume of turns each participant makes and can be further focused to examine the types of turns each participant makes, for example, whether a participant's turns are made up mainly of questions or statements.

Using Consultation A1 again as an example, from the structural mapping in Table 3.4, we can see that there are a total of 260 turns in the consultation, distributed across the

four phases. Analysis of the number of turns, as the first step of interactional mapping, gives us the following results: DR1's turns=135 turns and P1's turns=125 turns, which are represented as percentages in the following pie chart (Figure 3.4).

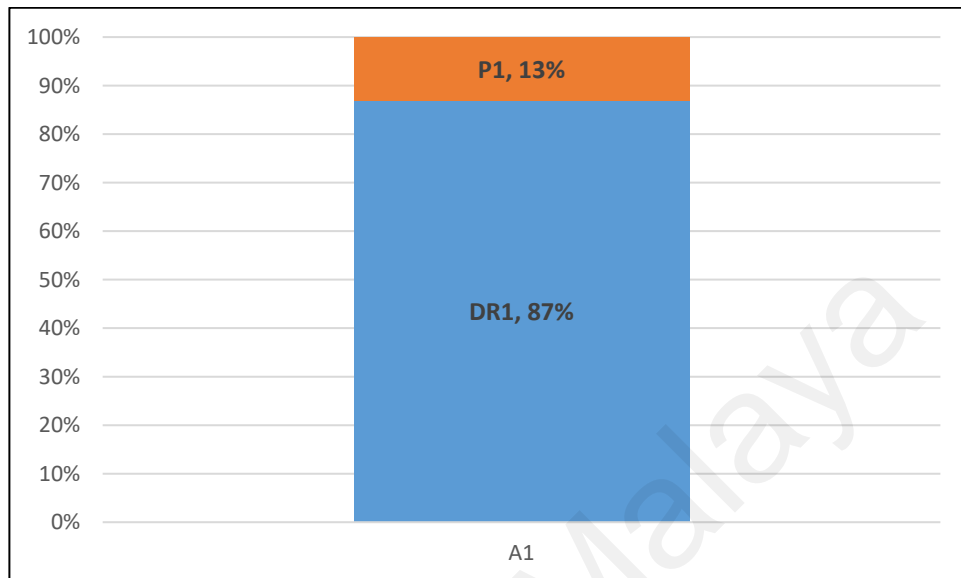


**Figure 3.4: Consultation A1-Number of Turns (% of 260 total turns)**

In a dyadic conversation such as this one, it can be expected that turn types would roughly be equal between the two participants, as shown in Figure 3.4. However, an approximately equivalent number of turns does not necessarily indicate approximately equal participation, as a single turn could be a question or statement, but could also be a minimal acknowledgement tokens or backchannelling responses. To present a more accurate picture of participation, analysis of turn volume is performed.

In previous applications of Activity Analysis, for example, by Sarangi (2010b) and Storey (2012), "turn volume" has been measured by word count. However, the present study measures volume according to the time taken up by each turn (in seconds and minutes). Time was considered a suitable measure of volume since it could include pauses and other temporal features of interaction, such as hesitations or rushed speech, which might not be accounted for in a word count. This decision also reflects the significance of consultation time as a barrier or facilitator to patient-centred decision making, as

indicated in the literature review. The results of turn volume analysis of Consultation A are presented in percentage form as follows:

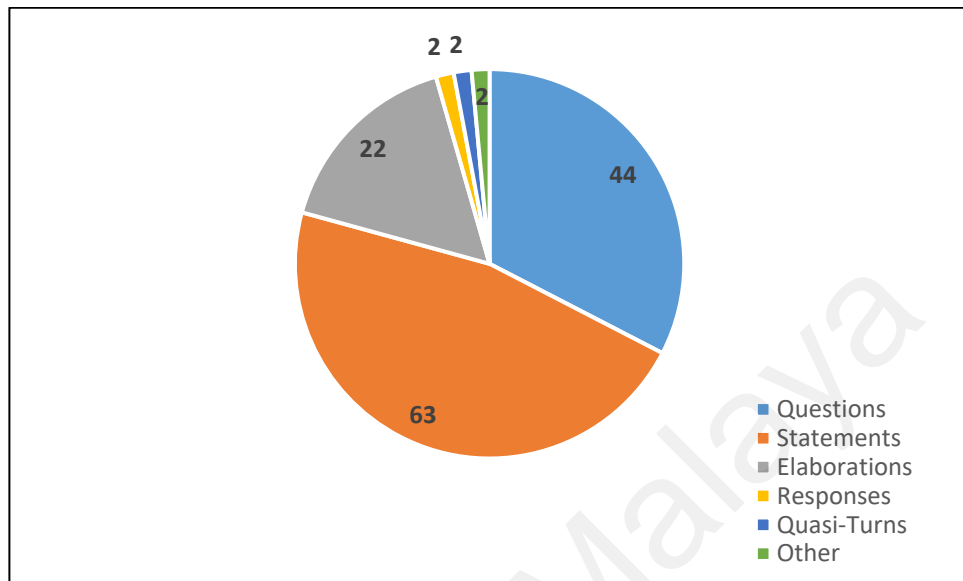


**Figure 3.5: Consultation A1-Volume of Turns (% of total turn volume)**

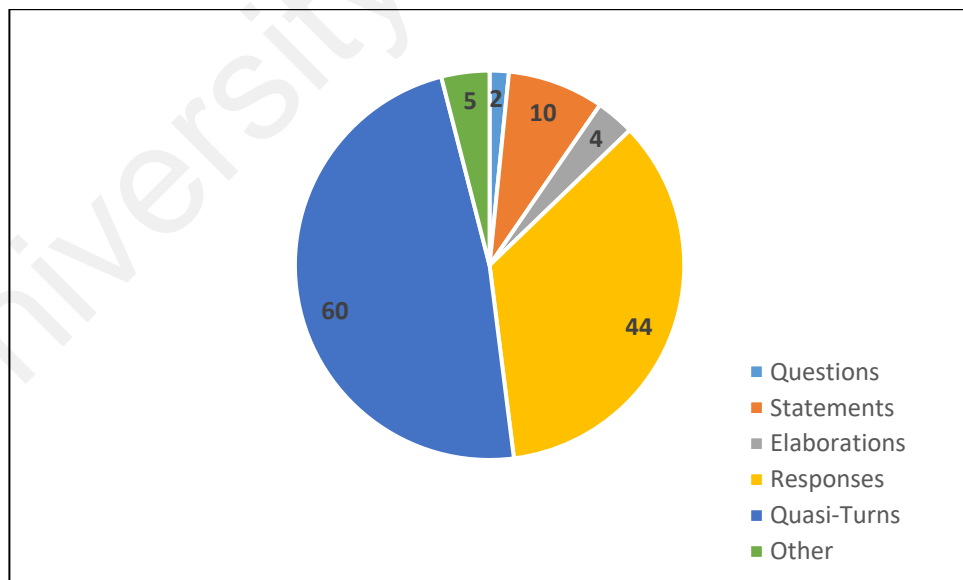
The figure shows a significant difference in the volume of turns between the doctor and patient, with the latter contributing only 13% of the talk. The comparison of this type of mapping across consultations shows broad patterns of participation in the consultations, which can be further broken down to identify patterns of participation according to phases, as presented in Chapter 4.

To further identify patterns of participation, the 260 turns in the consultation can also be analysed according to type of turn. In the interactional mapping for this study, turns were categorised as Questions, Responses, Statements, Elaborations, Quasi-turns, or Other. Quasi-turns are those turns made to confirm or show comprehension, including minimal acknowledgement tokens or back-channelling. The Other category includes relational talk, such as greetings, goodbyes, and thank yous, paralinguistic turns, which mainly comprised laughter, and other turns such as interjections, requests for repetition

(*Pardon?/ Oh?*) which did not fall into any of the existing categories. Figures 3.6 and 3.7 show the analysis of doctor and patient turn types of Consultation A1, as an example.



**Figure 3.6: Consultation A1-Doctor's Turn Types (Total: 135)**



**Figure 3.7: Consultation A1-Patient's Turn Types (Total: 125)**

While the analysis of turn volume has already identified the minimal participation of P1 in comparison to the doctor, turn-type analysis shows how this participation is

distributed across interaction type, with doctor-led question-answer sequences and the doctor's statements comprising most of the talk. Comparison of turn types across consultations, and broken down according to phase, provides an idea of the key interactional devices in the data, as discussed in Chapter 4 (Sections 4.14, 4.2.1, and 4.3.1), and informs the analysis of PDA use (Chapter 5) and treatment negotiation (Chapter 6).

(a) *Calculation of Turn Numbers, Turn Type and Turn Volume*

This section describes the technical procedures used to calculate turn number, turn type and volume for the interactional mapping. Calculations were performed using MS Excel, a spreadsheet programme, while measurement of turn length was performed using Audacity, a digital audio programme.

Initial transcription was performed in MS Word, undergoing several iterations (see 3.2.4.1), before the transcripts were pasted into separate MS Excel sheets for each consultation. The existing organisation of transcripts in MS Word table simplified the pasting into spreadsheet format, with column headings "Turn Number", "Speaker" and "Talk" retained.

For turn number calculation, the COUNT function was used to count the frequency of specific participant labels in the "Speaker" column, for example, "DR1" or "P1" in Consultation A1. This returned the total number of turns of each participant. To check accuracy, the total combined turns in the consultation (indicated by the last number in the automatic running line numbers in the Turn Number column) was compared to the summed total of "DRX" and "PX" frequency counts (and "H", in the case of the triadic consultation, A4). For example, in Consultation A1, there were 260 turns in total, while the COUNT totals for DR1 and A1 were 125 and 135 respectively, which adds up to 260 turns. Where there were discrepancies, transcripts were checked on a line-by-line basis

until the last Turn Number value matched the combined total of turns calculated for each speaker.

To calculate turn types, an additional column titled “Turn Type” was added after the “Talk” column. For each line on the spreadsheet (representing each turn), a code was added indicating whether the turn was a question (Q), statement (S), elaboration (E) response (R), Quasi-turn (Q) or other type of turn (O). Then for each consultation, a new spreadsheet was created for each speaker, leading to a total of three spreadsheets for each consultation (four for the triadic Consultation A4). One spreadsheet contained the original transcript, and the other two included either the doctor’s or the patient’s turns. Following this the COUNT function was used for each code in the Turn Type column (i.e., Q, S, E, R, Q or O) calculated separately for the doctor and patient. The total of all turn types for each speaker was compared to the total number of turns identified in the previous calculation to ensure accuracy. For example, of P1’s 125 turns, the turn types were Q:2, S:10, E:4, R:44, Q:60 and O-5, which totals 125.

Finally, to calculate turn volume, an additional column, titled “Volume” was created. The duration of each turn was measured using Audacity, which shows sound visually in terms of a horizontal line that undulates according to volume of the audio. As an audio file plays, a moving point indicates the corresponding point on the soundwave line, enabling the identification of start and end points of each turn. Since the wave line is at its lowest point during silence and increases with volume, silences between words and turns were easily identified.

However, measuring turn volume was a painstaking process of highlighting the area between the start and end of each turn, and referring to the number of seconds (to the third decimal point) displayed in the “length” box at the bottom of the screen, which shows the duration of the selected section. This was repeated for each turn in the consultation, as



well as for gaps (silences between turns) and pauses (silences within turns). The turn volume of each turn was then recorded in the Volume column. Accuracy was checked by calculating the total turn volume in the consultation using the SUM function and comparing this to the total consultation time. In this case, an approximate match was considered sufficient given the rounding to two decimal points. Separate turn volume totals for doctors and patients were calculated using the same process used to calculate separate turn types for each speaker.

This process was repeated for each consultation, before percentages were calculated and graphs generated to facilitate comparison across all consultations (Section 4.1 of Chapter 4). Following this section on interactional mapping, the methods used for thematic mapping are discussed.

### **3.3.1.3 Thematic Mapping**

The third type of mapping is thematic mapping, which is informed by identification of key structural phases and sub-phases, through the structural mapping, and of key discursual devices, through the interactional mapping. While the structural and interactional maps give a broad idea of content and participation in the consultations, respectively, thematic mapping enables a more detailed view of the consultation (Sarangi, 2010b).

The thematic maps include focal themes addressed implicitly in the talk, such as shared decision making, or those addressed explicitly, such as risk in genetic counselling sessions, as well as analytic themes, for example, frames, footing and alignment, or misunderstandings, which explicate the form by which the thematic content is managed in the talk (Sarangi, 2010b). For example, as mentioned earlier, the focal themes of PDA use and treatment decision making were identified as key themes for further investigation as a result of the structural mapping. Excerpt 3.7 below, taken from the beginning of the

Treatment phase in Consultation A1, shows an example of how the themes of PDA use and treatment decision making are mapped on a turn-by-turn level. In consideration of space, the analysis of both themes has been combined into one column.

### Excerpt 3.7: Consultation A1-Example of Thematic Mapping

Turn	Speaker	Talk	PDA Use/TDM
60	DR1	<i>so.::, s- s'karang ini yang dia orang ada.:: bagi kita.:: a:h, ada assistance. Kalau kita perlu mula insulin.(0.2) Sebab itu dia ada ini booklet</i> so, now this one they have given us, er, there's assistance. If we need to start insulin. that's why they have this booklet	PDA-Introducing TDM/Initiating TDM  -insulin focused -modals
61	P1	M:h	
62	DR1	<i>ini dia tolong doctor, tolong patient to decide. kalau perlu: (0.79) mula dengan insulin apa.::</i> this, it helps the doctor, helps the patient to decide, if need to start with insulin or	-shared decision  -insulin focused polar choice
63	P1	M:h	
64	DR1	<i>s:- kita (.) tak tau, kalau you.:: mau (.) inject sudah empat tahun saya sud- sudah cuba cakap you "NAME mau inject."</i> we don't know if you want to inject its already four years I've tried to tell you "NAME, you should inject"	TDM-Recommendation to  -reported speech -time reference -modal verb 'should'
65	P1	hnh	
66	DR1	<i>↑apa yang you ada problem yang you fikir.=</i> what are you are there problems that you're thinking about?	PDA-Going through TDM-Eliciting concerns  -Wh questions
67	P1	<i>h:h ((laughs)) tada:hh</i> nothing	PT response -denial, laughter

As seen in the excerpt, PDA use and treatment decision making are intertwined throughout the turns, for example, the introduction of the PDA in turns (turns 60-63) coincides with initiation of treatment decision making. The thematic mapping also indicates relevant analytical concepts and interactional features of talk. When summarised into a map of the whole consultation as shown in Table 3.6, the thematic mapping allows PDA use and treatment decision making to be analysed separately, while also comparing how these concerns develop sequentially throughout the turns. The right most column indicates the salient focal themes which are addressed in the talk, patient knowledge, choice and perspectives, and how they appear sequentially in the data. This

mapping is compared across consultations to identify patterns and key features of interaction in the consultations.

**Table 3.6: Thematic Map-Consultation A1**

Turns	Structural Sub-phases	PDA Use	TDM Sub-phases	Focal Theme
60-63	PDA	Introducing the PDA, Initiating TDM	Decision making	Pt perspective/ choice
64-65	Recommendation to start insulin			
66-84	Patient concerns about insulin			
85-86	Treatment decision			
87-116	Insulin & its functions	Providing information	Information delivery	Pt knowledge
117-161	Symptoms & complications			
162-192	Administering insulin/insulin pen			
193-196	Sugar targets			
197	Treatment plan		Decision making	Pt choice
198-201	Self-monitoring		Information delivery	Pt knowledge
202-206	Financial concerns			
207-217	Using insulin-Diet & exercise	Providing information		
218-223	Treatment decision		Decision making	Pt choice
224-232	Instructions-Travelling & insulin		Information delivery	Pt knowledge
233-238	Treatment plan		Decision making	Pt choice
239-245	Instructions-Travelling & insulin		Information delivery	Pt Knowledge
246-251	Treatment decision		Decision making	Pt Choice
251-257	Treatment plan			Pt Choice

It must be pointed out that the maps presented in this section are not presumed to be the only way that the consultations can be mapped. The level of detail and the aspects focused on in the mapping depend on the focus of the analysis, in other words, taking a theme-oriented approach. For example, in the summarised map of PDA use, only the general discourse type is indicated (e.g. providing information), while details of interaction and analytical concepts are not. A more detailed mapping, such as shown Excerpt 3.7 includes such details.

In the mapping of treatment decision making, on the other hand, talk is categorised into two broad sub-phases: “decision making”, which is concerned with discussing preferences or recommendations about treatment options, and “information delivery” sub-phases, which is concerned with providing information on treatment options. These two sub-phases tie into the focal themes of patient perspective and choice, and patient knowledge, respectively. Mapping at this level enabled comparison of broad patterns of PDA use and treatment decision making across the trajectory of the consultations, as described in Chapter 4 (Section 4.3) and Chapter 5 (Section 5.1), in order to identify key moments for further investigation through closer analysis of talk. In the following section, the method used to analyse the talk over turns will be described further.

### **3.3.2 Discourse Analysis**

Discourse analytic research is generally considered as working within a constructionist research paradigm, which conceives of social structures and actions as constructed through micro-level actions, including through discourse (Potter, 1996). However, the term “discourse analysis” (DA) encompasses a wide range of analytical approaches and methods, utilising different tools and concepts to suit specific research endeavours. In addition to the mapping of whole interactions, the key analytical features of Activity Analysis include integration of discourse and rhetorical devices, Goffman’s notion of frame, footing and face-work, thick participation and thick description (Sarangi, 2010a). As part of a theme-oriented approach, “a free-range DA, drawing inspiration from many approaches” is encouraged, along with the overlapping of analytical and focal themes (Roberts & Sarangi, 2005, p. 639). This approach is also able to incorporate Conversation Analysis to examine the interactional features in the unfolding of talk over turns.

In the present study, theme-oriented discourse analysis is applied to the turn-by-turn analysis of talk in the doctor-patient consultations. First, the analysis is focused according

to the two focal themes of PDA use and treatment decision making. Secondly, the analysis explicates the discursive, interactional and rhetorical devices used by participants. To investigate the interactional practices, analytic concepts and tools from Conversation Analysis are largely drawn upon, which will be described in the next sub-section, followed by the frameworks of SDM from the professional context (Charles et al., 1997, 1999; Elwyn et al., 2012), which are referred to when considering the use of the PDA.

### **3.3.2.1 Conversation Analysis**

The CA approach views talk as constrained by the natural order of interaction and analyses talk as it occurs sequentially, through each participant's turn. Describing and analysing patterns in the sequential development of talk is the primary focus of CA, where a participant's current talk is described in relation to the talk which precedes and follows it. Talk is shaped by participants' interpretation of the preceding talk, and the current talk also shapes the talk or "action" taken by the next participant. This context shaping and context renewing nature of talk is a fundamental assumption of CA (Maynard & Heritage, 2005), underlining the need to analyse interaction as it unfolds. The next-turn-proof procedure enables analysts to explicate the collaborative production of talk, by looking at the next turn as a display of the speaker's understanding of the previous turn (Hutchby, 2008). This also supports the validity of analytical claims.

Heritage (1998, p. 5) identifies six interactional phenomena which can be examined in analysing institutional talk: 1) Turn-taking organisation, 2) Overall structural organisation (3) Sequence organisation, (4) Turn design, (5) Lexical choice and (6) Epistemological and other asymmetries. Besides, CA studies can take the form of single-case analysis or collection studies, with the single-case approach utilised as means of understanding deviant or particularly problematic cases (Schegloff, 1987). Single-case analysis is also

seen as a starting point for studies of larger datasets, where the aim is to identify particular patterns of interaction (Heritage, 1998).

In addition to identifying interactional practices in ordinary conversation, CA has been widely used in institutional contexts such as healthcare, child abuse helplines and courtroom examination. Heritage describes institutional talk as being oriented towards goals, based on participants' institutional identities and linked to specific institutional frameworks and processes (Heritage, 2005).

In investigating the talk of doctors and patients in using the PDA and in treatment negotiations, I draw on the findings of CA studies on patient-centred treatment decision making, described in Section 2.2.2.2 of the Literature Review chapter (e.g., Collins et al., 2005; Koenig, et al., 2014; Land et al., 2017; Landmark et al., 2014; Landmark, Ofstad, et al., 2017; Stivers, 2005a, 2005b, 2006; Toerien et al., 2013). These studies, alongside other CA studies in doctor-patient talk and ordinary conversation inform the concepts and terminology used in the analysis of talk presented in the following chapters, including “formulations of patient stance/perspectives” (Landmark, Ofstad, et al., 2017), “perspective display invitation” (Maynard, 1991); “epistemic display questions” (Banbrook & Skehan, 1990) and epistemic and deontic turns (Landmark et al., 2014).

As described earlier, however, the present study applies CA tools and concepts within theme-oriented discourse analysis, rather than utilising CA as a theoretical and analytical approach. As such, the application of CA in this study is distinctly discourse analytic. To exemplify this distinction, CA studies investigating treatment decision making focus on very specific types of turns, for example, hypothetical formulation of patient perspectives (*If you think X...*) (Landmark, Ofstad, et al., 2017) and option-listing versus recommending formats in doctors' recommendations (Collins et al., 2005), identifying

patterns of use, for example, their sequential location within preceding and succeeding turns.

In contrast with the micro-level analytic focus of CA studies, the present study takes a broader perspective, in line with the meso-level focus of theme oriented discourse analysis (Sarangi, 2010a). The turn-by-turn analysis in the present study includes insights on interaction from CA research, in addition to analysis of rhetorical devices, to demonstrate how these turns culminate in the accomplishment of treatment decision making.

### **3.3.2.2 Analysing Shared Decision Making**

The analysis also draws on concepts and models of SDM from the medical context particularly in Chapter 5 which looks into the use of the PDA to implement SDM. These are Charles et al.'s (1999) three analytical stages of SDM and Elwyn et al.'s (2012) three-step SDM model.

Charles et al.'s (1999) three analytical stages of SDM, information exchange, deliberation on treatment and the decision (see 2.2.2 in Chapter 2). An additional stage, "establishing an ongoing partnership", has been proposed to adapt the three stages to the chronic care setting (Montori et al., 2006). However, since a large-part of this partnership is achieved outside the medical encounter and over the illness trajectory, the original three stages were considered more suitable for analysing doctor-patient talk in the consultations.

Moreover, in considering turn level practices in treatment decision making, the analysis refers to Elywn et al.'s (2012) three-step model which provides talk-based guidance for doctors to implement SDM. SDM is described as comprising "choice talk", "option talk" and "decision talk", with a list of talk-related practices within each category

as shown in Table 2.3 in Chapter 2 (2.2.2.1), which is reproduced below for ease of reference.

**Table 2.3: Elwyn et al. (2012)’s Three Step Shared Decision Making Model**  
(reproduced for ease of reference)

Choice talk	<ul style="list-style-type: none"> <li>• Step back</li> <li>• Offer choice</li> <li>• Justify choice - preferences matter</li> <li>• Check reaction</li> <li>• Defer closure</li> </ul>
Option talk	<ul style="list-style-type: none"> <li>• Check knowledge</li> <li>• List options</li> <li>• Describe options – explore preferences</li> <li>• Harms and benefits</li> <li>• Provide patient decision support</li> <li>• Summarize</li> </ul>
Decision talk	<ul style="list-style-type: none"> <li>• Focus on preferences</li> <li>• Elicit preferences</li> <li>• Move to a decision</li> <li>• Offer review</li> </ul>

**Source:** Elwyn et al. (2012)

The use of these models is motivated by the emphasis in theme-oriented discourse analysis, to maintain a keen awareness of professional concerns, procedures and knowledge when analysing talk in professional settings in order to produce findings that may be of use in practice (Sarangi, 2010a, 2010b). Since these two models have been influential in the medical setting, it was considered appropriate to refer to them while explicating the practices of doctors and patients while using the PDA.

### 3.3.2.3 Summary

This section has described the discourse analytic method which is used in the analysis of doctor-patient talk during PDA use (Chapter 5) and treatment negotiation (Chapter 6). Theme-oriented discourse analysis is applied, which has distinctive features including the consideration of both discursive and rhetorical practices and the analysis of turn-level



practices in view of the interactional trajectory (sub-section 3.3.2). In addition, tools and concepts from CA are applied to examine interactional features, particularly in relation to SDM and patient-centred care (3.3.2.1). Moreover, in considering the use of the PDA, the analysis makes use of two influential models in medical research and practice (Charles et al., 1999; Elwyn et al., 2012) (3.3.2.2) to orient the analysis to the professional setting.

The previous sections have described two methods within Activity Analysis, mapping analysis, which is used to address RQ1: *How is talk organised in the activity of routine visits for type 2 diabetes?* (3.3.1.1-3.3.1.3); and Discourse Analysis, incorporating Conversation Analysis to address RQ2: *How do doctors use a PDA on starting insulin to facilitate SDM during routine visits for type 2 diabetes?* and RQ3: *How do doctors and patients negotiate treatment decisions on starting insulin during routine visits for type 2 diabetes?*(3.3.2). Reference to models of SDM are also made in the analysis. The utilisation of Activity Analysis in this manner aims to provide thick description of consultations during routine diabetes visits. In the following section, the method used to analyse the research interviews will be discussed.

### **3.3.3 Accounts Analysis**

In the present study, Accounts Analysis is applied within the approach of Theme-Oriented Discourse Analysis to examine how doctors and patients make meaning of their treatment decision making experiences involving insulin. Section 2.4.4 of the Literature Review chapter has discussed various discursive studies which utilise analysis of accounts to examine individual meaning making practices in relation to experiences of managing chronic illness. This study uses Accounts Analysis as applied by Sarangi, Arribas-Ayllon and colleagues in a series of investigations into different aspects of genetic counselling (Arribas-Ayllon et al., 2008a, 2008b, 2008c, 2009; A. Clarke, Sarangi, & Verrier-Jones, 2011).

Accounts Analysis (Sarangi, 2010b) aims to identify the discursive and rhetorical practices speakers use to construct accounts. Antaki (1988) defines accounts as descriptions, explanations or self-reports about daily activities. Moreover, accounts fulfil various rhetorical functions, including justifying, persuading and excusing. Scott and Lyman (1968, p. 486) build upon Goffman's "self-representation" to describe an account as "a linguistic device employed whenever an action is subjected to evaluative inquiry." This denotes the underlying moral dimensions of accounts, which are oriented towards presenting a version of the self, others, actions or events in view of culturally embedded norms.

Accounts Analysis approaches accounting as a situated practice, in which participants use discursive or rhetorical devices to characterise themselves and their actions, others, or events, rather than a representation of internal psychological states. This method of analysis also considers the broader discourses to which speakers align themselves explicitly or implicitly, for example, ideas about genetic responsibility from a parental perspective (Arribas-Ayllon et al., 2008b) and the concept of child autonomy in genetic testing (Arribas-Ayllon et al., 2009).

Interactional studies, for example, those using CA, tend to study accounts in naturally-occurring conversation, or interactions which have not been arranged for the purpose of research, focusing on patterns of location, structure and design of these accounts (e.g. Parry, 2009). However, Accounts Analysis has been used to demonstrate how individuals construct versions of problematic events "to morally position actors/speakers and engage in perspective taking," (Arribas-Ayllon et al., 2009, p. 4) in genetics consultations as well as research interviews with genetic professionals (Arribas-Ayllon et al., 2008c; Clarke et al., 2011; Sarangi, 2010b). Both kinds of data are conceptualised as situated, jointly constructed activities.

Therefore, in applying Accounts Activity to the research interviews with doctors and patients to address RQ4 “*How do doctors and patients construct accounts about their experiences of treatment decision making on insulin therapy for type 2 diabetes?*”, the research interviews are analysed as an activity which has been occasioned to produce and elicit accounts, which are analysed as situated explanations and not as representations of a reality beyond the interview (Arribas-Ayllon et al., 2008b). This approach differs from the analysis of retrospective perspectives disclosed by participants during research interviews to draw conclusions about what occurred during a particular event, for example, in research which uses post-consultation interviews with doctors and patients to examine whether the consultations were patient-centred. Limitations of using qualitative interviews to collect participants perspectives or retrospective accounts have been discussed in the literature, including lack of reliability resulting from recollection bias or unreliable memories (Mann, 2010; Potter & Hepburn, 2005; Rosenthal & Fischer-Rosenthal, 2004; Schwarz, 2007). However, the present study uses accounts analysis to examine the doctors’ and patients’ practices in constructing the accounts rather than analysing the accounts as representations of what actually happened during their treatment decision making experience.

Accounts of treatment decision making episodes concerning insulin therapy were elicited from seven participants, comprising three primary care doctors and four patients with type 2 diabetes who had made a decision about starting insulin within the last twelve months. The doctors were asked for accounts of a specific treatment decision making episode which they considered as typical for their healthcare setting, while the patients were asked for accounts of their treatment decision making experience involving insulin therapy, which could involve more than one consultation. Participants were also asked for additional explanations about treatment decision making in general, SDM and PDAs

and the roles of doctors and patients over the decision making outcome (See Appendix D).

The interviews were then analysed through multiple close readings of the transcripts to identify broad themes in the doctors' and patients' accounts. While various topics related to the management of type 2 diabetes were discussed in the interviews, the focal theme of control was identified as a theme for further analysis, which corresponds with literature investigating doctors' and patients' perspectives on type 2 diabetes and other chronic illnesses as described in sub-section 2.3.1 of the literature review.

In the analysis reported in Chapter 7, I draw on the aforementioned studies, which identify accounting practices such as contrast, constructed dialogue or reported speech, character/event work and extreme case formulations. In addition, participants' orientations to moral and ethical concepts are analysed (Arribas-Ayllon et al., 2008a, 2008b, 2008c, 2009; A. Clarke et al., 2011).

#### **3.3.4 Justification for the Selected Analytical Approach**

The previous sections have presented the details of the analytical approach used in this study, which applies Activity Analysis and Accounts Analysis to doctor-patient consultations and interviews with doctors and patients within Theme-oriented Discourse Analysis (Roberts & Sarangi, 2005; Sarangi, 2010a, Sarangi, 2010b). This approach was selected as it provides a flexible framework which enables the analysis of treatment decision making on insulin therapy from two distinct perspectives, as an activity performed by doctors and patients in routine visits for type 2 diabetes and as an activity/event constructed by doctors and patients in research interviews.

A critique of discourse analytic studies in professional contexts is that they risk losing sight of concerns, issues and evidence from the professional context in pursuing analytical

findings (Sarangi, 2010a). By linking analytic themes to focal themes relevant to professional domains, theme-oriented discourse analysis emphasises the importance of connecting the analytical explication of discourse to the concerns, goals, frameworks and broader institutional discourses of the research context (Roberts & Sarangi, 2005). This may enhance the usefulness of analytical findings to practitioners.

In selecting the theoretical framework for this study, several approaches were considered and applied to preliminary investigations (see List of Publications and Conference Presentations). First, based on the literature review (Chapter 2), a qualitative, discursive approach was considered better suited to identifying participants' collaborative performance of treatment decision making than quantitative coding approaches which often analyse interactional behaviour as discrete units.

A general discourse analytic approach was first applied to investigate use of the PDA in the consultations (Don & Syed, 2017). Next, Conversation Analysis (CA) was considered for the explication of interaction over turns. CA is well-established and rigorous, with its applicability to professional settings supported by many CA studies on doctor-patient talk and treatment decision making (see 2.2.22; 2.4.3) among other institutional settings. However, although single-case CA analysis of several consultations revealed interesting findings about initial talk on the PDA (Syed et al., 2017), some limitations were revealed in consideration of the purpose of this study, as described in the following section.

The focus on identifying patterns at the micro-levels of interaction was considered restrictive for several reasons, including the lack of a specific framework by which to explicate the structure of whole consultations beyond assigning turns to phases. Moreover, the emphasis on using naturally-occurring interaction in CA research generally precludes the use of research interviews for theoretical and methodological reasons. This

would have limited the study to using only doctor-patient consultations, leaving out the perspectives of individual doctors and patients. In addition, limiting analysis to interactional features would overlook the rhetorical aspects of talk, which would be salient in decision making.

With little available information on doctor-patient talk in the Malaysian context, I considered it necessary to seek an approach which could be adapted based on the themes and concerns that would emerge from the data and that are of relevance to professional context. Finally, the multilingual nature of the research setting meant that consultations were conducted in English, Malay or both languages, presenting a methodological problem in applying CA, which is generally applied to collections of interaction in the same language.

Given these considerations, theme-oriented discourse analysis was considered suitable as it enables analysis of discourse from different perspectives and at different levels of the talk, through the use of Activity Analysis and Accounts Analysis. The structural, interactional and thematic mapping of whole consultations provides a systematic method of unpacking the whole consultation, in terms of structure, participation and thematic trajectories (see Section 3.1.1). This is tied to analysis at a closer level, explicating discursive and rhetorical practices, alongside focus on turn-level interaction through incorporation of CA.

Another benefit of this approach is its orientation to contextual factors beyond the turns of talk, which is appropriate for the complex, multi-factorial context of treatment decision making on insulin, as described in Chapter 2. The broader orientation to context in this approach is particularly relevant in the application of Accounts Analysis (3.3.3), which enables the analysis of participants' discursive and rhetorical accounting practices as well as their orientations to larger discourses of responsibility in the context of chronic disease.

Analysis of accounts can also be applied to research interviews, which allowed the inclusion of doctor's and patient's voices outside the consultation room. In addition to a more comprehensive analysis, this provides a means of triangulating findings.

An interpretive approach such as theme-oriented discourse analysis is not without its limitations. However, Sarangi (2010a) points out that although this approach may be characterised as eclectic, it involves the systematic selection of focal and analytical themes based on sufficient understanding of the professional setting. In linking analytical themes to focal themes, theme-oriented discourse analysis aims produce findings which are accessible and useful to the professional context being investigated. Sarangi (2010b, p. 192) characterises this framework as "...one that maps on to other-oriented professional expertise rather than becoming an exercise in pure intellectualism".

Nevertheless, theme-oriented discourse analysis has not been as widely used as other discourse analytic approaches for example, CA and CDA, and as such may not have sufficiently established its validity and reliability. Moreover, this study utilises a small number of consultations and interviews with a diverse group of doctors and patients. It is necessary here to point out that the reliability of qualitative approaches differs to what is expected of quantitative research, whereby reliability and validity are interconnected in discourse analysis (Potter, 1996). In addition to rigorous data collection and transcription methods, analysis may be supported by participants' understandings displayed in the talk, as well as coherence in the presentation of findings in relation to existing research (Potter, 1996).

Besides, the use of multiple data types and analytical methods, and engagement with the research context in terms of the research setting, as well as the use of frameworks, models and concepts from the medical field, aim to support the "ecological validity" and "external validity" of the findings (Cicourel, 2007; Sarangi, 2007a). Ultimately, this

approach does not aim to produce prescriptive findings but to provide insights that professionals may consider and choose to apply selectively (Sarangi, 2010a).

### **3.4 Summary**

This chapter has discussed the methodology used in this study, beginning with an overview of the methodology, which includes the underlying theoretical assumptions and the analytical approach (3.1). The research method was then described (3.2), beginning with preliminary stages of field visits and preparation of interview questions (3.2.1), which was followed by a discussion of the ethical considerations (3.2.2). Information about the consultations and interviews and how this data were collected (3.2.3) and transcribed were presented next (3.2.4). The approach and analytical methods were described in detail in Section 3.3., which begins with the application of Activity Analysis to the doctor-patient consultations, through structural, interactional and thematic mapping (3.3.1), and Discourse Analysis (3.3.2) incorporating CA (3.3.2.1) and models of SDM (3.3.2.2). Next, the application of Accounts Analysis to research interviews was described (3.3.3). The chapter concluded by explaining why this particular analytical approach was selected for the study (3.3.4.).

The analytical chapters that follow will present the findings of this study in relation to the four research questions about the organisation of talk (Chapter 4), the use of the PDA (Chapter 5), the negotiation of treatment decisions (Chapter 6) and doctors' and patients' construction of accounts about treatment decision making on insulin (Chapter 7).



## CHAPTER 4: ORGANISATION OF TALK IN ROUTINE DIABETES VISITS

The previous chapter has described the methodology used in this study, which applies Theme-oriented Discourse Analysis to study treatment decision making on insulin. These treatment decisions take place in routine visits for type 2 diabetes during which a patient decision aid (PDA) about insulin is used. To begin the analysis, therefore, this first analytical chapter aims to provide an overview of the talk in the doctor-patient consultations, to address the first research question:

***RQ1:** How is talk organised in the activity of routine visits for type 2 diabetes when a PDA on starting insulin is used?*

Utilising structural, interactional and thematic mapping, which is the first step in Activity Analysis (see 3.2.1), this chapter describes the whole consultations in terms of the structural sequence of phases, distribution of participation and thematic content. The identification of patterns and differences across the data points towards areas for closer investigation. Therefore, the analysis in this chapter informs closer analysis in the following chapters (Chapter 5 and Chapter 6).

This chapter begins with an overview of the consultations (4.1), describing the phases observed in the consultations and patterns in the sequential structure of these phases (4.1.2). This is followed by findings from the interactional mapping, which describes how participation is distributed between doctor and patient in the two main phases: Assessment and Treatment (4.1.3). The findings from more detailed structural, interactional and thematic mapping of each phase are then presented, beginning with the Assessment phase (Section 4.2) and followed by the Treatment phase (4.3).

## **4.1 Routine Visits for Type 2 Diabetes**

Since diabetes is generally monitored by measuring blood sugar levels, routine visits usually involve discussing blood test results. However, doctors may schedule visits between the blood taking schedule, which is usually every three months for HbA1c levels. Routine visits generally include physical examination of the patient by the doctor or nurse, for example, blood pressure measurement and examination of the skin, eyes and legs to check for arising complications. Any symptoms or complaints may be discussed, along with the patient's lifestyle. Based on this physical and verbal examination, the current treatment may also be revised, through lifestyle counselling, or by introducing or adjusting dosage of medication, whether oral medication or insulin. Finally, administrative tasks, such as writing records and prescriptions and setting appointments are performed.

### **4.1.1 Phases in Routine Diabetes Visits**

To compare structural aspects of the 11 consultations, structural mapping was performed as described in the previous chapter (3.3.1.1), analysing the content of turns to identify two main clinically-oriented phases:

- Assessment-Assessing the patient's current condition
- Treatment-Discussing future treatment

In the following sections, each phase is described in detail, with examples of the talk observed in each phase.

#### **4.1.1.1 Assessment Phase**

During this phase, talk focuses on the patient's current health and lifestyle practices. This largely comprises information-seeking actions of the doctor (Excerpt 4.1), such as physical examination, blood tests and blood pressure measurement, or verbal examination

through discussing the patient's symptoms, consumption of medicine and lifestyle. A central theme in this phase is the patient's blood sugar levels (Excerpt 4.2), and assessment of these in relation to blood sugar targets. Patients sometimes initiate talk, for example, service-related actions such as complaints and requests, or descriptions of their treatment experience, which contributes information about their condition and its management.

#### Excerpt 4.1: Assessing the Patient's Current Health (a)

Turn	Speaker	Talk
3	DR8	okay, how are you? (0.61)
4	DR8	oka:y,.h so: u::m, (0.62) taking all your medications?
5	P11	yah, taking
6	DR8	'kay so at the moment, you are taking:(0.65) two types of medicine for your diabetes,
7	P11	yah two types

#### Excerpt 4.2: Assessing the Patient's Current Health (b)

Turn	Speaker	Talk
1	DR1	<i>okay, ini: itu hari yang kita ada buat checkup=</i> okay, this, that day we did a checkup
2	P1	=h:m
3	DR1	=a::? <i>Ini: untu:: macam:: (.) check jantung punya:</i> [ <i>kalau</i> ] <i>tengok dia ada apa-apa=</i> ya? This is like, to check your heart to see if there are any
4	P1	[mmh ]
5	DR1	= <i>hal, sebab kita tahu you punya kencing manis tak de contro::l</i> issues, because we know your diabetes is not controlled
6	P1	m:h
7	DR1	<i>ikut itu:, (.) mase ini pun nasib bai:k, dia pinya level &gt;high sensitive</i> <i>C-reactive Protein&lt; dia pnya:? Dia ada:.(.) risk factor dia banyak</i> <i>kura:ng. Nasib baik dia okay,normal.</i> following that, at this time, luckily the level of the high sensitive C- reactive Protein, its risk factors are very low. luckily it's okay, normal

#### 4.1.1.2 Treatment Phase

In the Treatment phase, talk is focussed on the future treatment of the patient's condition, namely whether patient will start insulin, continue with the current treatment, or opt for some other treatment option (Excerpt 4.3).

#### Excerpt 4.3: Discussing Future Treatment

Turn	Speaker	Talk
107	DR3	<i>so s'karang ni a::, hari tu kita ade cakap pasa:l: .h mau: start itu insulin kan</i> so now, er, that day we had talked about starting insulin right?
108	P5	<i>ah</i> yes
109	DR3	<i>okey, s'karang you a- you rasa macam mana eh? (0.64) Itu:: a::: insuli:n?</i> okay, now, how do you feel eh? That, er, insulin?
110	P5	<i>°a-ha°(0.41) dia, dokter cakap insulin boleh kura:ng,</i> ah she, the doctor said insulin can reduce

Treatment-focused talk also includes information-providing talk by the doctor, for example, giving information about insulin (Excerpt 4.4) and instructions on administering insulin or self-monitoring of glucose, and counselling on lifestyle changes. This can occur before or after a decision on insulin is made.

#### Excerpt 4.4: Giving Instructions on Administering Insulin

Turn	Speaker	Talk
129	DR2	ri:ght. This injection is painless, the needle is very small.
130	P4	m::h
131	DR2	ye? A: and then you inject on your [tummy]
132	P4	[↑every] time, must e::rh (0.36)
133	DR2	not on the same site different site (0.43)
134	P4	no, ↑no the: n- needle one (0.28)
135	DR2	the needl::e?
136	P4	ha::
137	DR2	actually the needle can only be used once but sometimes patients use it for

In categorising talk according to phase, the rhetorical function of a particular turn was also considered as the patient's current condition, for example, their blood sugar level or dietary habits, may be mentioned not only for assessment purposes, but as justification

during discussions on treatment. For example, a doctor may mention a patient’s recent blood sugar level not to disclose new information to the patient, but to support the recommendation to start insulin (Excerpt 4.5).

#### Excerpt 4.5: Discussing Treatment Options

Turn	Speaker	Talk
23	DR6	err, diet. So you, you think you want to focus [more on ]that=
24	P8	[yes, yes] [((nods))]
25	DR6	=and [try and see ] lah,
26	P8	[yes, yes, yes] [((nods)) ] yes
27	DR6	alright. Because I seen previously your insulin is still: (0.78) eight point three <eight point [five ]=(( looking in pt file))
28	P8	[m::h]

In addition to the two main phases of Assessment and Treatment concerned with the clinical agenda of managing the patient’s health, the consultations feature varying types of openings and closings. For example, in some consultations, typical opening sequences were observed, with greetings (e.g. *Good morning*) or identification-confirmation sequences (e.g. *Mr and Mrs NAME?*). In other consultations, the doctor opens with a brief “Okay”, before initiating discussion on treatment within the same turn, while some doctors initiate talk on treatment without a distinct opening sequence. Closing sequences are similarly varied, with prolonged closing sequences in the community clinics, as the doctor fulfils administrative tasks such as writing out prescriptions and setting the next appointment. In other consultations, however, consultation closure and conclusion of the Treatment phase are achieved simultaneously through a quick exchange. In the following section, the sequential structure of these phases across the consultations will be discussed.

#### 4.1.2 Structure of the Consultations

Based on the phases described in the previous section, the consultation structure was mapped to show the sequential order of phases in each consultation. Next, consultations

were grouped to identify similarities and differences, showing three types of consultation structure: those comprising only the Treatment phase, those comprising Assessment followed by Treatment, and one consultation in which Assessment and Treatment occur iteratively throughout the consultation (see Table 4.1).

**Table 4.1: Overview of Consultation Structure**

<b>Consultation Phases</b>	<b>A2, A3, A4, C11, C12</b> (Opening) Treatment (Closing)	<b>A1, B7, B8, B15, C14</b> (Opening) Assessment Treatment (Assessment-BP) (Closing)
<b>Consultation Phases</b>	<b>B5</b> Opening Assessment Treatment Assessment Treatment Assessment Treatment Assessment Treatment Assessment Treatment (Assessment-BP) Treatment Closing	

Assessment and treatment-related actions are necessarily the focus of routine visits for non-acute conditions (Angell & Bolden 2016; Díaz, 2000; Koenig et al., 2014). However, as shown in Table 4.1, six consultations only contain talk on Treatment while five consultations are structured in what could be considered the more typical (Opening)Assessment-Treatment-(Closing) pattern. In contrast, the two phases of Treatment and Assessment alternate several times throughout Consultation B5. Blood pressure measurement was disregarded in the grouping as this is not performed during all

consultations and its location in the consultation appears to be determined by healthcare setting.

There is further indication that setting is linked to other structural features, as all the consultations in the public clinics involve an Assessment phase (B5, B7, B8, B15) and most of the consultations in the private clinics and hospital-based clinic begin directly with the Treatment phase. However, given the small number of consultations, and the two deviations from this pattern (C14 in the hospital and A1 in a private clinic also include an Assessment phase), it cannot be concluded that healthcare setting is the main influencing factor in whether a consultation includes an Assessment phase.

Overall, the mapping shows that all the consultations are largely focused on treatment. Analysis of turn distribution across phases shows that at least 53% of the turns in all consultations are concerned with treatment, while Assessment phase turns make up an average of 30% of total turns. To illustrate this, the sequential structural analysis (Tables 4.2-4.5) and the turn distribution across phases (Figures 4.1-4.3) for a typical consultation (B15) and the recursively structured consultation (B5) are presented here.

**Table 4.2: Structural Analysis of Consultation B15**

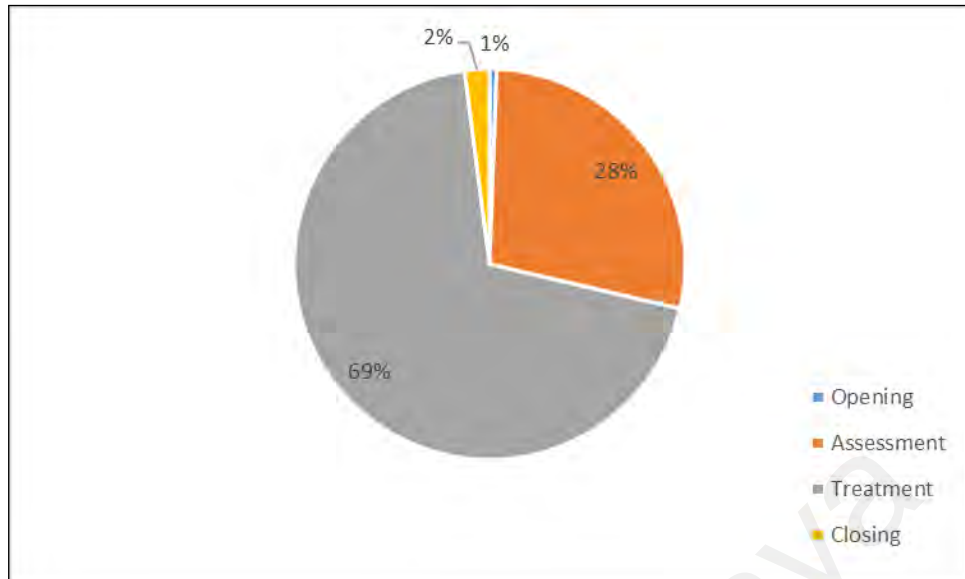
<b>Turns</b>	<b>Phase</b>
1-2	Opening
3-98	Assessment
99-335	Treatment
336-342	Closing

**Table 4.3: Structural Analysis of Consultation B5**

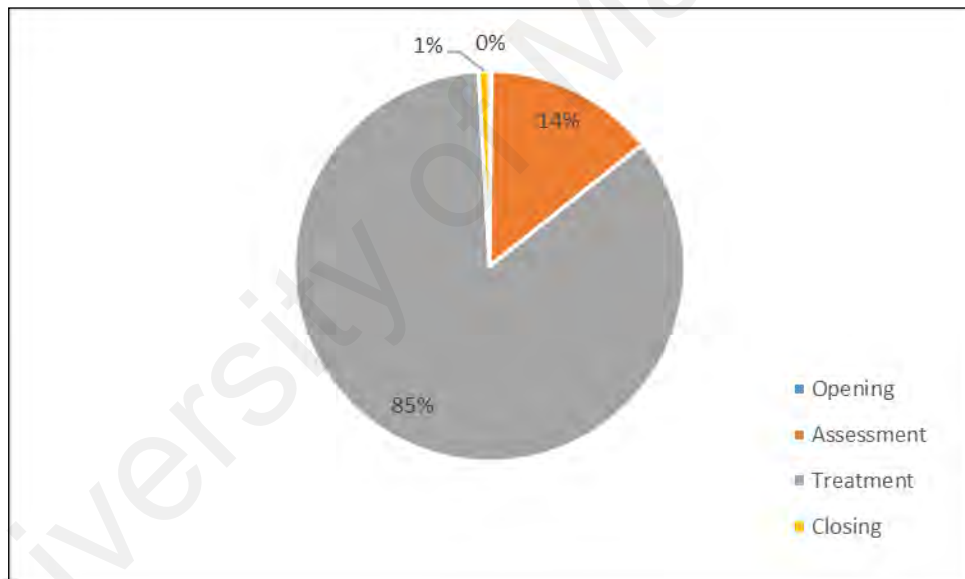
<b>Turns</b>	<b>Phase</b>
1-2	Opening
3-72	Assessment
73-89	Treatment
90-106	Assessment
107-221	Treatment
222-239	Assessment
240-439	Treatment
440-454	Assessment
455-884	Treatment
885-938	Assessment
939-1049	Treatment
1050-1099	Assessment
1100-1156	Treatment
1157-1211	Closing

Despite varying sequential patterns (Tables 4.2-4.3), the distribution of turns across phases (Figures 4.1-.4.2) are similar in that the Treatment phase takes up the most turns in both consultations. This indicates that the consultations are mainly concerned with discussing matters related to the patients' treatment, which is expected as all the patients involved had received recommendations to start insulin due to their sustained high blood sugar levels.





**Figure 4.1: Distribution of Turns per Phase-Consultation B15**



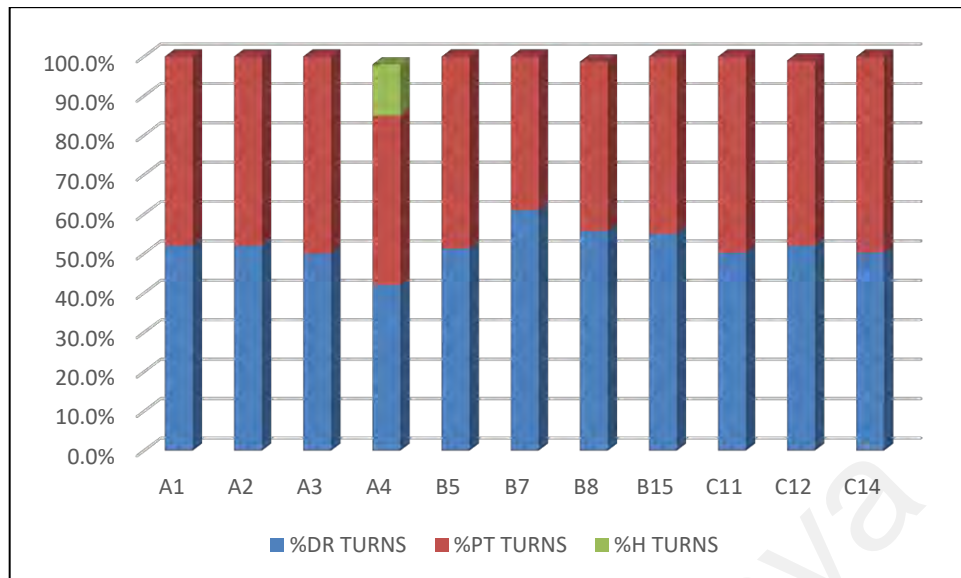
**Figure 4.2: Distribution of Turns per Phase-Consultation B5**

This section has described the sequence of phases in the consultations as well as the distribution of turns across the phases in whole consultations. While structural mapping provides an overview of the topics and goals addressed in the talk, interactional mapping is necessary to examine how participation is distributed between doctors and patients in pursuing these concerns.

### 4.1.3 Interactional Mapping of Consultations

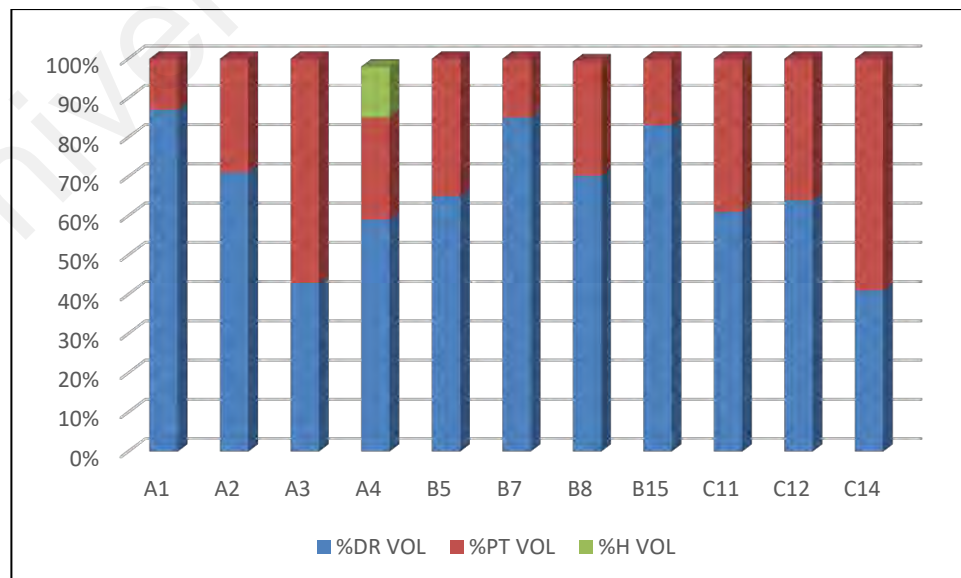
This section describes overall patterns of participation across the consultations through the interactional mapping of the consultations as a whole, and according to phase. As described in Chapter 3 (3.3.1.2), interactional mapping involves analysis of the number, volume and types of turns made by each participant, showing how participation is distributed across the consultations to identify asymmetries of participation (Sarangi, 2010b). The interactional mapping presented in this section shows the number and volume of turns made by doctors and patients, across the consultations, and according to the two main phases.

Analysis of turn numbers shows that doctors and patients contribute roughly equal numbers of turns, as shown in Figure 4.3. The chart shows that the percentage of turns by doctors and patients is distributed close to the 50% line, with only Consultation A4 and B7 indicating a difference of about 10% in favour of the patient, and doctor, respectively. In the case of Consultation A4, this could be because it is a triadic consultation (A4), with the turns made by the patient's husband (H) indicated. In a dyadic conversation, it can be expected that turn numbers would roughly be equal between the two participants as shown in the figure.



**Figure 4.3: Distribution of Turns in Consultations**

However, as demonstrated in Chapter 3 an equal number of turns does not indicate equal participation (3.3.1.2). To better analyse how participation is distributed between doctors and patients, the distribution of turn volume (duration of turns) was then analysed by measuring the time taken up by each turn (in seconds and minutes), to include pauses and other temporal features of interaction, such as hesitations or rushed speech. The results of turn volume analysis are shown in Figure 4.4.

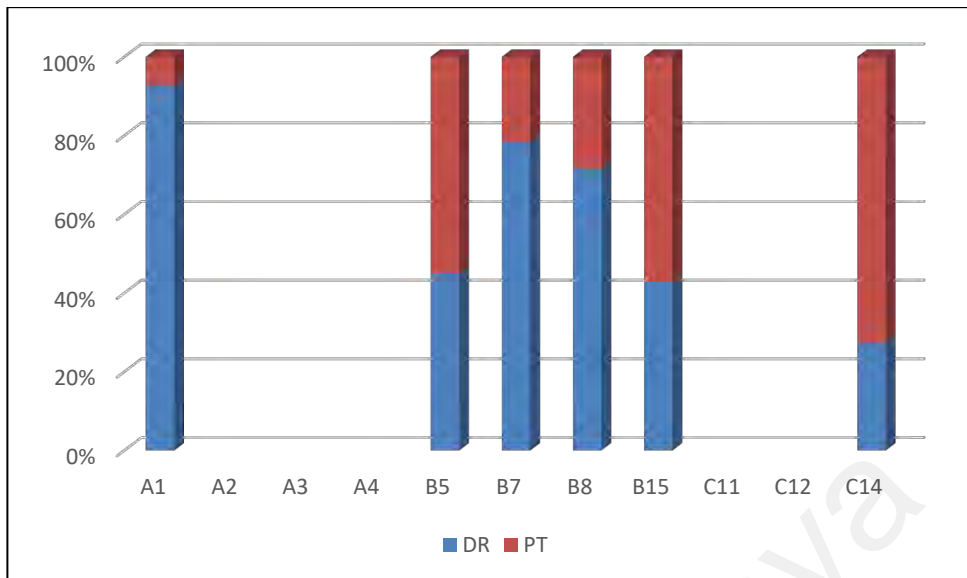


**Figure 4.4: Distribution of Turn Volume in Consultations**

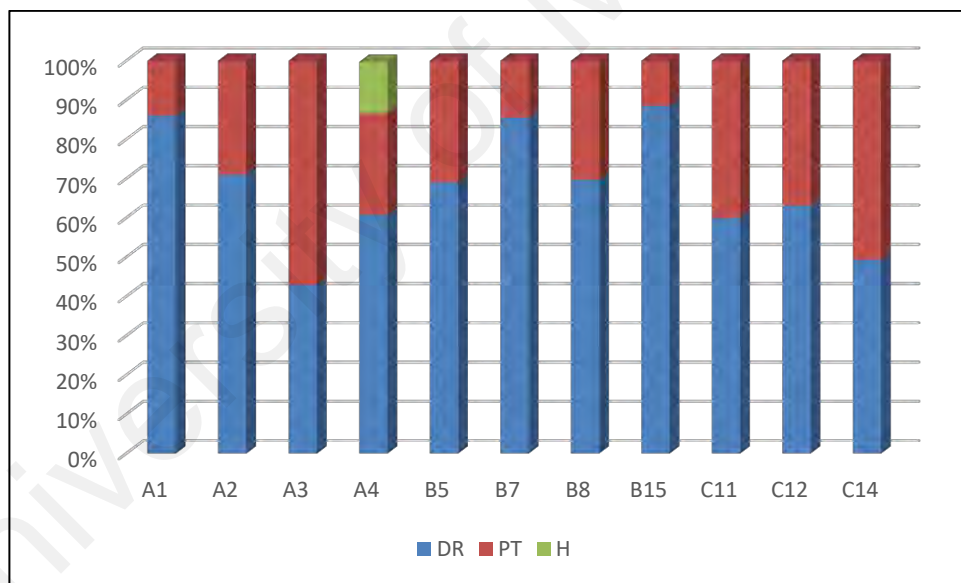
As shown in Figure 4.4, when considered in terms of turn volume, a greater variation in participation can be seen. For example, in Consultation A1, A2, B7, B8 and B15, the doctor's turn volume made up 70% or more of the consultation. This overall asymmetry corresponds with research on doctor-patient talk, which shows that doctors tend to have higher level of participation in consultations (Pilnick & Dingwall, 2011). However, the analysis shows some exceptions, namely Consultations A3 and C14, in which the patient's turn volume exceeds that of the doctor, accounting for 60% of the total volume.

As the differing goals of the Assessment and Treatment Phase may lead to differences in participation between the phases, participant turn volume was then analysed by phase. Figures 4.5 and 4.6 show the participation (in terms of volume), in the Assessment and Treatment phase, respectively.

The distribution of turn volume across phases also shows mixed levels of participation. In three consultations (A1, B7 and B8), doctors participate significantly more than patients in the Assessment phase. In contrast, the patients in Consultations B5 and B15 participate slightly more than the doctors while the patient in Consultation C14 takes up 75% of the turn volume. As discussed earlier in the structural overview of consultations, there are also five consultations which do not include the Assessment phase (A2, A3, A4, C11 and C12).



**Figure 4.5: Distribution of Turn Volume in Assessment Phase**



**Figure 4.6: Distribution of Turn Volume in Treatment Phase**

In comparison with the Assessment phase, distribution of turn volume in the Treatment phase (Figure 4.6) shows that doctors generally speak more than patients during this phase. With the exception of consultations A3 and C14, doctors' turn volume makes up 57% or more of the consultations. In several consultations, doctors appear to dominate most of the talk in the Treatment phase, taking up more than 80% of the volume in

Consultations A1, B7 and B15, and nearly 70% of the volume in Consultations A2, B5 and B8.

Figures 4.5 and 4.6 also indicate variations in participation within each consultation. For most consultations, the general participation patterns are similar across phases. For example, in Consultations A1, B7 and B8, patient participation is low, at 30% or less of turn volume in both phases and in C14, the patient's participation exceeds that of the doctor's in both phases, although more significantly in the Assessment phase (75%) than the Treatment phase (55%). In contrast, the patients in Consultations B5 and B15 participate more than the doctor during the Assessment phase, at 60 % of the turn volume, while during the Treatment phase, they participate less than the doctors, at 35% and 15%, respectively. This indicates that while individual patient behaviour, for example, being more talkative or reticent, might explain similarities across phases, differences related to the content of each phase may also explain the change in participation patterns in these two consultations.

#### **4.1.4 Section Summary**

The first section of this chapter has presented the preliminary mapping of structure and interaction in the doctor-patient consultations to identify patterns across the data set. The main phases in the consultations, Assessment and Treatment, have been described, with examples given to illustrate the kinds of talk occurring in each phase. These two phases are similar to those identified by Díaz (2000) in chemotherapy visits but expectedly differ to Byrne and Long's (1976) classic consultation structure and other consultation structures observed in acute care (Robinson, 2003).

Moreover, while five of the eleven consultations fall into the prototypical structure of "Assessment-Treatment-Closing", which favours the professional agenda, others show varying structural patterns (see Table 4.2). The varied structural patterns support

Sarangi's (2010b) assertion that the phases in naturally occurring consultations are not rigid units and may be varied and dispersed. Nevertheless, the structural overview gives an insight into the thematic content of the consultations, and highlights some similarities and differences across the consultations.

Interactional mapping also shows a high variation across consultations, with asymmetries in participation identified in both phases. These differences are not unexpected, given the variation in participant demographics and healthcare settings in the data, as described in Chapter 3 (see 3.2.3.1). Further analysis is necessary to explicate the structure of the consultations and identify reasons for the variations and similarities in the consultations. As interactional patterns are invariably tied to content and theme (Sarangi, 2010a), the following sections will discuss the results of further structural, interactional and thematic mapping of the Assessment (4.2) and Treatment phases (4.3) in turn.

#### **4.2 Assessment Phase in Routine Visit for Type 2 Diabetes**

This section reports the results of further mapping of the Assessment phase, in order to explore the patterns of structure, interaction and thematic content within this phase. As explained in Chapter 3 (3.3.1.1) structural analysis involves identifying and mapping sub-phases according to their sequential occurrence in the phase, while interactional mapping includes analysing turn number and volume as shown previously, as well as categorising the turns types as follows: Questions, Responses, Statements, Elaborations, Quasi-turns, or Other (3.3.1.2). To recap, quasi-turns are turns made to confirm or show comprehension (e.g. minimal acknowledgement tokens or back-channelling) and the "others" category includes relational talk, such as greetings and goodbyes; paralinguistic turns such as laughter; and turns which did not fall into any of the existing categories such as interjections and requests for repetition (*Pardon?/ Oh?*).

In addition, by examining the talk more closely to identify the thematic concerns which motivate the progress of discourse, it was possible to map out the salient focal themes in these sequences of talk, at a more detailed level than indicated by the phase label “Assessment”. These focal themes can be explicitly addressed or occur implicitly in the talk (3.3.1.3). The following sections will first present the results of the structural and interactional mapping, followed by an analysis of the discursive and interactional practices of participants during this phase.

#### **4.2.1 Mapping the Assessment Phase**

Given the small number of consultations, it was not possible to identify a prototypical sequential structure of the Assessment phase. However, the analysis reveals two typical concerns in the Assessment phase: the patient’s blood sugar levels and the patient’s health-related practices, which directly serve the clinical goal of assessing the patient’s current health. A third, less typical concern is the patient’s illness experience, which is embedded alongside the typical sub-phases. The structural maps of three consultations are presented in this section, followed by interactional maps showing how participation is distributed in these sub-phases.

##### **4.2.1.1 Patient’s Blood Sugar Control**

Since diabetes is generally assessed through the measurement of blood sugar levels, discussing the patient’s most recent tests results is a typical part of a routine visits (Koenig et al., 2014; Wingard, Olsher, Sabee, Vandergriff, & Koenig, 2014) as shown in the mapping of Consultation A1 (Table 4.4). The topical concerns in the sub-phases, concerned largely with clinical content, draw upon the doctor’s epistemic domain of “expertise” (Heritage, 2012).

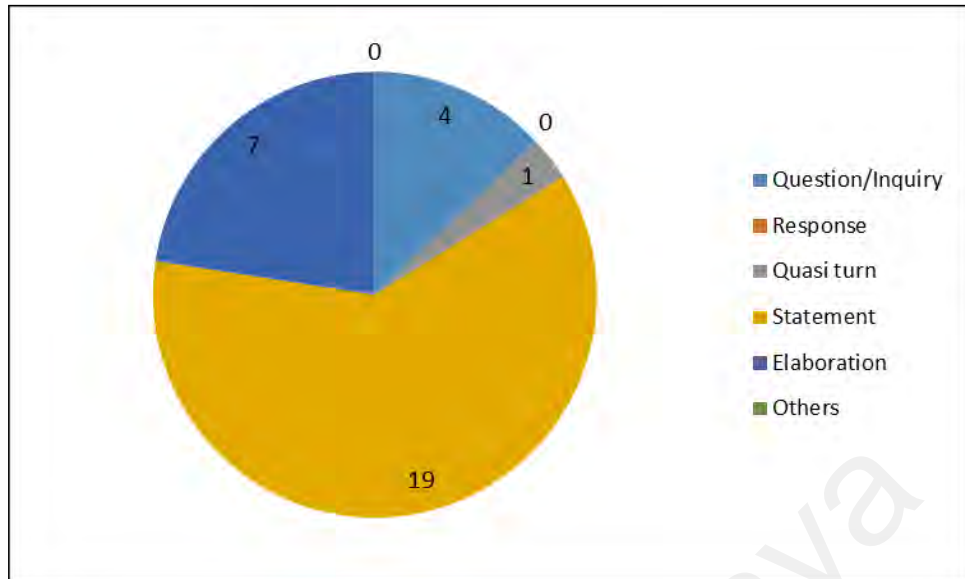


**Table 4.4: Consultation A1 (Private Clinic)**

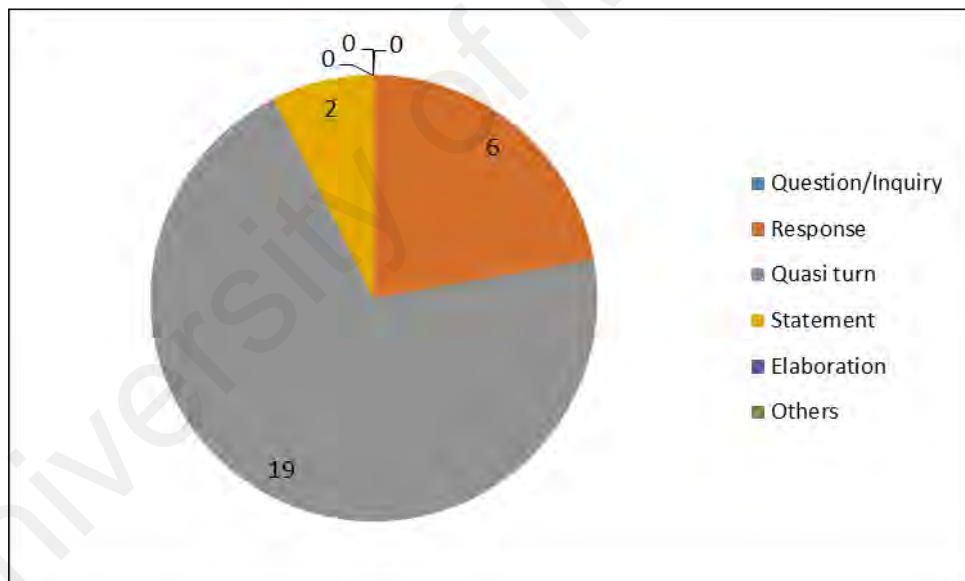
<b>Turn Nos</b>	<b>Sub-Phase</b>
1-32	Test results
33-40	Treatment history
41-56	Current medication
57-59	Assessment of sugar control

As shown in Table 4.4, Consultation A1 begins with a discussion of the patient's most recent test results. The next sub-phase is a discussion of the patient's treatment up to this point followed by his current medication and finally, an assessment of his current sugar control. The order of these sub-phases can be roughly compared to that of the clinical reasoning process reflected in the typical consultation structure (e.g. Robinson, 2003) and medical case presentations (Anspach, 1988), beginning with the medical problem (the test results), followed by the chronological treatment history before an assessment (or diagnosis) is made.

The main concern during this Assessment sub-phase is the patient's recent blood test results. Within this "medical/clinical" frame, the doctor's greater participation is required, in terms of information delivery, while the patient's role is largely restricted to indicating comprehension. This is shown in the interactional mapping of participants' turn types (Figures 4.7 and 4.8), where the majority of the doctor's turns are statements (19 out of a total of 31 turns) and correspondingly, the patient's main turns comprise quasi-turns such as receipt tokens.



**Figure 4.7: Consultation A1-Doctor's Turn Types (Total: 31)**



**Figure 4.8: Consultation A1-Patient's Turn Types (Total: 27)**

#### 4.2.1.2 Patient's Health-Related Practices

Particulars of a patient's daily life are also relevant to the management of diabetes since sugar control is affected by consumption of medication, diet and exercise. Therefore, sub-phases related to the patient's health-related practices in the "life-world"

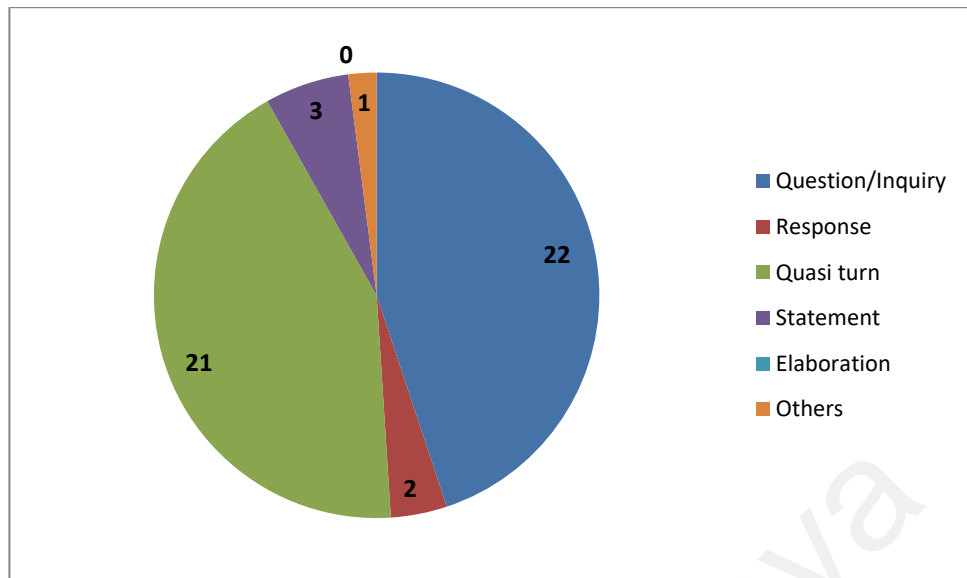
are typical of the Assessment phase. In contrast with the previous example, this information falls within the patient's epistemic domain.

**Table 4.5: Consultation B15: Public Community Clinic**

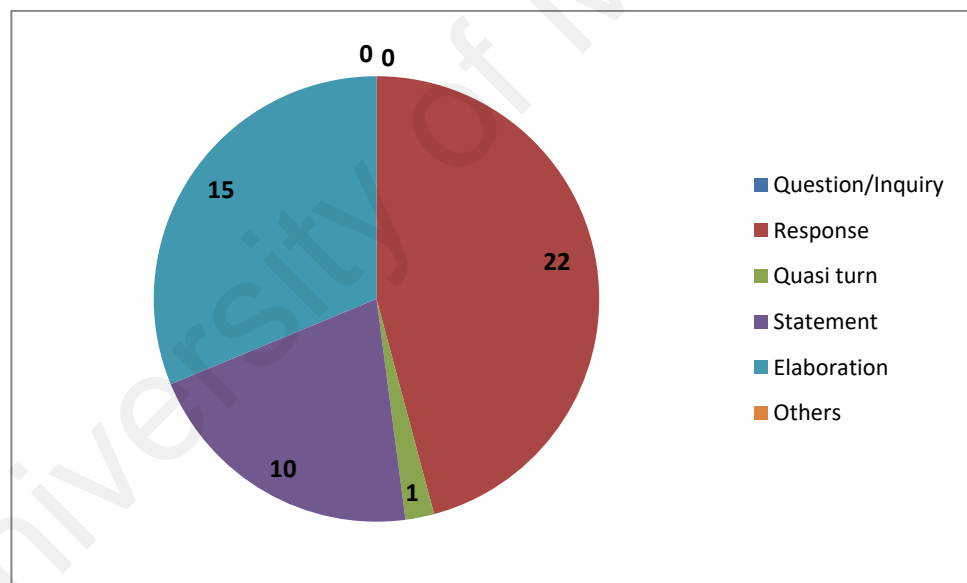
<b>Turn Nos</b>	<b>Sub-phase</b>
2-26	Current medication-adherence
26-41	Eating habits
42-74	Exercise habits
75-83	Daily routine/Work-life
84-98	Family background

As seen in Table 4.5, the Assessment phase begins with the topic of the patient's adherence to her medication, followed by talk on her eating and exercise habits. The patient's daily routine and family life is also discussed. Each sub-phase is dealt with sequentially, with topics comparable to information-gathering sequences in initial history taking.

The main concern in these sub-phases is information about the patients' practices relevant to their current blood sugar control. As shown in the interactional mapping of Consultation B15 (Figures 4.9 and 4.10), although the patient in B15 participates significantly more, the doctor still controls what information is brought into the talk. The doctor's main turn types are questions (22 out of 49 turns) and correspondingly the patient's participation is largely through responses (22 out of 48 turns) and elaborations (15 out of 48 turns). In contrast with the previous example, quasi-turns make up a large part of the doctor's turns (21 out of 49 turns) as she acknowledges the receipt of information provided by the patient.



**Figure 4.9: Consultation B15-Doctor's Turn Types (Total: 49)**



**Figure 4.10: Consultation B15-Patient's Turn Types (Total: 48)**

Consultations A1 and B15 were selected to separately exemplify the two typical focal themes in the Assessment phase and their related participation structure. However, three consultations include sub-phases on both the patient's blood sugar control and their daily practices. This makes for slightly longer Assessment phases, and more varied patterns of participation, explaining why the length of the Assessment phase varies from 59 to 250

turns. In the longer Assessment sequences (B5, B8 and C14), the structural map revealed a third focal theme, the patient's illness experience.

#### 4.2.1.3 Patient's Illness Experience

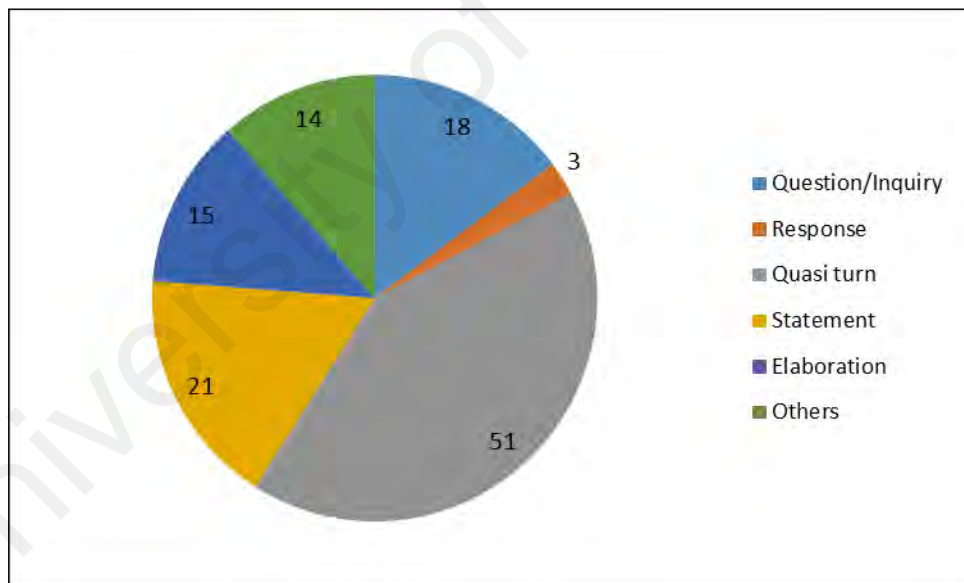
The patient's illness experience is also drawn upon as an epistemic resource in the Assessment phase, in patient-initiated sub-phases, which occur amongst the doctor-initiated sub-phases seen earlier. What distinguishes the patient-initiated sub-phases is a focus on the past, rather than current events.

**Table 4.6: Consultation B5: Public Community Clinic**

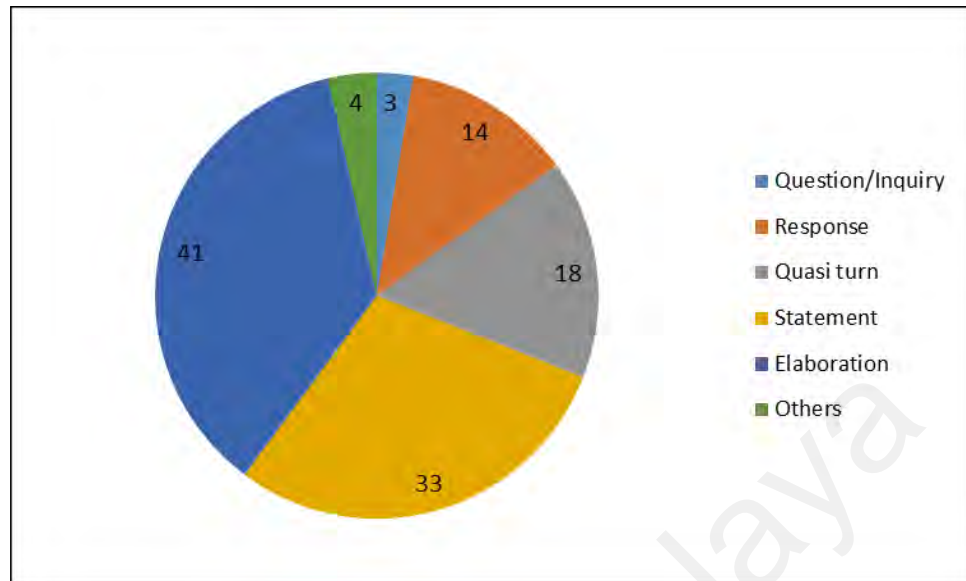
Turn Nos	Sub-phase
3-29	Blood pressure medication
30-53	Symptoms-Recent high sugar episode
54-72	Use of alternative medicine-'Noni' fruit for sugar control
90-106	Experience-First high sugar episode
222-239	Symptoms-past symptoms
440-454	Eating habits
885-917	Symptoms-past symptoms
919-938	Eating habits-Current and past
1037-1099	Assessment-Blood pressure & blood sugar testing

Table 4.6 presents the structural sub-phases of Assessment in Consultation B5, which was highlighted earlier as having an unusually recursive sequential structure. This is reflected in the non-sequential turn number in the table, for example, the gap between turns 72 and 90 represents the interspersed Assessment phase with the Treatment phase. Four sub-phases involve the patient's symptoms, which is a typical sub-phase of problem presentation phase in doctor-patient consultations. However, only the first sub-phase (30-53) is concerned with recent symptoms, with the remaining three concerned with past symptoms, namely the patient's first experience of hypoglycaemia (90-106) and pre-diagnosis symptoms (222-239, 887-917). Past eating habits are also discussed (919-938).

From the patient's perspective, such disclosures may be made to provide the doctor with relevant information to make an assessment. In addition, non-medical concerns, for example, social or emotional concerns may motivate these sub-phases. Interactional analysis of participant turn-types (see Figures 4.11 and 4.12) shows the high level of patient participation in these sub-phases. The doctor's turns mainly comprise quasi-turns (51/122), while statements (33/113) and elaborations (43/113) make up a significant proportion of the patient's turns, indicating that many of the patient's turns are self-initiated. The high number of elaborations made by the patient also indicates that the patient holds the floor for longer periods in comparison to the patients in A1 and B15, who do not make many elaborations.



**Figure 4.11: Consultation B5-Doctor's Turn Types (Total: 122)**



**Figure 4.12: Consultation B5-Patient's Turn Types (Total: 113)**

The maps of the three consultations have been presented to exemplify the structural and interactional patterns in the Assessment phase, around the three thematic concerns of patient's blood sugar control, patient's daily practices and patient's illness experience. The mapping shows overall structural and interactional patterns by which information is delivered and elicited to construct the patient's current health status, pointing towards themes for further analysis, namely in terms of the process of reasoning (rhetorics) and the management of knowledge (epistemics) which informs this process.

The sub-phases in the structural mapping highlight the interplay between the doctor's epistemics of "expertise" and the patient's epistemics of "experience" (Heritage, 2012) as resources in the Assessment phase, where the self-management of diabetes by the patients, in addition to their prolonged experience, reduces the knowledge asymmetry between doctors and patients compared to acute care consultations (Pilnick, 1998). Moreover, interactional mapping of the sub-phases shows that while doctor-initiated information delivery and gathering are typical in this phase, individual patients may also initiate information delivery through statements and elaborations. In order to identify the

discursive practices of doctors and patients in the Assessment phase, closer analysis of the talk was performed, as described in the following section.

#### **4.2.2 Constructing the Patient's Current Health**

During the Assessment phase the patient's current health status is constructed by drawing on the doctor's and patient's epistemic resources to deliver, elicit and consider information, against the biomedical measure of control. The patient's clinical condition then informs treatment decision making. In this section, excerpts from the three consultations discussed earlier will be presented to exemplify the discursive and rhetorical practices of doctors and patients in constructing the patient's current health.

##### **4.2.2.1 Building a Case for the Treatment Recommendation**

While blood sugar results are commonly solicited, delivered and assessed in diabetes visits (Koenig, et al., 2014; Wingard et al., 2014), in this study the doctor's delivery of the patient's recent HbA1c levels is not necessarily an act of information giving. Since diabetes progresses gradually, it is likely that the patient is already aware of his sugar level, which may not change significantly from one visit to another. Moreover, after dealing with the illness over time, patients are generally aware of whether their blood control is considered well or poorly controlled. Therefore, the delivery of results and assessment of the patient's condition appears to be more rhetorically motivated, not only as the basis for recommending insulin but also as a means to support the recommendation in talk leading up to treatment decision making.

The following excerpt of from Consultation A1 shows how DR1 moves from delivering results into an account which scaffolds her treatment recommendation. Using various discursive and interactional devices, DR1 builds a logical case for starting insulin, attempting to cast her assessment on a shared footing, by invoking shared knowledge, effort and compromise and eliciting P1's agreement with tag questions.



### Excerpt 4.6: So this is an old story

Turn	Speaker	Talk
*27-31	DR1	<i>live:r, (.) liver is also all normal, no problem. .h yang problem satu yang: besar itu biasa punya? He-he ((laughs)) you punya: &lt;H.B.A.1 C,&gt; yang untuk kencing manis, dia: &lt;langsung tak ada kura::ng&gt; masa ini pun nine point ↑one.</i> liver liver is also all normal, no problem <b>the one big problem, the usual one?</b> hh hh hh your HbA1c, for diabetes. It hasn't reduced at all even now it's at nine point one
30	P1	m:h
31	DR1	<i>nine point one, kalau ikut de punya ni chart you tengok, it is, diabetes with? poor contro:lh(.)</i> nine point one, <b>according to this chart</b> you see, it is, <b>diabetes with poor control</b> (1.42)
32	DR1	<i>so memang ini sudah lama punya cerite:::</i> so this is an old story
33	P1	m:h
*34-49	DR1	<i>NAME pun (.) faham ini:::, Saya pun faham in£hi£::, ((laughing voice)) So kita mahu <u>compromise</u> .h macam suda:h .h, dekat <u>ampat</u> tahun kita ada::: cakap = kita perlu mau buat in-= ((P1's minimal turns omitted))</i> <b>you also understand this, I also understand this.</b> so we must <b>compromise.</b> it's like already almost four years <b>we've</b> been saying, <b>we</b> need to do (in-)
40	P1	insulin (0.99)
*41-43	DR3	<i>insulin pun ye:s, tapi ini: saya cuba lain ubat pun sudeh. s'karang kencing manis punya ubat ada brapa?</i> insulin yes, but I've already tried other medicines. now how many diabetes medications are you taking?
44-57	omitted as DR1 and P1 discuss current medicines)	
58	DR1	<i>=so itu pun kita dah bagi. Tapi m- selepas itu pun kita tengok dia p'nya control? (.)No not very good. I↑sn't it</i> so we've also given that. but after even after that we see the control? no not very good, <b>is it?</b>
59	P1	yah
60	DR1 →	<i>so::, s- s'karang ini yang dia orang ada::: bagi kita::: a:h, ada assistance. kalau kita <u>perlu</u> mula insulin.(0.2) Sebab itu dia ada ini booklet</i> so, now they've given us er, assistance. if we need to start insulin. that's why they have this booklet
61	P1	m:h

\*P1's quasi-turns comprising minimal tokens omitted for brevity

At the beginning of the excerpt (turn 27) DR1 continues her delivery of the P1's test results, which are normal except for his HbA1c results, described as a "big problem". The description "the usual one," points to the chronic nature while also invoking P1's knowledge of the "problem", placing the problematisation of P1's sugar on a shared

footing. The laughter preceding “HbA1c” could attend to the dispreferred action of delivering bad news, while the slowed speech (e.g., <HbA1c>) and intensifying adverbs (*langsung/at all*), emphasise the negative assessment. In turn 31 DR1 refers to a blood sugar chart as a form of evidentiality (P. Atkinson, 1999) to support her assessment. At this point, P1, who has only produced minimal tokens so far, remains silent.

With no response from P1, DR1’s next statement appeals to his knowledge of his high blood sugar, invoking their shared knowledge (34-*You also understand this, I also understand this*) and effort (34-*So we must compromise*). The doctor continues on a shared footing by using the Malay pronoun “kita (we)” which includes the listener (34-*It’s like already almost four years we’ve been saying, we need to do*), before she is interrupted by P1, who completes her syllable “in-” with “insulin”. This displays his understanding that the doctor is approaching talk about insulin. The doctor’s next turn contrasts insulin against the other medications that the patient has been prescribed over the years, foregrounding her efforts (41-*I’ve already tried*) to use other medications (not shown). Against the “problem” of the patient’s high blood sugar, the medications represent the solutions attempted thus far. In turn 58, DR1 contrasts the prescribed medications against P1’s poor sugar control, which implies the failure of the attempts. Here, DR1 elicits P1’s agreement with her assessment, which P1 produces in turn 59.

Having gained P1’s agreement that his sugar control is problematic, DR1 initiates talk on future treatment by introducing the PDA (indicated by an arrow, 60) in a statement which foregrounds the treatment recommendation. Her description of the PDA is insulin-focused, rather than choice-focused, upgraded by the use of the Malay modal of “*perlu* (need to)”, which presents the treatment choice as a necessity.

The excerpt shows how the doctor’s rhetorical practices in moving from an assessment, which defines the problem, and accounting for solutions attempted before

starting the Treatment phase, seeking the patient's agreement for her assessment throughout the talk. This can be considered a way to "build a case" for the treatment recommendation by mitigating anticipated resistance (Angell and Bolden, 2016), indicating that the doctor does not expect a positive response to the recommendation. As mentioned in turns 34-49, the doctor and patient have been discussing insulin for four years, therefore it is likely that she may have expected the patient's resistance.

#### 4.2.2.2 Collaboratively Constructing an Assessment

As mentioned in Chapter 3 (3.3) activity types carry certain constraints on what is considered an allowable contribution, related to participants' "inferential schemata" tied to the activity. Analysis of excerpts from Consultations B15 and B5 in this section show how the doctors and patients exchange and negotiate the relevance of information in constructing an assessment of the patient's current condition. These excerpts exemplify two distinct patterns of information sharing during the assessment phase: one, which is elicited by the doctor and centres on the patient's health-related practices and the other, which is patient-initiated and centres on the patient's illness experience. Both patterns draw upon the patient's epistemic resources, but the first excerpt is recognisably in service of the medical agenda.

Like Consultation A1, the Assessment phase in Consultation B15 is led by the doctor. The excerpt shows how DR8 uses a variety of turn types to elicit and manage the type and quantity of information. In Excerpt 4.7, the doctor has just asked about P11's consumption of medication (not shown) and now initiates the topic of the patient's diet, with an open-ended question, (26-*How about food?*), followed by a close-ended question which foregrounds the patient's control over her eating habits. The element of control implies assessment of the patient's eating habits as being well or poorly controlled, in the

same way the patient's blood sugar can be assessed against the benchmark of sugar targets.

Instead of providing a yes or no response, the patient begins describing her eating habits, through short statements which are aligned with the notion of good dietary control. Naming Indian dishes which are known to be healthier options (29-*Tosai or Idli*), she mentions eating rice in the afternoon, and follows this with a statement that seems designed to minimise her consumption (33-*sometimes eat bread only*). Throughout the patient's talk, the doctor's continuers (28, 30, 32) not only indicate receipt of the information but elicit further disclosure from the patient by handing back the turn to the patient.

#### Excerpt 4.7: How about food?

Turn	Speaker	Talk
26	DR8	o::h okay.(.) alright, oka:y? how about food? (0.69) are you controlling your food (0.56)
27	P11	food sometime, (0.24) I- morn- night I eat bread,
28	DR8	m-hm? (0.46)
29	P11	tosai or idli,
30	DR8	m-hm
31	P11	and afternoon I eat rice,
32	DR8	m-hm
33	P11	sometimes eat (0.33) bread only (0.4)
34	DR8	oh, afternoon=
35	P11	=m-mh
36	DR8	rice how much you eat?
37	P11	rice, (.) only little bit only
38	DR8	little bit
39	P11	m:h
40	DR8	how many scoops?
41	P11	ah, two spoon
42	DR8	two spoons la (.) exercise? (0.61)
43	P11	exercise, now I: never do because, I'm: doing, (0.36) morning breakfast (0.89) for people lah

Following the patient's minimal token in turn 34, the doctor focuses on the patient's consumption of rice, known as a food with a high glycaemic score, enquiring about the quantity the patient consumes. Here, the patient again provides a description which minimises her consumption (37-*Only little bit only*). Upon acknowledging this response (38), the doctor specifically asks about the number of spoons consumed, accepting P11's response that she has two spoons of rice, before initiating a new topic. The patient recognises the doctor's single word enquiry (42-*Exercise?*) as a request for information and responds by disclosing that she does not exercise, explaining this by describing her work in a food stall in the morning, which prevents her from exercising.

P11's responses to the doctor's enquiries indicate her awareness that the elicited information is subject to doctor's assessment against a benchmark of good practices for type 2 diabetes. Using quantifiers like "only" and "little bit", she foregrounds the minimal aspects of her diet, aligning to the notion of "controlling one's food". Similarly, by citing her work demands to account for her lack of exercise, P11 orients to the expectation that she should be exercising to control her blood sugar. This excerpt demonstrates how both participants work around a shared understanding of the goal of talk in the Assessment phase, where the doctor tries to acquire information on the patient's practices which may affect her sugar control and the patient provides her answers in relation to an understood measure of what she is expected to be doing. While assessment of the patient's practices is not explicit, P11's turns indicate that it is an understood part of the activity.

In contrast, Excerpt (4.8) shows how doctor and patient may occasionally have differing inferential schemas about what information is relevant. The recursive structure of Consultation B5 has been mentioned earlier (4.2.1.3) in which the patient's talk is largely self-initiated. Without the doctor's control over the information provided, tensions between the doctor's "medical" perspective and the patient's "life-world" perspectives

(Mishler, 1984) become more apparent. In turn 79, the Treatment phase begins when the doctor mentions the recommendation to start insulin made by another doctor in the previous consultation, accounting for it with an assessment of P5's high sugar. DR3 supports the assessment by listing the patient's recent sugar readings (81-89), eliciting P5's agreement with a tag question.

In turn 90, the patient initiates a topic shift, beginning a narrative of her first hypoglycaemia episode. Unlike talk of symptoms in the problem presentation phase of a consultation, the narrative displays some elements of "troubles-telling", which allows a patient to express emotions and gain some affiliative response from the doctor (Ten Have, 1989). However, although DR3 allows P5 to continue her narrative, she does not attend to any of the socio-emotional aspects of the story, for example, that P5 was shivering and initially misdiagnosed by the doctor (96-100, DR3's minimal turns omitted for brevity). P5 ends her narrative by noting her blood sugar at that time of over 20, which is much higher than her current blood sugar of 10.5 mentioned earlier by DR3, perhaps implying some improvement (100).

At the end of the narrative, DR3's response does not address the previous blood sugar level or the socio-emotional details in P5's narrative. Instead, she picks up a chronological detail (95-*Last September*) in turn 101 (101-*Oh that means you've just er, had diabetes just one year*) and offers a conclusion (102-*Oh that means, it's one year but you're already taking maximum medication*) which implies an assessment of P5's condition. Her next turn is a confirmation-seeking statement that P5 cannot increase her medicine (105), which appears to be rhetorical since it falls within the doctor's epistemic domain and supports the treatment recommendation by eliminating the option of increasing medication.

### Excerpt 4.8: So that means

Turn	Speaker	Talk
*79-81	DR3	<i>so: a::: (.) pernah sebelum ni kan a::: Dokte:r NAMA dah perna:h.h &gt;cakap untuk&lt; u::m, ape? mulakan insulin kan? sebab .h tengok you punya bacaan gula ni, .h a:, tinggi: kan?</i> so, er, before this, right, er, Doctor NAME has mentioned to, um, what is it? starting insulin, right? Because, looking at your sugar readings, er, it's high, right?
82	P5	>a-a< m-hm
*83-85	DR3	<i>you punya: ape? bacaan yang tiga bulan tu HbA1c tu sepuluh point dua peratus 'an? Sepatutnya dia kurang dari enam point lima</i> you, what is it, that three-month reading, HbA1c, is ten point two percent, right? It should be less than six point five
86	P5	<i>m:h</i>
87	DR3	<i>ha: and then (.) bacaan gula you yang you ambik setiap pagi pun,.h tinggi jugak, kan? Dua bela::s, kan?</i> ah, and then your sugar reading that you take every morning is also high right? Twelve, right?
88	P5	<i>ah</i> ya
89	DR3	<i>sembila:n, lapan point enam</i> nine, eight point six
90-95	P5	<i>first time dokte:r= =a:::tahun lepas bulan s'milan saya saya kena diabetis kan? Itu pun saya tak syak saya (.) t'rus demam pana::s=</i> the first time, doctor, er last year in September, I I got diabetes, right? Even then, I didn't suspect anything, just had a high fever.
*96-100	P5	<i>=masa tu saya datang klinik adik saya bawak, saya gigil-gigil doktor semua ingat saya kena malaria:: Masa tu dia orang cek darah dua puluh point tiga</i> then, I came to the clinic, with my brother I was shivering. All the doctors thought I had malaria. At that time, they checked my blood it was twenty point three
101	DR3	<i>a::: So maknanya (.) you baru ng- d- kencing manis, baru satu tahun la:.</i> oh, so that means (.) you've just er, had diabetes just one year
102	P5	<i>ah, satu tahun.</i> ya, one year
103	DR3	<i>a::: (.) so maknanya sekarang, satu tahun tapi sudah makan ubat yang maksimum lah.</i> oh. so that means now, it's one year but you're already taking maximum medications
104	P5	<i>a: maksimum.</i> ya, maximum
105	DR3	<i>a: tak boleh tambah lagi kan?</i> ya. you can't add it anymore right?
106	P5	<i>ha</i> ya
107	DR3	<i>so s'karang ni a:::, hari tu kita ade cakap pasa:l: .h mau: start itu insulin kan?</i> so now, er, that day we had talked about, wanting to start insulin, right?

While doctors' sharing of medical information can often emphasise biomedical aspects over biographical and experiential (Donovan-Kicken, Tollison, & Goins, 2012; Koenig, Dutta, Kandula, & Palaniappan, 2012), the excerpt above shows how this may also be true in how doctors receive and respond to patient contributions. The doctor reframes a detail from the patient's narrative (101-*So that means now it's one year...*) in a way that justifies the recommendation to start insulin. With the patient agreeing that her oral medication can no longer be increased, the doctor resumes talk about starting insulin (107).

#### 4.2.3 Section Summary

The Assessment phase in chronic care consultations serves a similar purpose as "problem-presentation", "examination" and "diagnosis" in acute care consultations (Robinson, 2003; Byrne & Long, 1976; Ten Have, 1989) in that the medical problem is constructed during this phase for further action. However, the prolonged nature of diabetes, and continuity of care between doctor and patient mean that certain information may already be known to either party. Since the larger medical problem of the patient's diabetes is already known, what needs to be established over the routine visits is the current dimensions of the problem and how it will be addressed.

Therefore, talk during these consultations depends largely on what the patient and doctor know about the patient's diabetes, which may explain variations in the Assessment phase across the data. For example, patients who are seeing the doctor for the first time (e.g. B5 and B15) may need to share more information than a patient who sees the same doctor at each time (e.g., A1). This may also explain why there was no Assessment phase in Consultations A2, A3, A4 and C11.

Using structural, interactional and thematic mapping, followed by closer analysis of discursive and rhetorical practices, this section has demonstrated how doctors and patients



draw on their respective epistemic resources to construct an assessment of patient's health against blood sugar targets. Doctors elicit, present or reformulate information to support their treatment recommendation, while patients disclose information about their daily eating habits in a way that accounts for "good" health practices. Moreover, individual patients may disclose information for purposes other than attending to the clinical agenda, resulting in a conflict between the doctor's and patient's perspectives.

Ultimately, however, producing an explicit assessment which problematises (or normalises) the patient's current condition, remains the domain of the doctor, as is the delivery of a diagnosis in acute care consultations. While assessment of the patient's blood sugar is common in routine diabetes visits (Koenig et al., 2014, Wingard et al. 2014), in the present study, the doctor's assessment of the patient's high sugar level appeared to serve a rhetorical, rather than informational function, since both doctors and patients are already aware of the patient's high sugar levels. These assessments served to build a case for the treatment recommendations (Angell & Bolden, 2017) while also acting as an interactional device to approach talk on future treatment. This talk during the Treatment phase is discussed in the following section.

### **4.3 Treatment Phase in Routine Visits for Type 2 Diabetes**

The Treatment phase in the routine visits for type 2 diabetes serves the clinical goal of lowering the patient's risk of complications, in that talk during this phase determine the patient's course of treatment and self-management practices. As highlighted earlier (4.1.2), talk in the consultations is largely focused on the patient's future treatment. Since all the patients have sustained high blood sugar levels, for which insulin therapy has been recommended, the Treatment phase is generally concerned with arriving at a decision about insulin, including sub-phases of treatment recommendation, information about insulin, perspectives on starting insulin, and the treatment decision. Post-decision making

sub-phases include instructions on administering insulin and lifestyle counselling sub-phases, mostly about diet and exercise.

Mapping of this phase reveals diverse topical, sequential and interactional patterns. However, these can be broadly categorised according to the focal themes of patient knowledge and patient choice. These two themes are addressed explicitly and implicitly in all the consultations, since decision making, involves making sure the patient has the necessary information as well as arriving at a treatment choice. For example, patient knowledge is explicitly invoked when the doctor asks if the patient understands the PDA, and implicitly addressed when the patient displays knowledge of diabetes complications. In the same way, the doctor may explicitly elicit the patient's choice in decision making sub-phases, or the patient can implicitly display his choice by resisting discussion on insulin.

The use of the PDA, with its aim of facilitating informed and shared decision making, is tied to both patient knowledge and choice. Therefore, differences in whether the patient has read the PDA before the consultation (with its implications on how patient knowledge is managed), and whether the patient accepts or resists the recommendation to start insulin (with its implications on how patient choice is managed) affect the structure and interaction in treatment decision making. In the next section, the structural, interactional and thematic maps of the consultations will be presented to show some key patterns.

#### **4.3.1 Mapping the Treatment Phase**

While the notion of a prototypical pattern is central to Activity Analysis, a prototypical structure of the Treatment phase was not observed, possibly due to the variations in whether the patient has read the PDA (knowledge) and the patient's perspectives towards insulin (choice) across the small number of consultations. However, mapping shows some patterns tied to these two factors.

In this section, the maps of four consultations are presented to demonstrate how knowledge and choice manifest in the structure, interaction and thematic features of the Treatment phase. Consultation A4, in which the patient has read the PDA and responds positively towards insulin, has a brief, sequential structure. Comparatively, the extended and recursive structures in Consultations A1, A3 and B7 can be generally attributed to the patient not having read the PDA, responding negatively to insulin, or both. The structural maps show the sequential order of the sub-phases alongside the broad mapping of the two themes while interactional mapping provides an insight into distribution of participation.

#### 4.3.1.1 Patient Has Read the PDA and Responds Positively Towards Insulin

Consultation A4 shows the briefest and most linear structure. The themes of patient knowledge and choice are dealt with briefly with post-decision making instructions taking up the most turns.

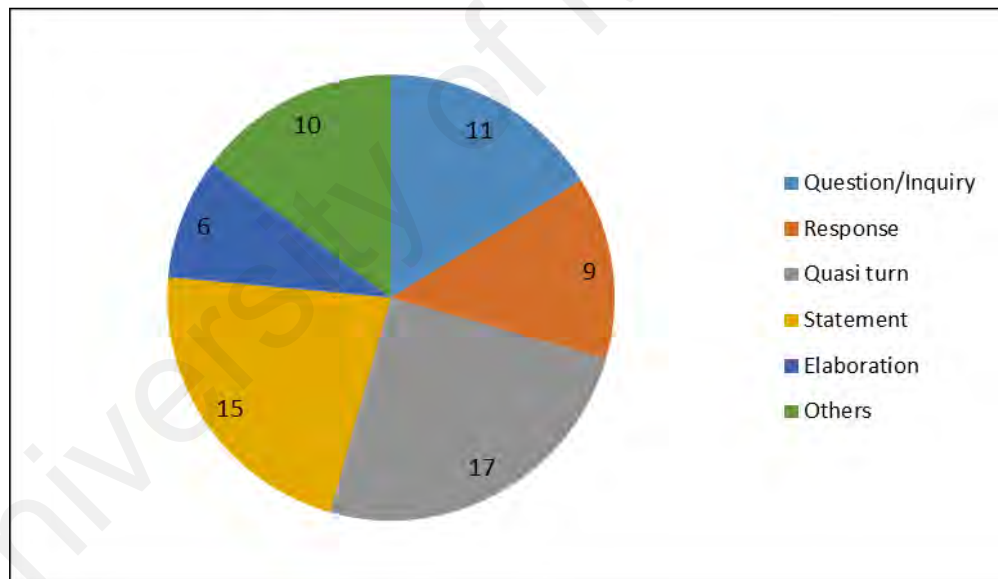
**Table 4.7: Consultation A4: Private Clinic**

<b>Turns</b>	<b>Structural Sub-phases</b>	<b>Themes</b>
1-40	PDA	Knowledge/Choice (40 turns)
41-60	Treatment decision	Choice (20 turns)
61-104	Instructions-Using insulin & other meds	Knowledge (100 turns)
105-113	Instructions-Avoiding hypoglycaemia	
118-147	Instructions-Injecting	
147-162	Instructions-Avoiding weight gain	

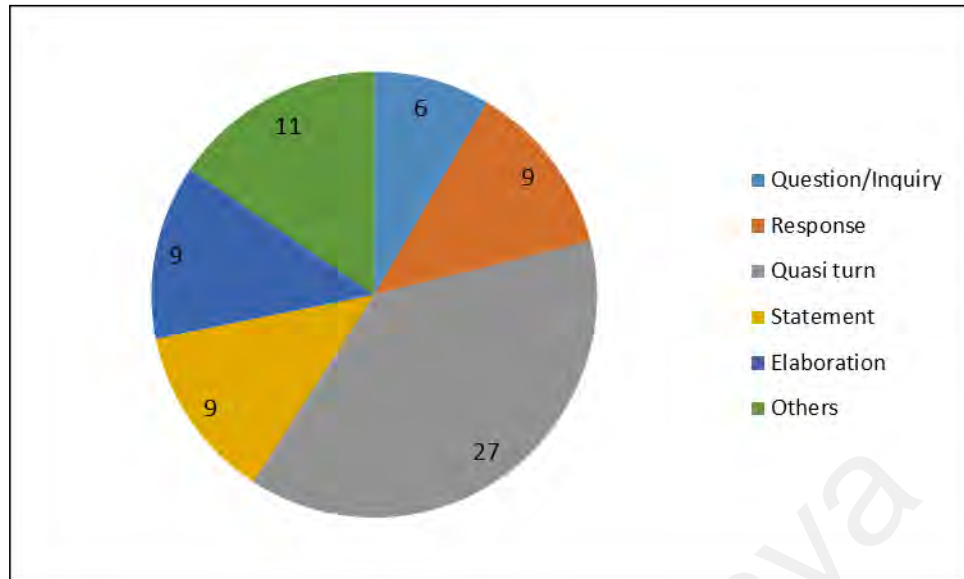
The Treatment phase begins at the initial turns with talk on the PDA, which was given to the patient in the previous consultation. This is followed by the treatment decision sub-phase, which is concluded over 20 turns. Interestingly, there is no “treatment recommendation” sub-phase. Following the treatment decision, the patient is given

instructions on administering insulin. Although the theme of knowledge is addressed more extensively than choice, it largely occurs after treatment decision making ends.

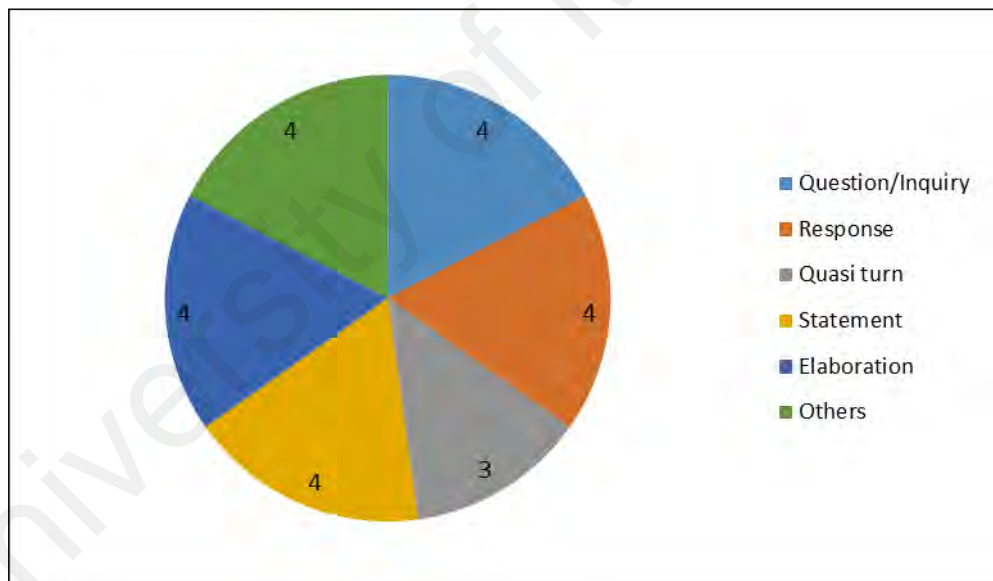
Interactional mapping of this consultation (Figures 4.13-15), which also includes the patient's husband, shows varied turn types. Although the doctor's and patient's most common turn types are quasi-turns, which usually occur while listening to another speaker, the rest of the talk is made up of roughly equal numbers of questions, responses and statements. However, the doctor makes more statements (16/68), when compared to the patient (9/71) and her husband (4/23), corresponding with the delivery of instructions on administering insulin. This probably explains why the doctor's turn volume (see 4.1.3) is slightly higher at 59%, compared to that of the patient (27%) and her husband (14%).



**Figure 4.13: Consultation A4-Doctor's Turn Types (Total: 68)**



**Figure 4.14: Consultation A4-Patient's Turn Types (Total: 71)**



**Figure 4.15: Consultation A4-Husband's Turn Types (Total: 23)**

The brief, sequential structure of Consultation A4 is not typical in the data, with most consultations showing extended and recursive structures when patients have not read the PDA or have a negative perspective towards insulin. These two factors lead to prolonged treatment decision making, in which the themes of knowledge and choice are dealt with

recursively, as demonstrated in the mapping of Consultations A1, A3 and B7 in the following sections.

#### 4.3.1.2 Patient Has Not Read the PDA

Consultation A1 is largely focussed on providing the patient with information on treatment, within the decision making process. Patient knowledge and choice are dealt with in a recursive manner, with patient knowledge addressed more extensively. As the patient responds positively towards insulin, sequences dealing with the patient's perspective and choice are relatively brief.

**Table 4.8: Consultation A1: Private Clinic**

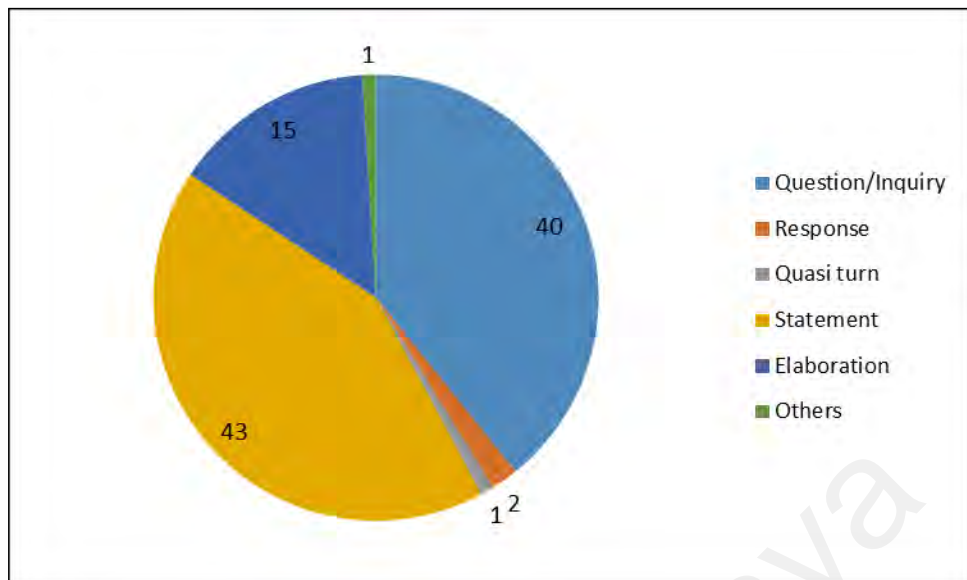
<b>Turns</b>	<b>Structural Sub-phases</b>	<b>Themes</b>
60-63	PDA	Choice (27 turns)
64-65	Recommendation to start insulin	
66-84	Patient perspective about insulin	
85-86	Treatment decision	
87-116	Insulin & its functions	Knowledge (110 turns)
117-161	Symptoms & complications	
162-192	Administering insulin/insulin pen	
193-196	Sugar targets	
197	Treatment decision	Choice (1 turn)
198-201	Self-monitoring	Knowledge (20 turns)
202-206	Instructions-Financial concerns	
207-217	Instructions-Avoiding weight gain	
218-223	Treatment decision	Choice (6 turns)
224-232	Instructions-Travelling & insulin	Knowledge (9 turns)
233-238	Treatment decision	Choice (6 turns)
239-245	Instructions-Travelling & insulin	Knowledge (7 turns)
246-257	Treatment decision	Choice (12 turns)

The Treatment phase begins in turn 60, after the Assessment phase (4.2.2.1), with talk on the PDA. As shown in Table 4.8, the Treatment phase in this consultation is largely focused on information related to starting and using insulin, as the doctor goes through the PDA contents. Of the 197 turns (from 60-257) in the Treatment phase, 146 turns focus on patient knowledge, with the sub-phases generally following the order of topics

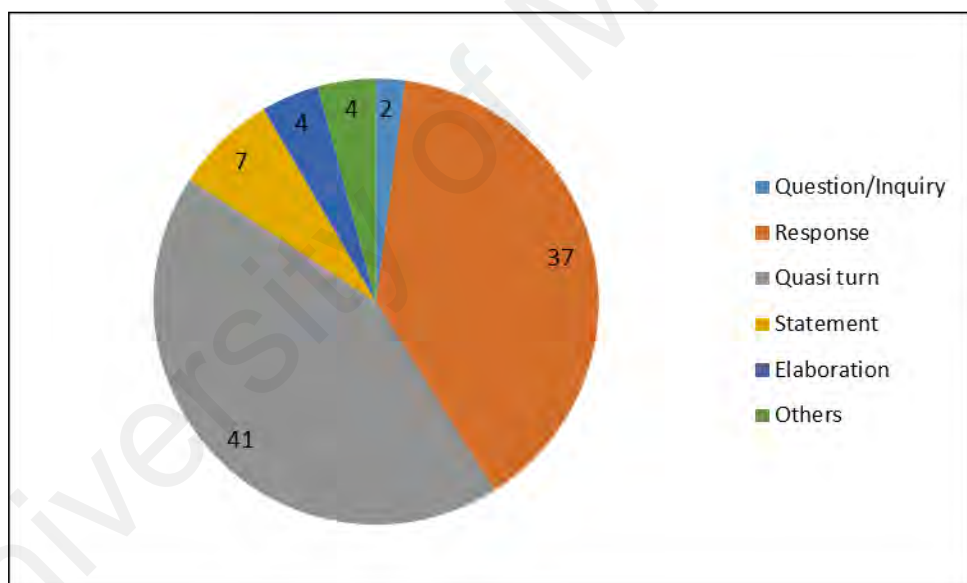
presented in the PDA (insulin and its functions (87-116), symptoms and complications of high sugar (117-161), using insulin (162-152) and sugar targets (193-196)). These sub-phases are interspersed with brief decision making sub-phases, becoming more recursive as the talk progresses. As the patient responds positively towards starting insulin, instruction giving also occurs towards the end of Treatment phase, which ends with a treatment decision sub-phase.

As can be seen in the interactional mapping of Consultation A1 (Figures 4.16-4.17), this consultation is largely doctor-driven. Question-answer sequences form the majority of turns, with the doctor asking the questions (40 out of 102 turns) and the patient providing responses (37 out of 95 turns). The doctor's turns are also made up of statements and elaborations, with a large proportion of quasi-turns from the patient. This indicates that the patient spends a lot of time receiving information from the PDA.

Further analysis of the doctor's question types shows that a majority of the questions (26/40) are yes/no questions, with 7 confirmation questions (those which aim to confirm information) and 7 open-ended questions. The kinds of questions asked largely constrain the patient's participation to yes or no responses, which combined with the lack of elaborations from the patient, corresponds with the patient's turn volume of only 20%. Also notable is the lack of questions from the patient (2/95 turns), even though he is given a large amount of information during the consultation. The limited patient participation and high proportion of doctor-led questions, as seen in Consultation A1, is also observed in other consultations in which patients had not read the PDA. However, Consultation A1 shows the lowest percentage of patient turn volume.



**Figure 4.16: Consultation A1-Doctor's Turn Types (Total: 102)**



**Figure 4.17: Consultation A1-Patient's Turn Types (Total: 95)**

#### 4.3.1.3 Patient Responds Negatively towards Insulin

In Consultation A3 (Table 4.9), in which the patient responds negatively towards insulin, the Treatment phase is also extended and recursive. However, in contrast with the previous example, the patient's choice is addressed extensively (225 turns), through sub-phases on the patient's perspective and treatment decision. Since the patient has already read the PDA, sub-phases about diabetes and using insulin are minimal (45 turns).

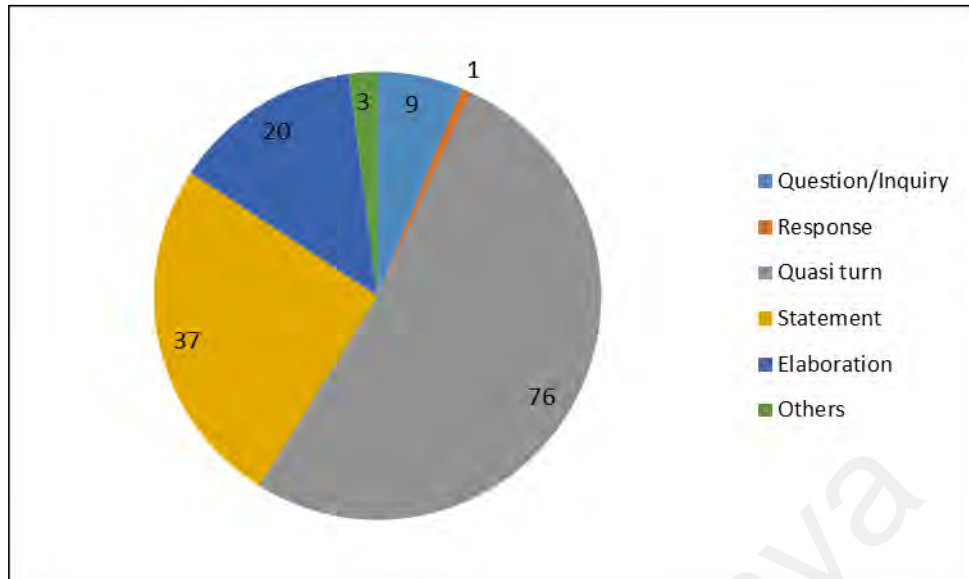


**Table 4.9: Consultation A3: Private Clinic**

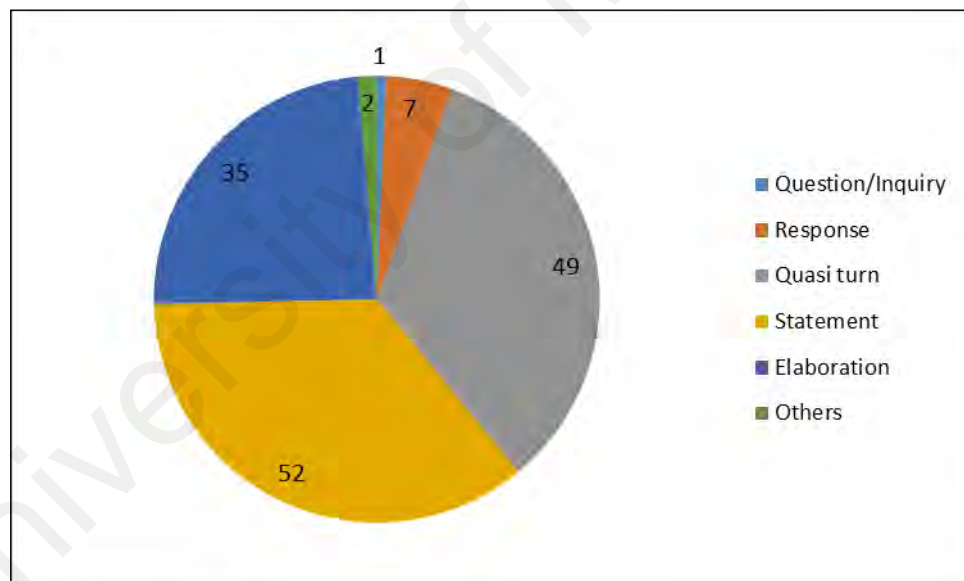
<b>Turn</b>	<b>Sub-phases</b>	<b>Themes</b>
1-23	PDA	Knowledge/Choice (23 turns)
24-38	Patient perspective on insulin	Choice (50 turns)
38-46	Treatment decision	
47-66	Patient perspective on insulin	
67-73	Treatment decision	
74-98	Complications of high sugar	Knowledge (25 turns)
99-118	Recommendation	Choice (20 turns)
119-136	Eating habits and sugar level	Knowledge (18 turns)
137-276	Patient perspective on insulin	Choice (155 turns)
277-292	Treatment decision	

The consultation begins in a similar way to Consultation A4, with knowledge and choice being addressed in the initial PDA sub-phase. This is followed by about 50 turns of repeated sub-phases concerning the patient's perspectives and the treatment decision. Of note is the treatment recommendation, which appears in the middle of the Treatment phase, after a sub-phase on complications. The consultation ends with a prolonged sub-phase on the patient's perspective, lasting over 100 turns, before treatment decision making closes with a treatment decision sub-phase.

Compared to Consultation A4 and A1, the interactional mapping of Consultation A3 (Figures 4.18 and 4.19) shows active patient participation. Both doctor and patient make 146 turns each, largely comprising statements and elaborations, and quasi-turns. In contrast with the doctor-dominated Consultation A1, the doctor participates less in Consultation A3, with half her turns comprising quasi-turns. This is consistent with the analysis of turn volume, showing that the doctor's turns only make up 40% of the total turn volume.



**Figure 4.18: Consultation A3-Doctor's Turn Types (Total: 146)**



**Figure 4.19: Consultation A3-Patient's Turn Types (Total: 146)**

As Figures 4.18 and 4.19 show, questions are used minimally by both doctor and patient, with further analysis of the doctor's nine questions showing that the majority (5/9) are confirmation questions, rather than information-seeking open-ended questions (3/9) or yes/no questions (1/9). This indicates that the patient's disclosures of perspective are largely self-initiated, rather than elicited by the doctor, unlike Consultation A1 in

which the patient's turns are mostly responses to the doctor's questions and Consultation A4, in which the patient's turns are mostly quasi-turns. The patient's single confirmation question further implies that the patient does not seek much information from the doctor.

While the extensive addressing of patient perspective seen in this consultation (see Table 4.9) is common throughout consultations in which patients responded negatively towards insulin, Consultation A3 is not typical in its high patient participation levels, and the patient's frequent statements and elaborations. The fourth and final consultation to be discussed, Consultation B7, demonstrates a more common interactional pattern in consultations with patients who respond negatively towards insulin.

#### **4.3.1.4 Patient Has Not Read the PDA and Responds Negatively Towards Insulin**

Consultation B7 (Table 4.10), in which the patient has not read the PDA and responds negatively towards insulin, shows similar features to the two consultations discussed earlier (A1 and A3). The patient's choice is addressed repeatedly through sub-phases on the patient's perspective and the treatment decision, and there are many sub-phases concerned with insulin, diabetes, complications and instructions on using insulin. This makes for a highly extended and recursive structural pattern.

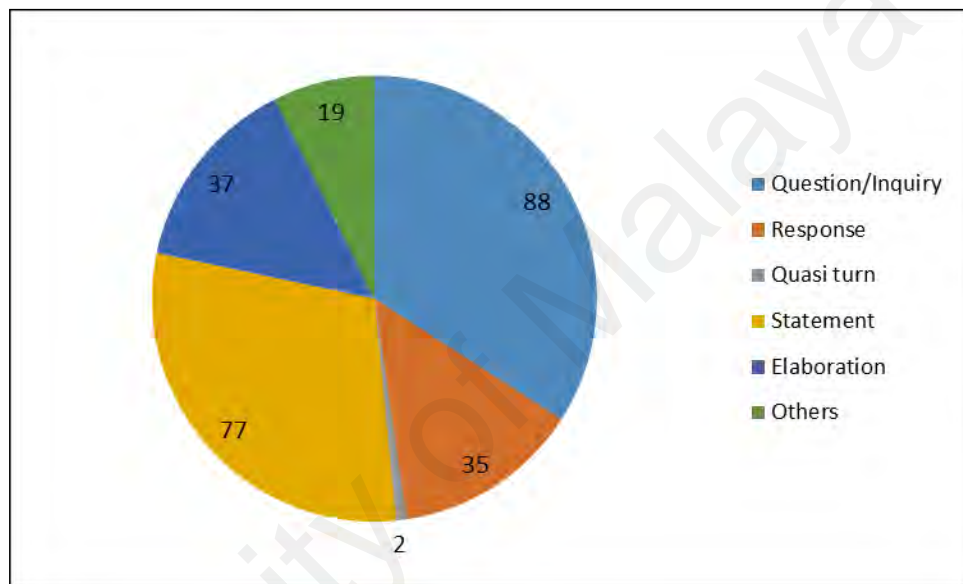
Following the Assessment phase, the Treatment phase begins in turn 60 with talk on the patient's perspective towards insulin, after which the PDA is discussed. Other than the highly recursive structure, it is difficult to identify patterns in the sequence of sub-phases. The treatment decision sub-phase occurs most frequently, interspersed with recommendation and patient perspective sub-phases earlier in the Treatment phase and interspersed with instructions towards the end of the phase. As the doctor goes through the PDA, the sub-phases dealing with information on insulin and its functions, diabetes, and injecting insulin follow a similar order as that of the PDA contents. However, other than a stretch of 88 turns in the middle, these knowledge-focused sub-phases are

interspersed with choice-focused sub-phases. The latter are more varied at the beginning of the consultation, including patient perspective, recommendation and treatment decision sub-phases. As treatment decision making progresses, choice is addressed only in sub-phases in which the treatment decision is explicitly made, with the length of the sub-phases growing shorter towards the end.

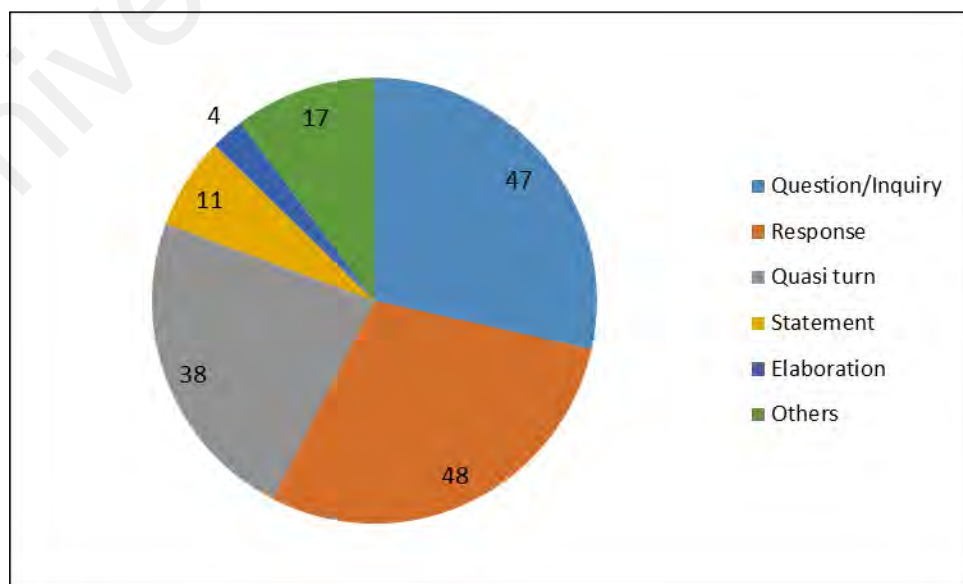
**Table 4.10: Consultation B7: Public Community Clinic**

<b>Turn</b>	<b>Sub-phases</b>	<b>Themes</b>
60	Patient perspective towards insulin	Choice (1 turn)
61-74	PDA	Knowledge (14 turns)
75-84	Treatment decision	Choice (22 turns)
85-96	Patient perspective towards insulin	
97-114	Injecting insulin	Knowledge (18 turns)
115-139	Recommendation	Choice (25 turns)
140-146	PDA	Knowledge (7 turns)
147-154	Patient perspective towards insulin	Choice (13 turns)
156-159	Treatment decision	
160-180	Insulin and its functions	Knowledge (21 turns)
181-186	Recommendation	Choice (9 turns)
187-189	Treatment decision	
190-199	Recording of consultation	10 turns
200-203	Treatment decision	Choice (4 turns)
204-234	Diabetes-Complications	Knowledge (85 turns)
235-239	PDA	
240-247	Diabetes-Prognosis	
248-281	Injecting insulin-Procedure side effects	
282-288	Instructions-Financial concerns	
289-304	Treatment decision	Choice (16 turns)
305-327	Instructions-Monitoring blood sugar	Knowledge (23 turns)
328-341	Treatment decision	Choice (14 turns)
342-358	Instructions-Avoiding hypoglycaemia	Knowledge (17 turns)
359-362	Treatment decision	Choice (4 turns)
363-385	PDA	Knowledge (23 turns)
386-399	Treatment decision	Choice (14 turns)
400-411	Instructions-Injecting schedule	Knowledge (12 turns)
412-416	Treatment decision	Choice (5 turns)
417-445	ASSESSMENT-BP & Blood sugar	29 turns
446-448	Treatment decision	Choice (3 turns)
449-483	Instructions-Injecting schedule	Knowledge (35 turns)

The interactional mapping of Consultation B7 (Figures 4.20 and 4.21) is similar to that of Consultation A1, which shows limited patient participation. However, in this consultation, the doctor's total turn number of 258 far exceeds that of the patient at 165. In contrast with Consultation A1, in which the patient's turns are mainly responses and quasi turns, the patient in B7 makes roughly equal numbers of questions, responses and quasi-turns.



**Figure 4.20: Consultation B7-Doctor's Turn Types (Total: 258)**



**Figure 4.21: Consultation B7-Patient's Turn Types (Total: 165)**

### 4.3.2 Section Summary

This section has described some key features in the structure, interaction and themes observed in the Treatment phase. Comparing the brief sequential structure of Consultation A4 against the extended recursive structures of Consultations A1, A4 and B7 exemplifies how alignment (or disalignment) between doctor and patient, in terms of the knowledge considered necessary for decision making and perspectives about the treatment recommendation, can hasten or prolong the treatment decision making process. In keeping with the method of Activity Analysis, the findings from this mapping guide further analysis, which will be discussed in Chapters 5 and 6.

Firstly, the structural maps provide insight into PDA use, which is initiated early in the Treatment phase and limited to initial turns if it transpires that the patient has read the PDA prior to the visit. If the patient has not read the PDA, PDA use is observed throughout the consultation, both explicitly as a topic of discussion and implicitly, as doctors go through its contents with the patient. However, closer analysis is necessary to identify doctors' and patients' discursive practices in using the PDA.

Moreover, the structural mapping highlights a notable feature of treatment decision making in the consultations. The absence of an Assessment phase and/or the typical treatment recommendation sub-phase, considered the first turn in treatment decision making structure (Stivers, 2005a, 2005b, 2006), in several consultations raises questions about how treatment decision making is initiated in the consultations. This will be investigated further in the following chapters.

The mapping also shows the extended and recursive structure of treatment decision making with patients who respond negatively towards insulin, in which the "treatment recommendation" and "patient perspective" sub-phases reflect the conflicting perspectives of doctor and patient. As indicated by the interactional mapping of

Consultations A3 and B7, patient participation can vary during the negotiation of these two perspectives, wherein doctor-led question-answer sequences are a key feature, but patient-initiated statements and elaborations are also observed. More detailed analysis is needed to explicate the discursive, rhetorical and interactional practices by which the themes of knowledge and choice are negotiated in treatment decision making.

#### **4.4 Summary and Discussion**

The analysis in this chapter provides a comprehensive analysis of how talk is organised in routine visits for type 2 diabetes, through mapping of whole consultations according to structure, interaction and theme. The mapping shows variations in structure, participation and thematic content across the 11 consultations. This may be due to differences in healthcare setting, PDA use and patient perspectives towards insulin. In Section 4.1, two main phases of Assessment and Treatment were identified, corroborating earlier studies outside acute primary care and adding to the limited research on consultation structure in chronic care (Díaz, 2000; Pilnick, 2001). Moreover, interactional mapping showed that doctors generally participate more than patients, particularly during the Treatment phase (Section 4.1).

Mapping of the Assessment phase showed that talk was concerned with the patient's blood sugar and health-related practices and less commonly, the patient's illness experience. While doctors mostly control the talk, analysis showed how assessment is jointly constructed by drawing on the doctor's and patient's respective epistemics of medicine and the life-world to construct an assessment of the patient's current health. The chronic nature of diabetes, however, means that this information may already be known to the other. Therefore, the Assessment phase, appears to largely serve a rhetorical function, with patients aligning their disclosures to ideas about "healthy" practices and

doctors presenting or reformulating assessment of the patient's sugar control to support their recommendation and approach treatment decision making.

In Section 4.3, mapping of the treatment phase showed that PDA use and patient's perspectives towards insulin influence how talk is structured and the extent to which patient knowledge and choice are managed. Broad patterns of PDA use were identified. Moreover, most consultations were prolonged and recursive, although details of the sub-phase and participation differed across consultations.

As the first step in Activity Analysis, the structural, interactional and thematic mapping also serves to identify key areas for closer analysis. (Sarangi, 2010a). Therefore, the next two analytical chapters will examine talk in the Treatment phase, according to the two key factors of PDA use and patients' perspectives towards insulin. Chapter 5 investigates the use of the PDA in consideration of the SDM model, while Chapter 6 examines consultations in which the patient resists insulin, to examine how doctors and patients negotiate the treatment decision about starting insulin.



## CHAPTER 5: USING A PATIENT DECISION AID ON INSULIN TO FACILITATE SDM

Following the identification of broad patterns in the Treatment phase, this chapter takes a closer look at the use of the patient decision aid (PDA) in the consultations, to answer the second research question:

**RQ2:** *How do doctors use a patient decision aid (PDA) on starting insulin to facilitate shared decision making (SDM) during routine visits for type 2 diabetes?*

As described in Chapter 3, Discourse Analysis, incorporating Conversation Analysis (CA) is used to investigate the discursive, rhetorical and interactional practices of the doctors and patients in using the PDA considering these against the SDM model (Charles et al., 1999; Elwyn et al., 2012).

The first section (5.1) describes overall patterns of PDA use within the SDM trajectory, beginning from the initial turns of talk involving the PDA (5.1.1). These initial sequences are then analysed to investigate how knowledge and choice are managed by doctors and patients, leading to two phases of SDM: information exchange and deliberation on treatment (5.1.2). Following this, the analysis focuses on the discursive and interactional practices of doctors and patients when using the PDA for information exchange (5.3) and decision making, respectively (5.4).

### 5.1 Patterns of PDA Use in the SDM Trajectory

Before discussing the talk surrounding the PDA, a brief recap of information about the PDA is warranted (Table 1.2, Chapter 1). The PDA called “*Making Choices: Should I start insulin?*” is designed for patients with type 2 diabetes for whom insulin therapy has been recommended and covers topics related to the treatment decision, including patient concerns, advantages and disadvantages of the six treatment options, information about

insulin, exploration of patient values and a page prompting the decision, if the patient is ready.

As mentioned earlier, the PDA content reflects the SDM model that underpins its use, as part of the concept of patient-centred care, which has been discussed at length in the literature review chapter (Section 2.2). The PDA sections can therefore be considered in relation to the three analytical stages of SDM: information exchange, which involves both medical information from the doctor and information from the patient, including concerns and values; deliberation on treatment, which involves discussing preferences, and the decision itself, which involves mutually agreeing on a future course of action (Charles et al., 1999).

The PDA content covers key elements of information exchange in the SDM approach, including eliciting patient concerns (p. 3), providing evidence-based information about diabetes and insulin (pp. 5-7) listing and comparing options (pages 8 and, 10) and checking knowledge (p. 12). Following this, the section on patient values (p. 13), involves the elicitation or disclosure of information from the patient. However, by distinguishing patient values according to the choice of “starting insulin” and “not starting insulin”, this section also involves the expression of preferences about treatment options, i.e. deliberation on treatment. Finally, the last two sections (pp. 14-15) can be linked to the actual decision, by prompting the patient’s choice, thereby resulting in a commitment towards a future course of treatment.

### **5.1.1 Initial PDA Talk and the Trajectory of SDM**

The varying recursive structures in the mapping of the Treatment phase show that the analytical stages of SDM occur in a reiterative manner in real practice (Montori et al., 2006), depending on the specifics of each individual consultation. Based on the mapping

in Chapter 4, however, it is possible to identify some broad patterns of PDA use in the consultation.

Talk on the PDA occurs early in the Treatment phase in all consultations. However, PDA use is limited to the initial turns of consultations if patients have read it before the visit, and the remaining talk in decision making largely concerns patient choice (4.3.1.1, 4.3.1.3). In contrast, when patients have not read the PDA, the PDA is used throughout the consultation, not only in explicit mentions as a subject of discussion but also in exchanges about its contents. Patient knowledge is addressed more extensively in these consultations, when compared to patient choice (4.3.1.2, 4.3.1.4). These two patterns of PDA use can be linked to the SDM stages of “information exchange” and “deliberation on treatment”.

Figure 5.1 summarises the findings related to PDA use in the consultations, linking initial PDA talk to the two patterns of PDA use according to the trajectory of SDM, and showing the salient themes at each phase. Based on preliminary application of CA to initial PDA talk in selected consultations, two patterns of PDA use were identified in that it is used for *information exchange* or to initiate *deliberation on treatment*, depending on whether patients have read the PDA before the consultation (Syed et al., 2017).

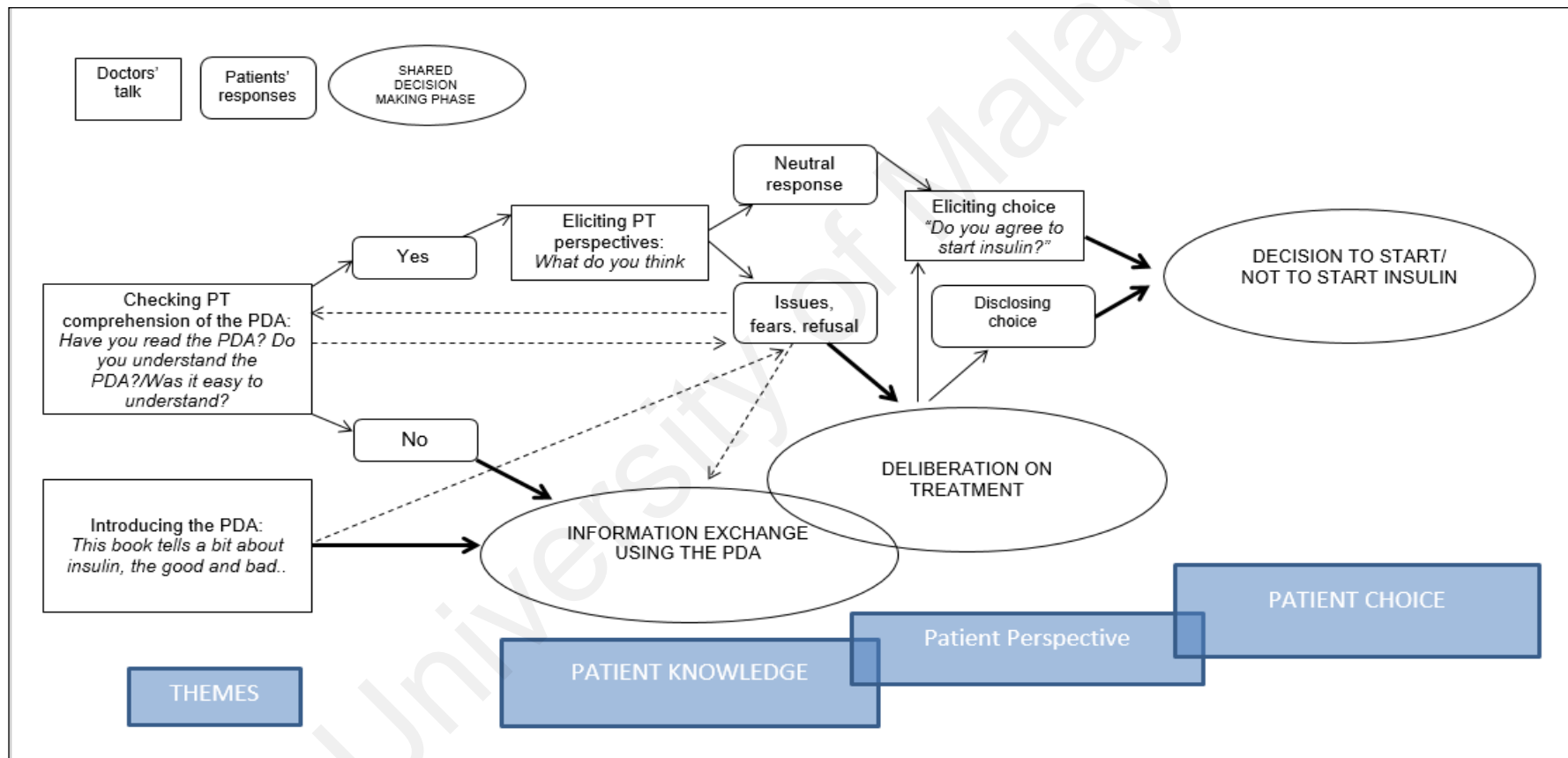


Figure 5.1: Initial PDA talk and trajectory of treatment decision making

As shown in Figure 5.1, when patients have been given the PDA before the consultation, doctors' initial PDA talk is largely knowledge-focused, to find out whether patients have read and understood the PDA or to elicit their questions. With patients who disclose that they have not read the PDA, and those to whom the PDA is being introduced for the first time, the doctor uses the PDA for information exchange to provide the patient with information about diabetes, insulin and/or other treatment options and explore their knowledge and concerns.

In contrast, when the patient has read the PDA and does not raise any questions about its contents, the doctor does not go through the PDA and instead elicits the patient's perspectives on the PDA, which leads to a discussion on starting insulin. "Deliberation on treatment" or the discussion of treatment preferences becomes the focus, rather than "information exchange." During deliberation on treatment, the patients' perspectives towards insulin become more salient than patient knowledge. To elicit patients' perspectives, doctors make perspective display invitations/enquiries (Maynard, 1989), and a neutral response from the patient leads to decision talk and conclusion of treatment decision making (e.g. as shown in the mapping of Consultation A4, 4.3.1.1). However, if the patient responds by bringing up issues, concerns or refusing insulin, then deliberation becomes prolonged (as shown in the mapping of Consultation A3, 4.3.1.3).

As indicated by the dotted arrows in Figure 5.1, patients also disclose their perspectives without any prompting from the doctor. Similarly, other patients bring up issues and fears or refuse insulin in response to doctors' initial questions about the PDA. The doctor-led question-answer sequences that largely direct the progress of talk in these initial sequences are generally tied to patient knowledge and choice, with patient perspectives elicited as a precursor to eliciting patient choice. It must, however, be highlighted that Figure 5.1 shows a simplified depiction of the participants' initial PDA

talk and how this leads to different trajectories in the consultations. On a turn-by-turn level, the initial PDA talk progresses in various ways.

As shown in Figure 5.1, the initial sequences of PDA talk are key moments in the decision making trajectory. The following section will therefore present an analysis of selected sequences of talk in four example consultations (A4, A3, A1 and B15) to further describe the practices of doctors and patients in initiating talk on the PDA.

### **5.1.2 Managing Knowledge and Choice in Initial PDA Talk**

The previous section has provided an overview of two patterns of PDA use in the consultations. In this section, excerpts from four consultations are analysed to investigate the discursive practices by which doctors manage patient knowledge and choice in initial PDA talk, showing how turn-level practices lead to different trajectories of SDM: information exchange or deliberation on treatment.

#### **5.1.2.1 Initiating Deliberation on Treatment**

The first two consultations to be discussed are A3 and A4, in which both patients have read the PDA before the current visit, but disclose different perspectives towards insulin. In addition to showing the discursive practices of the doctor in initiating treatment decision making through PDA-related questions, these examples demonstrate how the patients' affiliation or disaffiliation with the treatment recommendation drives the interaction.

The mapping of Consultation A3 in Chapter 4 shows a brief and linear structure of treatment decision making with a patient who has read the PDA and responds positively towards insulin. Excerpt 5.1 begins at the first turn of the consultation, when the patient (P4) meets her regular doctor (DR2) for a follow up visit, accompanied by her husband

(H), who occasionally interprets for his wife, between English and Tamil. However, the patient's grasp of English enables her to participate through most of the consultation.

**Excerpt 5.1: So what you think of the book?**

Turn	Speaker	Talk
001	DR2	Mrs B and Mr B, ye:?=
002	H	=[yes]
003	P4	[a:: ]
004	DR2	[you] have read the <u>book</u> ri:ght?= =y[es ]
005	H	[ya]::=
006	P4	=a::, so what you <u>think</u> of the boo:k? (0.5)
007	DR2	<I thi:nk,> >I'm no:t sure< mh h h=((laughs))
008	P4	=herh [↑herh herh] ((laughs))
009	DR2	[ er, the ] book= =is er= =is in <u>very simple</u> langua:[zge]
010	H	[Ve]ry= =ye:[s? ]
011	P4	[sim][ple ]
012	H	[and] very easy to understand.

Coming right after the greeting, DR2's initial reference to the PDA (004), which was given to P4 in the previous consultation, is a knowledge-focused enquiry. The confirmation-seeking statement (004-*You have read the book, right?*) favours an affirmative response, which is provided by patient and husband (005, 006). DR2 then asks for P4's views on the PDA with a Wh-question (open-ended question). In responding to this perspective display invitation (Maynard, 1989), P4 discloses her uncertainty through the epistemic stance markers (Kärkkäinen, 2003) (008-*I think, I'm not sure*), in a delayed turn, which is accompanied by hesitation markers and embedded laughter. DR2's reciprocating laughter appears to orient to a potentially delicate, or face-threatening, topic of discussion (Osvaldsson, 2004), which P4's husband does not attend to in his next turn which re-initiates PDA talk (010). Momentarily intercepted by P4's "is", H completes an affiliative assessment of the PDA (012-*very simple language*), which P4 partially echoes. Interrupted by DR2's go-ahead signal to complete her utterance (014-*Yes?*) P4 completes her brief assessment of the PDA (050).

### Excerpt 5.2: Do you agree or not?

Turn	Speaker	Talk
((lines 017-30 omitted as P4 and H explain how long it took them to read PDA))		
031	DR2	right. so what [do you] <u>think</u> of the book.
032	P4	[and so ]
033	P4	<b>(.) I think very easy lah [ can, better ]</b>
034	DR2	[Aha:, do you] understand what it's trying to tell you?= =tell you a::, what a:: (0.2) must (.) tell <u>her</u> ? ((Tamil)) [hh hh ] ((laughs))
036	DR2	[herh herh ]herh=((laughs))
037	H	[ya lah, sh] =she understands.=
038	P4	=[hm:: ]
039	DR2	[you ] understand ya?
040	P4	hm::=
041	DR2	<b>=a:: do you (.) agree or not?</b> <b>(.)</b>
042	P4	<b>ag- agree lah=</b>
043	DR2	<b>=you agree?= =m[:h</b>
044	P4	[e:r, you know <u>why</u> you have to take the insulin?
045	DR2	y:a:h, Because I:'m- cannot take a med'cine already_
046	P4	aha::?
047	DR2	a- no <u>choice</u> ,(.) ↑lah= =erhh((laughs)), £(you) no choice?£ [a-ha]
048	P4	[a::, ] <u>must</u> take the:(.)[insulin ]
049	DR2	[so you ]
050	P4	right, so you <u>agree</u> to start the insulin <u>injection</u> ?
051	DR2	y:a::
052	P4	=yia:: we will teach you ho:w to do i:t,yerh?
053	DR2	yia:
054	P4	yia:
055	P4	yia:

Following further elaboration by P4 and H (omitted), Excerpt 5.2 begins with DR2 repeating her perspective display invitation (031). The open-ended question elicits P4's opinion, remaining focused on the PDA (*the book*), rather than the treatment decision. However, considering an extended response has already been given to the same question asked earlier, it seems that DR2's perspective display invitation is seeking P4's perspective on more than just the PDA itself. Following P4's reiterated assessment of the PDA as "easy", DR2 asks about P4's comprehension of the PDA content, (034-*Do you understand what it's trying to tell you?*). This epistemic display question (Banbrook & Skehan, 1990) positions the PDA as the creator of the "message", rather than the doctor, while continuing to omit mention of "insulin". A brief misunderstanding ensues,



indicated in P4's repetition of "tell you" in turn 35, followed by pauses and hesitation, before she asks H if she must tell her (the doctor) something. Amidst laughter from P4 and DR2 (035,036), P4 speaks in Tamil to her husband, who then conveys to DR2 that P4 has, in fact, understood (037).

DR2 seeks confirmation from P4 about her comprehension of the PDA's content, with an epistemic status check (Sert, 2013) (038-*You understand, ya?*) and receives a weak affirmation (039). Taking the acknowledgement token as confirmation of understanding, the doctor moves from a knowledge-focused question to a choice-focused question. She elicits P4's agreement or disagreement (041-*Do you agree or not?*) without mentioning the recommendation to start insulin. This turn marks the doctor's movement to "decision talk", by explicitly presenting the decision as a polar question, with P4's acceptance as the preferred response. In asking this question, DR2 orients, however minimally, to P4's right to accept or reject the recommended treatment. P4 gives an affirmative response (042), albeit marked with the particle "lah". Perhaps due to questions about P4's comprehension of English, the doctor rephrases her previous knowledge and choice focused questions in more specific language. In line 045, the recommended treatment is mentioned for the first time in DR2's knowledge-focused question, "Do you know why you have to take insulin?". The question frames the treatment choice as an obligation (have to), which is mirrored in P4's response that she has "no choice" (048) and "must take insulin". DR2 then seeks P4's agreement again, this time specifying the details of the proposed treatment, in her enquiry (050- *you agree to start the insulin injection?*). Having received P4's brief affirmation (053-*Ya*), the doctor signals closure of the decision making sequence with a future arrangement, which indicates the move towards closure (Robinson, 2001), stating that P4 will be given instructions on administering insulin (055). After this point, which indicates closure of the sequence, the prospect of starting insulin is no longer tentative and the PDA is not mentioned again

The first consultation (A4) shows that doctors' questions are a key interactional device, which in combination with the patient's affirmative responses, move the talk rapidly along the themes of patient knowledge, patient perspective and patient choice, ending with the closure of the decision making sequence. In the absence of a prototypical decision making structure, Consultation A4 can be said to follow a normative decision-making process, as the patient provides the preferred affirmative response to both the doctor's epistemic display enquiries (004, 034, 039) as well as the perspective-display invitation (031), without introducing any negative matters. The doctor then initiates talk on the treatment decision (041), seeking the patient's agreement to start insulin with a Yes/No question, which receives another affirmative response.

The next consultation, Consultation A3, begins in roughly the same way as the first. In Excerpt 5.3, DR3 begins with a confirmation-seeking statement, checking if P3 has read the PDA (001). Receiving P3's confirmation, DR2's next turn is a perspective display invitation (005). As in the previous consultation, DR2 refers to the PDA as "the book", and does not mention insulin or the treatment decision in her initial enquiries. In turn 6, the patient responds with an assessment of the PDA that is not very affiliative. Saying that the PDA has "just basic information", P3 explains that the PDA does not contain the information he needs. This prompts DR2's enquiry about what information he needs. In the following turns (10 -20), P3 responds by listing a series of questions which he wants the PDA to address, including the effects of high sugar levels (complications) and the effects of "over-control" by using insulin and other methods of controlling one's blood sugar level.

In turn 22, P3 transitions from asking questions to explicitly disclosing his perspective, by responding to his own question about the effects of "over control" in turn 22. Stating that this may not be good for the body, P3 describes insulin therapy as incompatible with

dietary control and exercise, modulating his statement with qualifiers (26-*to me*) and conditions (28-*unless it becomes a routine*).

**Excerpt 5.3:** There's not much information

Turn	Speaker	Talk
001	DR2	-ning. E:rm, e:rm, e:rm, e:rm I believe you have read the: book?
002	P3	yea:h
003	DR2	yes, [er what d' you think? ]=
004	P3	[yes I've read, I've read]
005	DR2	=a:h, what do you think of the book? (0.5)
006	P3	<b>that's just basi:c information nah</b>
007	DR2	[ right ]
008	P3	<b>[there's] not, there's not, much information that (1.23)that (0.35) I'd like to:: find out lah (0.74)[actually I nee::d]</b>
009	DR2	[E:r, what kind of] information do you like to find out?
010	P3	you ↑see this ↓e:r without insulin, [what]=
011	DR2	[yerh?]
012	P3	=are the effect, if you sta:y if your glucose level sta:y (0.48) at the high level. It doesn't state ↑here lah.
013	DR2	right
014	P3	e:r what if you: over-control yourse:lf.
015	DR2	right
016	P3	e:r what is the side-ef↑fect lah.
017	DR2	right
018	P3	e:r without (0.82) if you: on your own you try to contro:l,
019	DR2	right
020	P3	using other means, at the same time you use e:r insulin,
021	DR2	yiah?
022	P3	So it will be a double e:r double control, which may not be (0.84) e:r good for your body: ↑ah
023	DR2	o[kay]
024	P3	<b>[a: ] that is the only thing. Because, (0.5) to me,(.) e:r exercise and control your diet, and the same time insulin doesn't go togetherlah.</b>
025	DR2	right,
026	P3	to: me.
027	DR2	m:h=
028	P3	=e::rh, unless it it become a routine.
029	DR2	right
030	P3	<b>e:r so this is my only concern. Because my routine at the moment?(0.96) e:r it's on the borderline,=</b>

With the doctor's participation limited to continuers and minimal acknowledgement tokens, P3 continues expressing his perspective towards insulin, providing an account in turn 30. His explanation that his routine is on the borderline appears to refer to his blood sugar level as being on the borderline, which he brings up in a later turn (not shown). Referring to his current blood sugar level as "on the borderline" of poor and good control,

P3 provides a health-related account against starting insulin, which implies he does not need to start insulin at the moment. In the following turns (not shown), P3 continues to build his account against starting insulin.

The excerpts from Consultations A4 and A3 exemplify how doctors use the PDA as a topical device to initiate treatment decision making, beginning with epistemic questions to determine the patients' epistemic access and status. Upon receiving confirmation of the patient's epistemic status, doctors initiate deliberation on treatment, by eliciting patient's perspectives. However, while deliberation on treatment in A4 is limited to the patient's disclosure of a neutral/positive perspective towards insulin, followed by explicit decision talk, P3's disaffiliation with the recommendation to start insulin prolongs the deliberation phase of SDM. Excerpt 5.2 shows how the patient gradually approaches the display of his perspective. From his initial response (turns 10, 12, 14, 16, 18 & 20) about the topic of the PDA initiated by DR2, the patient builds one of the PDA issues (a lack of information about "double control") into an account against starting insulin. This can be described as active resistance (Stivers, 2005a, 2005b). Negotiation of the treatment decision which ensues when patients resist the doctor's recommendation will be investigated in Chapter 6.

#### **5.1.2.2 Initiating Information Exchange with the PDA**

In this section, excerpts from Consultations A1 and B5 are presented as examples of initial PDA talk in two different contexts: when the PDA is being introduced to the patient (A1) and when the patient has been given the PDA in a previous consultation but has not read it. Since both patients have not read the PDA, the doctors initiate information exchange, using the PDA as an epistemic source to deliver information.

In Chapter 4, Excerpt 4.6 from Consultation A1 has shown how the doctor constructs an assessment of the patient's health to build a case for starting insulin. Excerpt 5.4

follows from this, beginning at turn 60 when the doctor introduces the PDA to shift from Assessment talk to Treatment talk.

#### Excerpt 5.4: They have this booklet

Turn	Speaker	Talk
60	DR1	<i>so::, s- s'karang ini yang dia orang ada:: bagi kita:: a:h, ada assistance. Kalau kita <u>perlu</u> mula insulin.(0.2) Sebab itu dia ada ini booklet</i> <b>so, now this one they have given us, er, there's assistance. If we need to start insulin. That's why they have this booklet</b>
61	P1	m:h
62	DR1	<i>ini dia tolong doctor, tolong patient to decide. Kalau perlu: (0.79) mula dengan insulin apa::</i> this, it helps the doctor, helps the patient to decide, if they need to start with insulin or
63	P1	m:h
64	DR1	<i>s:- kita (.) tak tau, kalau you:: mau (.)inject sudah empat tahun saya sud- sudah cuba cakap you "NAME mau inject."</i> we don't know if you want to inject it's already four years I've tried to tell you "NAME you should inject"
65	P1	hmh
66	DR1	↑ <i>apa yang you ada problem yang you fikir.</i> what are you are there problems that you're thinking about?
67	P1	h:h ((laughs))tada:hh <i>nothing</i>

In introducing the PDA, the doctor's two turns offer the patient different levels of choice in the decision. Her description of the PDA as "*assistance, if we need to start insulin*" in turn 60 implies that the PDA is to be used for patients who are going to start insulin, while in turn 62, she states that the PDA *helps the doctor, helps the patient to decide if they need to start insulin.*" This second description of the PDA presents the decision as tentative and shared between doctor and patient.

As shown in the mapping of Consultation A1 in Chapter 4 (Section 4.3.1.2), the PDA is not mentioned again after this turn. However, the doctor then begins to elicit P1's concerns about insulin (66), which ties in with the first section of the PDA "What are your concerns?", beginning the phase of information exchange. Moreover, the ensuing topics, (diabetes, complications and insulin pen) follow the order in which they are presented in the PDA. Unlike the previous excerpts, the doctor's initial PDA talk is

focused on choice rather than knowledge, in that the doctor's statements foreground the treatment recommendation and decision in her description of the PDA. This of course, is because the PDA is being introduced to P1; therefore, questions about his knowledge of its contents are not relevant.

The fourth consultation, B15, takes place in a public community clinic. Excerpt 5.5 begins after the Assessment phase, as the doctor (DR8) initiates the Treatment phase by referring to the previous consultation when the PDA was given to the patient (P11). This statement (99) reveals that the doctor did not see the patient in the previous visit, which is common in the community clinics to which medical officers are posted on rotation.

Unlike the previous example, DR8 does not specify anything about the PDA content or purpose, referring to it simply as "the book". In her next turn, the doctor asks whether the patient has brought the PDA with her (101). After a pause, P8 explains that she has left the book at home and accounts for this by stating that she has read everything (102), a claim which she repeats in turn 106. After some discussion on the language of the PDA received by the patient (107-110), DR8 continues exploring P11's engagement with the PDA, asking whether she answered the questions in the PDA, which has spaces for patients to write notes and tick boxes (111). The patient's negative response (112) is followed by her elaboration that she "only" read the PDA (114).

### Excerpt 5.5: The doctor gave you a book

Turn	Speaker	Talk
99	DR8	a:right-right. Okay, (.) u:m, .h okay so:, one month ago:, you came to see: a doctor here, the doctor gave you a book.
100	P11	yah
101	DR8	do you have the book? (0.45)
102	P11	m- at home. Because I read everythi:ng,
103	DR8	[a:h]
104	P11	[ to ]day I forgot to take
105	DR8	oh you forgot [to bring ]
106	P11	[but I read] already that book,
107	DR8	.h okay [the-]
108	P11	[ Ta]mil words. (0.45)
109	DR8	oh in Tamil [one lah]
110	P11	[a:h he] give me Tamil one
111	DR8	oka::yh, (1.83) just wait a::h, (1.02) did you: (0.21) answer anything in the book
112	P11	no.
113	DR8	you didn't-
114	P11	I just [read] only.
115	DR8	[read]
116	DR8	you read o::h. (0.43)
117	DR8	do you understand? (0.55) everything in the book,
118	P11	m:-yah
119	DR8	is there anything that you:: wish to ask,
120	P11	because=
121	DR8	=anything you don't understand?
122	P11	<b>I ↑thought I don't want to put insulatio:n ((insulin))</b>
123	DR8	<b>ha:</b>
124	P11	<b>because,(.)I scared</b>
125	DR8	h::mh (0.46)
126	P11	only that one hh only hh

The doctor's next turns centre on the patient's knowledge of the PDA content, with a series of yes/no questions (117, 119, 121), asking if P8 understands the PDA and eliciting her questions. P8's responses overlap with the doctor's epistemic display enquiries, but only her first turn (118), a minimal affirmation, responds to the epistemic agenda. Instead, she discloses her negative perspective towards insulin, "I thought I don't want to put insulation (sic)" (122), followed by an account (124-*Because (.) I scared*).

### Excerpt 5.6: I'll just go through the book

Turn	Speaker	Talk
127	DR8	m::h. Okay-okay .h so when you went through the book, (0.64) did you:, (0.31) er were you able to understand (.) more? (0.65)
128	P11	°yah°
129	DR8	y- understand more.'Kay- so once you have finished reading the whole boo:k (0.88) a:h, did you:, (1.32) [were you able ]
130	P11	[I never finish] whole the book. Only 'alf only.
131	DR8	ha::lf
132	P11	[m:h]
133	DR8	[ un]til where? (0.49)
134	P11	until:, hh, (1.04) because I read-read a:h,
135	DR8	[hm:] 0.34
136	P11	[my ] eyes very pai:n,=
137	DR8	m::h=
138	P11	=because I got eyes proble:m,
139	DR8	m::h -0.2
140	P11	I think until, half page only I read (.)M::h
141	DR8	half- half [page lah ]
142	P11	[Half page] ((sound of pages being turned))
143	DR8	<b>'kay, so (.) maybe I'll just go through the book with you lah, m-hm, in that case,</b> (0.92)

Following the patient's disclosure of being scared of insulin in the previous excerpt, the doctor gives a brief acknowledgement but does not take up the topic initiated by P11 (Excerpt 5.6). She returns to her attempts to check the patient's knowledge of the PDA content. Her two enquiries (127, 129) foreground the patient's reading of the PDA in helping her understand the content, placing epistemic access as a precursor to the epistemic status of having understood the PDA. The patient's response to the first question comes after a silence and is an affirmation delivered in a lower volume than her previous turn. However, when the doctor rephrases "went through the book" to the more specific phrase "finished reading the whole book", the patient interrupts her question to disclose that she has not finished reading the PDA. Over the next few turns, the doctor attempts to determine how much of the PDA has been read by the patient, while the patient offers an account for not finishing the PDA.



Upon establishing that the patient has not read the PDA as she claimed earlier, the doctor then begins to go through the PDA with the patient (143). It is at this juncture that the doctor shifts from topicalising the PDA in talk to going through its contents with the patient. Unlike the doctor in Consultation A1, DR8 first makes an explicit announcement of her intention to go through the PDA (143). By focusing on the PDA as a shared focal object, this turn functions to manage the action of going through the PDA with the patient and marks the beginning of information exchange with the PDA.

Initial PDA talk in Consultation B15 is similar to that in Consultation A3 and A4, in that the doctor begins with epistemic questions. However, in B15 the doctor asks repeated yes/no questions focused on establishing the patient's epistemic status. Moreover, this leads to a disclosure that the patient may not have the necessary epistemic resources to progress to deliberation on treatment. Similarly, the patient in A1, who is engaging with the PDA for the first time, is not considered to have had epistemic access to the contents of the PDA. In both consultations, the patient's epistemic status leads the doctor to initiate information exchange using the PDA.

### **5.1.3 Section Summary**

This section has presented an overview of how the PDA is used in the consultations, with initial talk on the PDA leading to different trajectories of SDM, depending on whether patients have or have not read the PDA, and whether they respond negatively or neutrally/positively towards the recommendation to start insulin. These two factors are linked to the salient themes of "patient knowledge" and "patient perspectives", which are interconnected in the interactional accomplishment of "patient choice" about whether or not to start insulin (see Figure 5.1).

In considering how the PDA is used to implement SDM, it is useful to consider the two aims of PDAs, to provide information about treatment and to support deliberation on

treatment (O'Connor et al., 2007). This duality ties in with the description of doctors' implementation of SDM as conferring agency to patients by 1) providing information and 2) supporting the decision making process (Elwyn et al., 2012), as well as the analytical SDM stages of "information exchange" and "deliberation on treatment".

As shown in this section, the use of the PDA as an epistemic source for information exchange or as an interactional device to initiate deliberation on treatment depends largely on patient responses to doctor's epistemic questions in the initial PDA talk, when patients have been given the PDA prior to the present consultation. In these turns of talk, the PDA becomes a resource by which doctors assess patients' epistemic status, for example, by asking questions to determine their epistemic access (*Have you read the book?*) or to elicit epistemic display (*Do you understand what it's trying to say?*). With patients who are considered to be ready for informed decision making, the epistemic role of the PDA ends here. However, with those who are not considered informed, the PDA is then explicitly used as an epistemic source for giving information to, and eliciting information from patients, during the information exchange stage.

This concern with epistemics, or knowledge management, is not only part of the professional context, as a medico-legal requirement and a key component of SDM. From an interactional perspective, the norm against conveying already known information (Heritage, 2012) may also motivate doctors to check whether the patient has read the PDA before they go through it in detail. However, this may lead doctors to only superficially check patient knowledge before proceeding with deliberation on treatment. For example, in Consultations A3 and A4, the doctor only asks a single yes-preferring enquiry to check if the patients have read the PDA, in contrast with the repeated questions from the doctor in Consultation B15.

Continuity of care may possibly explain the different questioning practices, where DR2 (Consultation A3, A4) has been treating her patients continuously, while DR8 (Consultation B15) did not see the patient in the previous consultation. This leads to differences in what the doctor knows about the patient's knowledge of the PDA's contents. However, as seen in Consultation B15, a patient's initial response to the question "Have you read the PDA?" may not be reliable. Therefore, when re-initiating talk on treatment with patients who have been given the PDA in previous visits, more substantive epistemic enquiries, for example, the teach-back method (Elwyn, et al., 2012) may be necessary to ensure that patients are informed before doctors engage in deliberation on treatment.

The PDA is also used as an interactional device, as a means of initiating talk on treatment, both with patients who have been given the PDA previously and those who are being introduced to the PDA in the present consultation. Questions or statements about the PDA allow doctors to approach treatment decision making gradually, without necessarily mentioning the recommendation to start insulin, as seen in Consultations A4, A3 and B15. When patients have read the PDA, it is not usually mentioned again after the doctor's initial epistemic questions. Therefore, PDA-related talk largely acts as a pre-sequence leading up to talk on treatment. During initial PDA talk, doctors not only ask epistemic questions, but also make "perspective-display invitations" (Maynard, 1989). Eliciting the patient's perspectives, values and preference is considered an important element in SDM (Makoul & Clayman, 2006), while Elwyn et al.'s (2012) model describes "eliciting patient preferences" as a step in "Decision Talk".

However, while the doctors may foreground the PDA, rather than the treatment decision when initiating talk on treatment, some patients respond to doctors' PDA questions by initiating accounts against insulin, refusing insulin or disclosing their fears

about insulin (Syed et al., 2017). This indicates that patients orient towards the PDA talk as being implicative of the treatment recommendation, which in turn makes their perspective towards insulin relevant. The PDA's implicit ties to the treatment recommendation may also explain why treatment decision making in the consultations does not always begin with an explicit recommendation, as proposed in the three-part decision making structure shown in CA studies (Stiver, 2005a, 2005b, 2006). This implied, rather than explicit, invoking of the treatment recommendation may help reduce the interactional burden on patients to accept or refuse the recommendation.

Moreover, doctors' open-ended enquiries about the PDA provide patients the opportunity to express their perspectives before the doctor makes any further statements or recommendations. In this sense, the doctors' initial PDA questions hand the floor to the patient in the early turns of the treatment phase, orienting to the patient's knowledge and perspectives as focal themes. This not only encourages patient participation but enables doctors to then tailor their talk to individual patients, making for a more patient-centred approach towards information exchange and deliberation on treatment. In the following sections, analysis will focus on discursive practices in consultations in which the PDA is used during the information exchange and decision making stages.

## **5.2 Exchanging Information with the PDA**

The previous section has shown how the PDA is used implicitly as an epistemic device by which doctors assess patients' knowledge to determine whether information exchange is needed. This section focuses on discursive practices during information exchange using the PDA, in which the PDA's role as an epistemic source is explicit, as doctors draw upon its contents to deliver and elicit information from patients. Moreover, reference to the PDA also plays an interactional function as a means of initiating talk on specific topics.

Across the five consultations in which doctors go through the PDA with patients (A1, B5, B7, B8 and B15), there are differences in how the PDA is used. For example, while four of the doctors make explicit references to the PDA during information exchange, one doctor does not mention it at all. Moreover, while some doctors deliver the content in their own words, others read directly from the PDA or ask patients to read from it.

There are also structural and sequential differences in PDA use, with only two doctors (B15 and B8) going through the PDA from start to end, while the remaining three largely use only the sections that provide information on insulin and diabetes, and skip the sections geared towards decision making (listing and comparing treatment options, patient values and decision). Moreover, the doctor in B5 skips backwards and forwards to specific sections, in response to topics initiated by the patient.

In the following sections, excerpts from Consultation B15 (discussed previously), will be presented alongside excerpts from other consultations, to exemplify some similarities and differences in PDA use across consultations.

### **5.2.1 Engaging with the PDA**

The introduction of the PDA as a decision making tool adds an element to the talk, which may change how information is delivered and elicited during decision making. Not only is the PDA spoken about as a topical concern in itself (as seen in initial PDA talk) but its content influences the topics that are spoken about (as seen in the mapping of the Treatment phase in Chapter 4). This section looks at doctors' discursive practices in drawing on the content of the PDA in facilitating information exchange, exemplified in excerpts from three consultations (B15, B8 and A1) that show the doctor and patient going through the first section of the PDA. In line with SDM, the PDA begins by focusing on the patient's perspectives in the section entitled "What are your concerns?". The first page

lists seven items, including needles and injections, hypoglycaemia, and side-effects, (e.g. *I am afraid of injections and pain*), with response options under each concern.

Excerpt 5.7 from Consultation B15 begins after the doctor has initiated information exchange (see Excerpt 5.6). As seen previously, DR8’s turn in 144 functions to manage the collaborative act of going through the PDA. This “activity management” turn serves to orientate the talk as she goes through the PDA, making it a shared focal object for DR8 and P11. DR8 “signposts” her movement through the PDA by explicitly referring to the first page, and initiating a new topic of discussion.

### Excerpt 5.7: What are you afraid

Turn	Speaker	Talk
144	DR8	<b>okay, so::, a:h, the:: first page over <u>he:re</u> (0.45) is actually to ask what are you: (.) afraid.</b> Ah, what-what are you (0.52) concerned. about e::rh, .hh about your condition lah.
145		‘kay, <u>so</u> (0.37) e::rh, have- you have <u>heard</u> about insulin before <u>right?</u> (0.37)
146	P11	ya, my mother put. (0.51)
147	DR8	<b>your mother put insulin. <u>So, what</u> is it that you a:re (.) are concerned about insulin (0.79) afraid of</b>
148	P11	<u>m::h</u> I heard n- people tell m- (0.39) insulatio:n ((sic)) is better,
149	DR8	yah
150	P11	put the <u>medicine</u> , .h insulatio:n better but you <u>put</u> insulatio:n, ((sic))
151	DR8	m-hm
152	P11	you <u>must take</u> (.) anything <u>must ea:t</u>
153	DR8	[mh]
154	P11	[no] means you- your hand all shake
155	DR8	<u>m:h</u>
156	P11	°only that one only°
157	DR8	kay, <u>so-</u> (0.41) a:, besides the: hands all shaking, any other thing that you are concerned of? (.) regarding insulin? (1.04)
158	P11	hm, nothing,

Describing the purpose of the section, DR8 uses the word “afraid”, followed by “concerned”, both of which are in the PDA text. The doctor’s pauses before these two words may reflect her considerations about how to reformulate the PDA content for this patient, who is not very fluent in English. DR8 then makes an epistemic enquiry to

establish what P11 knows about insulin (145), prompting P11's disclosure that her mother used insulin (146).

Next, DR8 elicits the patient's concerns with an open-ended question, following "concerned" with "afraid", perhaps to enhance P11's comprehension (147). In responding (148-154) P11 does not mention the affective agenda of the question. Using reported speech (148-*I heard people tell me*) which shows that she may still be orienting to the doctor's earlier epistemic question (145-*...have you heard about insulin*), she describes insulin with a positive attribute (*better*) and then mentions hypoglycaemia, or low blood sugar, a side-effect of insulin that may occur if the dosage is too high or if patients miss meals (154-*your hand all shake*). DR8's elicitation of other concerns indicates her orientation to P11's response as a disclosure of concerns (157-*Besides the hands all shaking, any other thing that you are concerned about?*). After P11's negative response, DR8 begins explaining the causes of hypoglycaemia and how it can be avoided when using insulin (not shown).

Activity management turns as used by DR8 were observed in four of the five consultations, although doctors did not use these turns at the beginning of every PDA section. However, as mentioned earlier, in Consultation A1 the doctor does not make any reference to the PDA after introducing it to initiate talk on treatment (see Section 5.1.2.2). As shown in Excerpt 5.8, DR1 initiates talk with a direct elicitation of P1's problems through several yes/no questions, first generally eliciting concerns (66) and then mentioning pain (of injecting) as a specific concern (68). Following P1's negations (67, 69), DR1 reformulates the patient's response in a confirmation-seeking enquiry (70-*You aren't afraid of needles*). These two turns refer to the PDA content, which lists "I'm afraid of injections and pain" as a concern. However, without explicit reference to the PDA by

DR1, the PDA is not so much a shared focal object, but more like a topic-guide for the doctor.

### Excerpt 5.8: What problems are you thinking about

Turn	Speaker	Talk
64	DR1	<i>s:- kita (.) tak tau, kalau you.: mau (.)inject sudah empat tahun saya sud-sudah cuba cakap you "NAME mau inject."</i> we don't know if you want to inject its already four years I've tried to tell you "NAME, you should inject"
65	P1	hmh
66	DR1	<b>↑<i>apa yang you ada problem yang you fikir.=</i></b> <b>what problems are you thinking about?</b>
67	P1	h:h ((laughs))tada:hh <i>Nothing</i>
68	DR1	<i>ada sakit untuk ini ke::? S- apahal.</i> is it about the pain? What's the problem?
69	P1	<i>tade, tad-</i> no, no
70	DR1	<i>tak de:. You tak de::: takut daripada jarum.</i> no. You aren't afraid of needles
71	P1	(1.72) >tak da< no

In addition, doctors draw on and reformulate the PDA content in different ways. In Excerpt 5.8 which has just been discussed, DR1 does not mention the PDA when eliciting the patient's concerns, while in Excerpt 5.7 shown earlier, DR8 describes the purpose of the section on patient's concerns (*the first page... is to ask you what you are afraid*). In contrast, the doctor in Excerpt 5.9 reformulates the PDA content using reported speech. After the patient discloses she has not read the PDA, the doctor begins going through it, with an "activity management", turn as seen previously (218-...*this is trying to show what are the concerns*).



### Excerpt 5.9: This is trying to show

Turn	Speaker	Talk
215	DR5	but you have <u>read</u> about this book <u>ri:ght</u> ?
216	P7	yah, (.) n- not yet, not [yet, just a::]
217	DR5	[not ye::t ]=
218	DR5	=o:kay-okay.So, oka:y. There a:re, okay, w-, <b>this is s- (0.56) trying to show what <u>are</u> the concerns ↑<u>lah</u></b>
219	P7	yi:a:h
220	DR5	okay what is the concerns of, um, taking the insulin
221	P7	m:h?
222	DR5	a-, so it >was telling< “Are you afraid of injection and ↑pain?”
223	P7	no, I’m [not afraid.]
224	DR5	[No:, not ]=
225	DR5	=afraid of su[ga:r] getting too lo:w?
226	P7	[Ya-] (0.52)
227	P7	.h no::
228	DR5	no,no afraid of getting, a:, gaining <u>wei:ght</u>

In turn 222, DR5 begins with a reporting phrase commonly used in Malaysian English, “It was telling” before reformulating the statement in the PDA (“I’m afraid of injections and pain”) into a yes/no question (222-*Are you afraid of injection and pain?*) to elicit P7’s response. By asking the question as a reported question from the PDA rather than asking the question without mentioning the PDA, as done by DR1 (Excerpt 5.8), DR8 distances herself from the questions that follow, placing her in the position of mediating between the PDA and the patient. In earlier talk, P7 has already denied strongly having any concerns about injecting insulin (not shown). Therefore, the doctor’s change in footing here (Sarangi, 2010a; Goffman, 1979), using reported speech, could mitigate the potentially problematic repetition of the question, by attributing it to the PDA. DR5 continues in 225 and 228, reframing four of the seven listed concerns as questions, while the patient gives negative responses.

The three excerpts discussed in this section show the different practices by which doctors relate the content of the first section of the PDA. Although not observed in all the consultations, activity management turns facilitate the joint activity of going through the

PDA, so that the patient can follow the discussion by referring to his/her own copy. As seen in the excerpt from Consultation A1, without such turns, the PDA appears to be a tool for the doctor rather than for both doctor and patient. In addition, explicit references to PDA sections also function as an interactional device to move from one topic to another, which helps avoid abrupt topic shifts in keeping with interactional norms (Drew & Holt, 1998).

While some doctors only use the PDA to initiate topics, others convey the PDA content to the patient, by drawing on it selectively or reformulating it. Applying Goffman's (1979) categorisations of speakers as animators (who articulate the words), authors (who select the words from another source) or the principal (whose message is being conveyed), it can be said that the doctor in Consultation A1 (Excerpt 5.8) acts as animator, author and principal of the content throughout information exchange, as she does not refer to the PDA at all, delivering the content as her own. In contrast, the doctors in B15 and B8 (Excerpts 5.7, 5.9) act as animators and authors, while the PDA is acknowledged as the principal, or creator of the message in activity management turns, (Excerpt 5.7) or in using reported speech to convey the PDA content (Excerpt 5.9). In other turns not shown here, both doctors and patients are animators when they read aloud sections of text from the PDA. As seen in the Excerpts 5.7 and 5.9, changes in footing may fulfil various purposes, for example, to facilitate collaborative use of the PDA, to create a distance between the doctor and the PDA content, or to upgrade claims by attributing them to a source.

Moreover, changes in footing have implications for the implementation of SDM. By selectively drawing on the PDA content as "authors", doctors foreground certain content while omitting others. This could lead to important information being left out, for example, when doctors omit the responses listed below the specific concerns, or only ask

about one or two concerns, they risk leaving certain patient concerns unaddressed. Selective delivery of PDA content could also lead to biased presentation of information, which could be considered as implicit persuasion, a barrier to SDM (Engelhardt et al., 2016). On the other hand, by selecting which details to convey, doctors are able to tailor their talk to the individual patient.

In summary, the introduction of the PDA into decision making talk adds to the interaction an epistemic and interactional resource that can be utilised in various ways, with resulting implications on how knowledge and choice are managed. The discussion will now focus on information delivery sequences during PDA use.

### **5.2.2 Managing Information Delivery**

As seen in the mapping of the Treatment phase in Chapter 4, PDA use is largely made up of long sub-phases in which patient knowledge is addressed. These mainly comprise information delivery sequences in which the doctor talks about diabetes and insulin. Some common practices in information delivery are observed across the consultations. Doctors first ask epistemic questions, after which information delivery begins if patients' responding turns display a lack of knowledge. These turns include not only patient's negative responses to epistemic enquiries (as shown in Excerpt 5.10), but also patient's questions or statements in response to doctors' elicitation of questions (as shown in Excerpt 5.11).

#### **5.2.2.1 Checking Patient Knowledge and Comprehension**

Excerpt 5.10 from Consultation B15 shows the doctor and patient going through the PDA section about "Knowing Your Blood Sugar", which draws on the doctor's epistemic domain. The doctor uses initial enquiries (Zayts & Kang, 2010), which aim to access the patient's knowledge or experience before introducing new information, as well as closing enquiries, which attempt to check patient comprehension before talk on a particular topic

is closed. These enquiries allow patients to participate in information delivery beyond simply receiving the information, which makes it more collaborative. Moreover, the excerpt shows how the doctor orientates her talk towards the patient's perspective by reformulating PDA content in non-technical language and drawing on the patient's "epistemics of experience".

The doctor's initial epistemic display enquiry attempts to check the patient's knowledge about the topic covered in this section of the PDA (234). After a short gap (0.77) passes with no response from P11, the doctor asks her next question. She focuses on the patient's epistemic access to the content in that section (235, 236), checking if she has read it. The patient provides a negative response to the doctor's third prompt, which displays her epistemic status of "not-knowing" (224). This leads to the beginning of information delivery (224). As DR8 explains two types of blood sugar measurements, she makes another enquiry to find out if P11 is familiar with a glucometer (240). Her incomplete utterance of the word glucometer (240-*Gluco*), is elaborated as "the meter where you check the sugar" (240), showing DR8's efforts to use laymen's terms.

Further orienting to the patient's perspective, the doctor distinguishes between the two blood tests by describing them as the "one that you take on your own" (through a finger prick) and the "one that we take from here", (presumably indicating the vein in the arm). These descriptions invoke the patient's experience of routine blood tests. After explaining what the HbA1c blood test is, the doctor personalises her delivery of information by referring to P11's latest HbA1c test result, of nine point two. This description is followed by an assessment of the patient's blood sugar as high, against the target HbA1c of six point five or lower (242).

Excerpt 5.10: It's a big difference

Turn	Speaker	Talk
234	DR8	so are you aware of, ah what are the: (0.36) target, (0.48) what is supposed to be the: (0.52) normal blood sugar level (0.77)
235	DR8	have you ever read through this? (0.24)
236	DR8	this, part of it (0.52)
237	P11	no hh
238	DR8	okay, .h so e:r the blood sugar leve:l, there are two ways of finding out lah. okay? one is er the one that (0.46) you check, on your own, you know? have you [heard]
239	P11	[Yah ]
240	DR8	of the gluco: the- the [ me]ter where you check the sugar, that is
241	P11	[Yah]
242	DR8	one,.h the other one is the blood that we take from here. (0.59) so the blood that we take from here usually we used(.) what we call as HbA1c. .h HbA1c, actually gives you an idea, .h for the past two three months, (0.39) average every day of your sugar level. (0.86) That means, like let's say, .h (0.31) a:h yours a:h, the HbA1c that day the blood test was done, came back to be nine point one, nine point zero (0.57) ((sound of pages being turned)) that means, (.) this past two months, every day your sugar level has been roughly about nine(0.39) which is high .h The target for the HbA1c is less than six point five (0.65)
243	DR8	so £it's a big difference£,
244	P11	[hhh ]
245	DR8	[yours] is nine,
246	P11	[mh ]
247	DR8	[is- ] should be less than six point five. (0.34).hh kay, the ↑other target is <b>once you start insulin</b> , we'll (.) we may have to ask you to .h check your sugar, about once or twice a day. usually is the (.) one in the morning, the [ fas]ting one.
248	P11	[m:h]
249	DR8	((some talk omitted)) so these are your targets lah, but at the moment, (0.21) <b>i:f you: (.) are considering to start insulin</b> , we normally try to target the fasting sugar first (0.95) so y- we want that to be between four point four to six point one. (0.62)'kay- So as I said,(0.24) <b>once: you: if you decide to: start insulin</b> , you: have to monitor maybe just (0.39) once or twice a day with the meter, .h you have to check and see lah, (some talk omitted) (turns 250-254 omitted)
255	DR8	a::h (0.33) kha::y, (1.29)
256	DR8	ahkay, so- now, (0.40) you roughly know h what this is all about a::h? (1.41) ((turning pages))

With no verbal response from the patient, the doctor explicitly contrasts the two, stating that “it’s a big difference” and repeating what the patient’s HbA1c is and what it “should be”. Here, the patient makes brief receipt tokens, a pattern of minimal patient participation which is common during doctors’ diagnostic turns (Peräkylä, 2002). As with talk during the Assessment phase, benchmarking (Koenig et al., 2014) the patient’s sugar against the targets during information delivery can also serve to support the treatment recommendation. The rhetorical orientation of the doctor’s information delivery is made more evident in her following turns describing non-fasting sugar level.

In turns 247-249, the doctor frames the information about non-fasting sugar within the context of the patient starting insulin, invoking different levels of choice and obligation in reference to the treatment decision. By stating that P11 may be required to check her blood sugar “once you start insulin” (247), DR8 presents P11’s decision to start insulin as a foregone conclusion. However, in the following turn, (further explanations of self-monitoring omitted), DR8 invokes the patient’s choice by presenting the decision as tentative with a hypothetical if-then clause (249-*if you are considering to start; if you decide to start*). This is further reinforced by her rephrasing of “once you” to “if you decide” in the following line.

Following further information delivery on the topic, DR8 moves towards closure (255) with a closing enquiry to confirm P11’s comprehension of the matters discussed (256). Although it would be expected that this epistemic status check requires the patient’s response to close the question-response adjacency pair, the patient’s silence as the doctor begins turning the PDA page could show that the absence of a non-aligning epistemic display (e.g. asking questions, or a negative response) is sufficient to close information delivery.

As shown in Excerpt 5.10, although going through the PDA involves long information delivery sequences, this talk is not necessarily doctor-centric and is accomplished jointly by both participants, with the patient responding to the doctor's enquiries (Lehtinen, 2007; Zayts & Kang, 2010). However, information delivery could also be designed to support the doctor's treatment recommendation, and continued talk on insulin or the possibility of the patient starting insulin, may be interpreted by some patients as pressure.

#### **5.2.2.2 Eliciting Patient's Questions and Statements**

In addition to epistemic enquiries, doctors' epistemic-focused talk also includes question invitations, which lead to information delivery if the patient's responding turns indicate an epistemic gap. This is demonstrated in Excerpt 5.11 from Consultation B5, in which the patient earlier disclosed having read only two pages of the PDA.

In turns 171-175, the doctor begins an epistemic enquiry, checking if P5 understands what she has read, following P5's silence with a repeated enquiry (176). After the patient responds with a positive epistemic claim (177), the doctor continues making epistemic enquiries, this time eliciting questions from P5 about anything she wants to ask or anything she doesn't understand (178). In response, P5 asks if she can continue exercising and eating regularly if she starts insulin therapy (179-186). The doctor responds in the affirmative. After further exchange on the same matter (187-194 omitted) the patient describes her current symptoms, stating that she is on medication but does not have much energy (195).

### Excerpt 5.11: So that means

Turn	Speaker	Talk
171-175*	DR3	<i>okey <u>you</u> ada paham tak, apa yang dia tulis kat sini semua?</i> <b>okay, do you understand, all of what is written here?</b> (2.28)
176	DR3	<i>you: boleh paham tak?</i> can you understand?
177	P5	<i>boleh dokte:r,</i> I can, doctor
178	DR3	<b><i>okey. Kalau ada, h ada tak, apa-apa yang you nak tanya. a:: daripada soalan-soalan ni, (0.94) a:: apa yang:, apa yang you rasa macam .h you: tak paham ke:, ataupun you nak tau lebih lanjut ke:, okay, if you have, is there, anything that you want to ask. er, from these questions. anything that, anything that you feel like you don't understand, or you want to know more about</i></b>
179-185*	P5	<i>ah (0.76) kalau a: kal- kalau cucuk insulin ni::, a:, kita boleh buat exercise macam biasa, makan macam biasa, a: (0.30) makan macam biasa <u>kan</u>? a semua boleh kan?</i> er, if er, if- if we inject insulin, er, can we exercise as usual, eat as usual, er, eat as usual right? we can do everything right?
186	DR3	<i>a-a:h, boleh</i> a-ha, you can (187-194 omitted as P5 elaborates)
195	P5	<b><i>sekarang saya makan ubat, tapi saya rasa macam leti::h je. a:, macam a::, tak cergas lah nak cakap kan?</i></b> <b>now I'm taking medication, but I feel like I'm tired. er, like, er, not energetic lah, you could say</b>
196	DR3	<i>.h oh maknanya, kan?[.h ]</i> oh, that means, right?
197	P5	[m:]
198-202*	DR3	<b><i>s'karang ni: a::ape? Puan: .h NAME masih b- kurang faham pasal penyakit kencing manis la:h, sebab .h kadang-kadang tu, a::: bila kita rasa leti::h, itu boleh disebabkan oleh kita punya kandungan gula: .h terlampau tinggi::: bukan disebabkan oleh you punya...</i></b> <b>right now, er, what? you still don't quite understand about diabetes lah. because sometimes, er, if we feel tired. it could be caused by our sugar level being too high. not caused by your-</b>

\*minimal turns omitted for brevity

The doctor's response indicates she interprets P5's foregrounding of medication in her symptoms description as expressing a causal relationship, which shows a lack of understanding about diabetes and its symptoms. Making an explicit assessment of P5's epistemic status (198-*You still don't quite understand about diabetes*), she begins information delivery, explaining that tiredness is a symptom of high blood sugar (not a side-effect of the medication). Information delivery continues over the next twenty turns (not shown).



While Excerpt 5.10 and 5.11 both begin with the doctors' epistemic enquiries leading to the patient's disclosure or display of not-knowing, in Excerpt 5.11, the topic of information delivery is not determined by the PDA content. The questions and statements from the patient lead the doctor to identify her lack of understanding of a particular topic, which is then discussed. This type of information delivery can be considered more patient-centred as it is targeted to fill an epistemic gap relevant to the individual patient. However, as mentioned in the previous chapter, not all patients actively participate by asking questions. In fact, repeated patient enquiries during information exchange were observed in this consultation, and not frequently in others. Therefore, the topics and order of information delivery were largely determined by the doctors' use of the PDA content.

### **5.2.3 Section Summary**

This section has investigated information exchange using the PDA, first showing how the PDA is drawn on as an epistemic and interactional resource to facilitate information exchange on topics related to diabetes and insulin. Activity management turns, in which doctors explicitly refer to sections and pages of the PDA facilitate the collaborative process of going through the PDA. However, "going through the PDA" with the patient does not mean that all the PDA content is explained to the patient. While some doctors read out or report the PDA content line by line, others rephrase the information in their own words, or just refer to the PDA sections as a means of initiating talk on different topics. Moreover, doctors do not necessarily go through all the PDA sections.

Information exchange using the PDA, like initial PDA talk, is largely driven by doctor-initiated question answer sequences, not only to elicit patient concerns about insulin but also to deliver information about diabetes and insulin. By eliciting patients' epistemic displays or disclosures, doctors' epistemic enquiries ascertain patient knowledge, leading to the initiation or closure of information delivery. This makes information delivery more

collaborative and patient centred. Doctors also personalise information delivery to individual patients, drawing on their experiences and health records to facilitate explanation. Although information delivery sequences are largely determined by the topics in the PDA, patients' enquiries or statements enable doctors to tailor information to the specific patient, supporting informed decision making.

In addition, while the delivery of unbiased information is an important part of SDM, information delivery in certain sequences of talk appear to be oriented towards the treatment recommendation, for example, as seen in Excerpt 5.10 when the doctor benchmarks the patient's blood sugar and talks about the patient starting insulin while explaining blood sugar targets. This may reflect the PDA content, which appears to be oriented towards making a decision about starting insulin although six treatment options are listed and compared. It could also reflect the clinical context, where insulin has been recommended to the patient. Moreover, since making a decision about treatment is the overall goal of the consultation, it can be expected that doctors' talk during information delivery is not solely to increase patient knowledge but to do so as a prelude to decision making.

### **5.3 Facilitating Decision Making with the PDA**

As stated earlier, a decision about the patient's future course of treatment is made in all consultations, including the five consultations in which doctors and patients go through the PDA. As mentioned in the previous section, only two doctors go through the PDA from the first to last section, meaning that the other three doctors largely use the PDA for information exchange. This selective use of the PDA content leads to differences in how choice is managed and the decision is accomplished in the talk.

Following the sections on patient concerns, diabetes and insulin and blood sugar targets, the PDA lists the six available options (including "doing nothing", as

recommended in the SDM framework), followed by a comparison of their advantages and disadvantages. The next section (Knowing the Facts) attempts to check patient knowledge through a series of questions (for example, “Which treatment option can best control my blood sugar?”), with the six treatment options listed as possible responses for each question. Then, a section titled “Knowing what is Important to You” engages patients in considering their preferences with reasons for and against insulin listed on opposing sides of a scale visual. A list of common concerns about insulin is presented under this visual. Only after completing these sections are patients prompted to make a decision, if they are ready, in the final section of the PDA.

Three doctors use the PDA for information exchange, going through or referring to its sections, mainly to provide information on diabetes, insulin and blood sugar targets, while the remaining two doctors go through the PDA until the final section, but also draw selectively on its contents. These practices lead to differences in structure and interaction, as well as how patient choice is facilitated in reference to the SDM framework.

Two consultations (Consultation B15 and B5 seen in the previous section) are compared in this section, beginning with an abbreviated mapping which shows which sections of the PDA are used, alongside the SDM trajectory. The mapping shown in Tables 5.1 and 5.2 was prepared according to the method of structural mapping, as part of Activity Analysis (see 3.3.1 in Chapter 3). In keeping with the theme-oriented approach, the maps presented in this section show how the structural sub-phases (sub-phases of the Treatment phase) relate to the focal themes of PDA use and SDM. For the former, the relevant PDA sections (if any) and sub-phases are indicated alongside the turn numbers.

To map how these sequences fit into the SDM trajectory, the right-most column shows the corresponding SDM phases and elements, based on Charles et al. (1999)’s analytical

stages of SDM (information exchange, deliberation on treatment, decision) and Elywn et al.'s (2012) talk-based model of SDM, as described in the literature review chapter (2.2.2) and methodology chapters (3.3.2.2). Sub-phases which are not considered as part of the treatment decision making trajectory, for example, those related to Assessment, or instructions on administering insulin, are shaded in grey.

Consultation B15 (Table 5.1), which has been discussed throughout this chapter, can be considered to take a normative approach, with the doctor and patient going through the PDA sequentially. In this consultation, the PDA is used for information exchange before the doctor and patient go through the section which lists the options, and consequently, the decision section. Although further information delivery occurs after initial decision talk (indicated by the “treatment decision” sub-phases), the bulk of information exchange precedes decision talk.

Moreover, the SDM trajectory shows a relatively normative sequential progression from recommendation to “option talk”, including option listing, elicitation of patient values and confirming patient knowledge, and leading to “decision talk” (Elwyn et al., 2012). This bears similarities to the three-part decision making structure, in that decision talk begins with a recommendation (Stivers, 2005a, 2005b, 2006), and also depicts elements of Elywn et al.'s model (2012), such as option listing, checking knowledge and eliciting patient values.

Treatment decision making ends with repeated sub-phases of treatment decision, the first of which involves the patient expressing her treatment preference (263-297) after which the doctor checks her knowledge. The final treatment decision sub-phases, involve the doctor confirming the patient's decision, both before and after giving instructions on administering insulin.

**Table 5.1: Consultation B15-Abbreviated mapping**

<b>Turns</b>	<b>Sub-phase/PDA Section</b>	<b>SDM Trajectory</b>
142-179	PDA-What are your concerns?	Information exchange <i>-Providing information</i>
180-200	PDA-Information about diabetes & treatment	
201-234	PDA-About insulin therapy	
235-256	PDA-Knowing your blood sugar	
257	Recommendation to start insulin	Deliberation on Treatment- <i>Recommending</i>
258-259	Treatment decision--patient readiness	Decision- <i>Moving to a decision</i>
260-262	PDA-What are your choices?	Information exchange <i>-Listing the options</i>
263-285	Treatment decision	Decision- <i>PT expressing preference</i>
286-297	PDA-What is important to me?	Information exchange <i>-Checking PT knowledge</i>
298-311	PDA-Knowing the facts	
312-314	PDA-What is your decision? Treatment decision	Decision- <i>Confirming the decision</i>
315-330	Financial concerns	(Instructions)
331-334	Self-monitoring	
334-335	Treatment decision	Decision- <i>Confirming the decision</i>
336-340	Closing	CLOSING PHASE

In contrast, use of the PDA in Consultation B5 (Table 5.2) is non-sequential, with only three sections of the PDA referred to in the consultation. As shown in Chapter 4, this consultation is highly recursive at phase level and the SDM trajectory is similarly recursive with information exchange occurring extensively both before and after the initial talk on the treatment decision (275-278).

**Table 5.2: Consultation B5-Abbreviated Map**

<b>Turns</b>	<b>Sub-phase/PDA Section</b>	<b>SDM Trajectory</b>
171-221	<u>PDA</u> -Information on diabetes & treatment	Information exchange <i>-Providing information</i>
222-240	Symptoms-past symptoms	ASSESSMENT PHASE
241-274	<u>PDA</u> -What is important to me?	Information exchange <i>-Eliciting PT values</i>
275-278	Treatment decision	Decision- <i>Eliciting preference</i>
279-286	<u>PDA</u> -What is important to me? Benefits of insulin	Decision- <i>Checking PT knowledge</i>
287-406	<u>PDA</u> -What is important to me? -Insulin-side effects	Information exchange <i>-Providing information</i>
407-439	Using insulin+herbal medication	Information exchange <i>-Providing information</i>
440-454	Eating habits	ASSESSMENT PHASE
455-517	Lifestyle advice & counselling	(Lifestyle counselling)
518-624	<u>PDA</u> -Insulin-side effects: hypo	Information exchange <i>-Providing information</i>
625-746	Injecting insulin	
747-755	Using insulin-permanence	
756-787	Using insulin-topical creams	
788-808	Patient knowledge	Information exchange <i>-Checking PT knowledge</i>
809-884	Self-monitoring	(Instructions)
885-917	Symptoms-past symptoms	ASSESSMENT PHASE
918-938	Eating habits-current and past	Lifestyle counselling
939-965	Diet and fat loss	
966-968	Prescription	CLOSING PHASE
969-1049	Using insulin + other medication	Information exchange <i>-Providing information</i>
1050-1099	Blood pressure + sugar test	ASSESSMENT PHASE
1100-1108	Treatment decision	Decision- <i>Confirming the decision</i>
1109-1133	Using insulin+ diet	(Instructions)
1134-1153	Self-monitoring	
1154-1156	Treatment decision	Decision- <i>Confirming decision</i>
1157-1211	Closing	CLOSING PHASE

As shown in the mapping, the doctor begins using the PDA, starting at the second section about diabetes and treatment (171-221) (see 5.2.2.2). After a patient-initiated narrative of previous symptoms (discussed in Chapter 4, 4.2.2.2.), the doctor resumes using the PDA, skipping forward to the section on patient values which lists the reasons for and against starting insulin before engaging in decision talk. After the patient discloses her choice to start insulin (275-278), the doctor begins checking the patient's knowledge (279-286), which leads to prolonged and iterative information exchange in turns 407-439,

518-787 and 969-1049. In contrast with Consultation B15, the bulk of information exchange occurs after the first treatment decision sub-phase. However, both consultations end with repeated sub-phases of explicit decision talk, although this process is more prolonged in Consultation B5.

The mapping exemplifies shows some differences in PDA use and SDM trajectory between the two consultations, which will be investigated further through closer analysis of the talk. Our analysis will begin first with excerpts from Consultation B15 to show how decision making is conducted using the PDA in sequential order. Since there is little data showing the use of PDAs in interaction, focusing on this normative and sequential consultation is a useful starting point to exemplify discursive practices in 1) initiating decision talk, 2) facilitating informed decision making and 3) concluding decision making, and their implications on SDM. Following this, excerpts from Consultation B5 in the same three areas will be discussed briefly to contrast the earlier examples against the non-sequential use of the PDA.

### **5.3.1 Sequential Use of PDA**

As shown earlier in this chapter, DR8 has gone through each section of the PDA, after finding out that P11 did not finish reading it. In the initial PDA talk, P11 disclosed that she did not want insulin because she was scared. However, she has not made any other resisting turns.

#### **5.3.1.1 Initiating Decision Making**

After briefly checking the patient's comprehension of the section on blood sugar targets with a confirmation-requiring statement (256), DR8 delivers a recommendation to start insulin (Excerpt 5.12). Invoking her medical authority by using "we", rather than "I" DR8 presents the recommendation as advice, describing insulin as the "best solution", although this recommendation is mitigated by the hedgers "probably" and "may be". The

recommendation acts as a pre-sequence to the doctors' initiation of decision talk, asking P11 if she has made up her mind (258).

DR8's enquiry although a yes/no question does not constrain P11's choice by focusing on her readiness to make a decision, instead of, for example, asking her to choose or asking whether she wants to start insulin. Following P11's softly voiced negation (253), DR8 begins paraphrasing the list of six available options listed in the PDA. She begins with the first option, "doing nothing" (260) and continues up to option three, "starting insulin", with pauses between each option.

**Excerpt 5.12: There are a few choices**

Turn	Speaker	Talk
256	DR8	ahkay, so- <u>now</u> , (0.40) you roughly know h what this is all about <u>a::h?</u> (1.41) ((sound of pages being turned))
257	DR8	<b>'kay so- <u>we</u> advise that (0.34) probably the <u>best u:m</u> solution for your sugar, may be the insulin..h</b> (.) I think, starting <u>o:nce</u> at night also should be sufficient. .hhh
258	DR8	<b>'kay so- afte::r you've(0.40) listen to <u>all</u> these things, (0.37) have you: (.) made up your mind.</b> (0.46)
259	P11	°No° (0.89)
260	DR8	<b>still haven't make up your mind, okay, .h so- &gt;let me just tell you&lt; there are a few choices for you <u>lah</u> (0.37) for <u>you:r</u> side, there are a few choices. <u>one</u>, you: may <u>choose</u> (.) <u>not</u> to do anything, (0.57) although your sugar is still <u>high</u>, you may want to just continue:, what you are taking <u>now</u>, .hh</b>
261	P11	[ah ]
262	DR8	[the:] second choice you <u>have</u> , i:s, (.)whether you want to: (0.48) control your food some <u>more</u> , and <u>try</u> .hh <u>back</u> with your exercise, .h (0.66) the <u>third</u> option, is whether you want to start the insulin, (0.48)
263	P11	<b>I [think] I want to start the insulin=</b>
264	DR8	[yea? ]
265	DR8	<b>you want to start insulin.</b>
266	P11	=because everytime I forgot to take my medihhcine
267	DR8	<u>o::h</u> , okay-kay

After DR8 mentions insulin, P11 takes the turn after the silence to disclose that she wants to start insulin. DR8 confirms P11's choice with a formulation of patient preference



(265-*You want to start insulin*), after which P11 accounts for her choice by saying that she often forgets to take her oral medicine. The doctor accepts this explanation (267).

### 5.3.1.2 Managing Informed Decision Making

Excerpt 5.13 below begins after the patient's account (previous excerpt). DR8 reformulates the patient's choice with a confirmation seeking statement (284) before beginning the section which compares treatment options with an activity management turn (286). However, although the PDA lists the advantages and disadvantages of all six treatment options, the doctor only goes through those related to insulin, implying that other treatment options are no longer being considered.

Beginning in turn 288 and ending in turn 297 (some talk omitted), DR8 goes through the advantages and disadvantages of insulin, ending with advice on preventing the side-effect of weight gain. In 198, DR8 moves to the section on checking the patient's knowledge of the treatment options, telling P11 that she will be asking her questions to check her understanding (298). DR8 reads out the first question, "Which treatment option may improve the blood sugar level the most?", followed by possible answers, which are the six treatment options (298, 299). P11 provides the expected response, naming "insulin" as the said treatment option (300), and doctor and patient go through the remaining three questions in a similar manner (not shown).

Having completed this section, DR8 gives a positive assessment of P11's knowledge, (312-*so you do understand about this*) and then informs P11 that they are skipping the section on patient values (Knowing what is important to you). The doctor deems this section "not necessary" because P11 has already made a decision, indicating that the decision is no longer tentative. This is made more evident by the doctor's next turn (312-*So you're ready to make a decision and you want to start insulin*), in which she provides the answers herself for the two questions listed in the PDA's final section (What is your

decision?"). "Are you ready to make a decision about starting insulin?" and "If you are ready to make a decision, which choice do you prefer?"

### Excerpt 5.13: So you are keen for insulin?

Turn	Speaker	Talk
284	DR8	so you are <u>keen</u> for insulin lah?
285	P11	m:h
286	DR8	<b>okayh, so:, (.) now I'll go through with you:, this page,a:h?</b>
287	DR8	<b>since you are keen to start insulin, hhh</b> (4.25) ((interruption omitted))
288	DR8	so <u>what</u> is the advantages, <u>why</u> - what is the <u>good</u> (0.27) about starting insulin. .h first of <u>↑all</u> , your sugar can come down to control. it's very, insulin is the <u>most</u> effective lah,(0.27) to bring your sugar ((lines omitted))
297	DR8	okay, but <u>how</u> to prevent that? (0.48) Is, e:r you reduce, the: f-food with a lot of e:r carbohydrate. Carbohydrate means like, e:r <u>ri:ce</u> , <u>potato:</u> , all these got a lot of carbohydrate that can put on some more weight. so if you <u>put</u> insulin you already know that you have a <u>chance</u> of putting on weight, you can reduce on all these food, and of course the other thing is,(.) <u>most</u> important is exercise lah. (1.5)
298	DR8	<b>oka:yh.(3.26) 'kay so: I'll just go through some (.) questions with you lah. to: see whether you understand or not lah.</b> .h 'kay, (0.51) <u>which</u> treatment option, may improve the blood sugar level the most, (0.95)
299	DR8	do nothi:ng? (0.91) a:h follow strict diet exercise, start insulin, (0.57) adding on oral medication, (0.64) e:r (0.43) <u>use</u> other type of injections or use alternative treatment (0.71)
300	P11	<b>I think insulation. ((sic))</b>
301	DR8	o:kay, <u>goo:d</u> , .hh <u>which</u> treatment option is the <u>most</u> effective in lowering diabetes complication. ((lines omitted as DR8 and P11 go through all four questions in a similar manner))
312	DR8	=yes, o:h kayh. <b>alright, so:, (.) you do understand about this, very ↑good. .hhh o:kayh, (1.20) so:: (1.29)I think this one not necessary, because you've already made up your decision lah (0.55) so::, you:'re, ready to make (.) your decision, and you want to start insulin.</b> (0.61)
313	P11	°okay°

In terms of SDM, formulations of patient preference allow the doctor to confirm that the patient wants to start insulin (Landmark, Ofstad, et al., 2017), while from an interactional perspective, formulations of gist (Heritage & Watson, 1979; Svennevig, 2012) indicate the closing of the decision making sub-phase by formulating the outcome.

Such formulations typically require the recipient's acknowledgement or endorsement, given by P11 in 313.

### 5.3.1.3 Concluding Decision Making

Following the previous excerpt, DR8 begins moving towards closure of the consultation as shown in Excerpt 5.14. In turn 314, after a confirmation seeking "Okay?" (314), DR8 produces two pre-closing tokens (Robinson, 2001), "okays" and one "alright" surrounded with pauses (314), indicating that she is moving towards closure. Validating the patient's decision as "very good", she begins to outline the treatment plan (314-*so today, I'll start insulin for you*). Such upshots, or forward looking summaries, commonly used as topic closing devices (Robinson, 2001), are used throughout the data by the doctors as they move to close treatment decision making.

#### Excerpt 5.14: So today I'll start insulin

Turn	Speaker	Talk
314	DR8	oka:yh? (.) <b>Allright.(0.31) Okayh.</b> That's very ↑ <u>goo:d</u> , <b>so today, I'll start insulin for you, (0.54) And then I will inform the pharmacy, that</b> we are>starting insulin<,I'll just start <u>once</u> : (0.52) at <u>night</u> (0.51) <u>So</u> , I'll start on very low, (.) <u>dose</u> ,
315	P11	one more doctor,=
316	DR8	=[ya,]
317	P11	[ if ] I want to buy <u>mea:ns</u> ,
318	DR8	hm:h? (0.68)
319	P11	I:: er myself, I:: (.) no money to <u>buy</u>
320	DR8	<u>hm:h</u> (lines omitted as P11 and DR8 discuss financial matters & instructions on using insulin)
334	DR8	<b>so::, um, I'm going to start you on insulin only at <u>night</u></b> , .hh I'll start you with eight units at <u>night</u> , .hh then a:h, we will give you the book and everythi:ng, ((further instructions omitted)) .hh and then e:rh, you try to check, but at <u>least</u> have about, .hh three or four readings a week <u>lah</u> . that will be very good <u>lah</u> . <b>so, (.) <u>we'll see you back at the end of two weeks</u></b>
335	P11	°okayh°
336	DR8	<b>so in <u>two weeks' time</u>, I'll see <u>you</u>? .hh and then <u>based</u> on you: <u>readings</u>, <u>then</u> we will adjust your insulin.</b> (0.46)
337	P11	°'kayh°
338	DR8	<b>oka::yh?</b>
339	P11	°okayh°
340	DR8	<b>a:lright, o:ka::y, thank YOU::.</b>

However, DR8's pre-closing move is interrupted by P11, who raises her concerns about paying for the medicine, beginning with a pre-announcement of a topic-shift (Campion & Langdon, 2004) (315-*One more, doctor*). This begins another information exchange sequence (not shown) as the doctor informs the patient about cost-related issues and gives instructions on self-monitoring of blood sugar. In turn 334, the doctor returns to the treatment plan summary and upshot of the self-monitoring instructions as she moves towards closing the consultation. Following P11's acceptance (335), and with no new topics initiated, DR8 then makes a future arrangement as a closing move (Robinson, 2001), specifying the next appointment date (336). This first part of the adjacency pair requires the patient's acknowledgment or agreement, which P11 provides (337). The doctor then solicits a confirmation (338), provided by P11 in the following turn, before closing the consultation with a "thank you" (340).

Excerpt 5.14 has shown how DR8 approaches closure of treatment decision making gradually, with forward looking summaries (334, 334) that serve to indicate upcoming closure (Robinson, 2001). Moreover, in combination with P11's confirming response, this facilitates the achievement of a mutual future commitment, which is described as the culmination point of SDM (Elywn et al., 2012). In the following section, the decision making talk in Consultation B5 will be discussed.

### **5.3.2 Non-sequential Use of the PDA**

The mapping of Consultation B5 shown earlier has the non-sequential use of the PDA, from the second section about diabetes and insulin, to the sixth section about patient values, before returning to the fifth section which compares treatment options (Table 5.2). In the two excerpts that follow show doctor and patient going through the sixth PDA section "What is important to me?", which is designed to prompt clarification of patient values by presenting reasons for and against starting insulin on a scale graphic,

### 5.3.2.1 Initiating Decision Making

Excerpt 5.15 begins with an activity management turn, as DR3 asks P5 to turn to the right page. In turns 242-244, DR3 prompts P5 to read through the items under “starting insulin”, which P5 does in turns 246-252 (transcript has been edited for brevity). After P5 finishes, DR3 elicits her perspective by asking whether she wants those benefits of insulin (253).

#### Excerpt 5.15: Let’s look at this

Turn	Speaker	Talk
241	DR3	<i>a: kita tengok yang: ni. “Apa yang penting” <u>ah</u>. (0.82) bukak muka surat tiga belas.</i> <b>rr, let’s look at this “What is important”. turn to page thirteen (4.79) ((sounds of pages being turned))</b>
242	DR3	<i>okey .h a: s’karang ni kita tengok, <u>eh?</u> a:: okey. (.) a::: s’karang, cuba, cuba Puan NAME baca kat sini:;, okay, now let’s look eh? er, okay, er, now try, you try to read here</i>
243	P5	[m:]
244	DR3	<i>[ya]ng dalam kotak-kotak tu:;, in those boxes</i>
245	P5	m: (0.97)
246	P5	<i>a:: ingin memulakan rawatan insulin</i> er.. want to start insulin
247	DR3	m
* 248- 252	P5	<i>saya mahu, paras gula saya terkawal, rendahkan risiko komplikasi:;, mengurangkan gejala dia-betis.</i> I want to control my blood sugar, lower risk of complications, reduce symptoms of diabetes
253	DR3	<b><i>m-m:h. .h okey. .h so maknanya daripada <u>sini</u>, maksudnya a:: .h a-a- Puan NAME rasa Puan NAME <u>nak</u> tak benda-benda ni semua.</i></b> <b>mmh, okay. So that means, from these, that means, er, do you feel that you want all these things?</b> <b>(1.08)</b>
254	P5	<i>ah, &gt;nak nak&lt;</i> <b>er, yes yes</b>
255	DR3	<i>nak tak?= do you?</i>
256	P5	[m: ] Mmm

\* minimal responses omitted for brevity

In the following excerpt (Excerpt 5.16), DR3 moves to the items on the other side of the scale, under “not starting insulin”, this time reading out the text herself (271, 273). P5’s perspectives on the disadvantages of insulin are not elicited, so her turns are limited to minimal tokens (272, 274). In the next turn, the doctor initiates “decision talk”, with a yes/no enquiry that elicits the patient’s choice. Following the patient’s affirmative

response (276), DR3 reformulates the patient's perspective with a confirmation seeking statement (277-*Now you agree lah*). P5 gives the preferred confirmation.

#### Excerpt 5.16: Now I want to ask

Turn	Speaker	Talk
271	DR3	<i>maksudnya macam tu. okey, lepas tu, a: yang sebelah ni, kalau a: tidak mahu memulakan, maksudnya k- a: kenapa? a:, at- Puan tak nak memulakan mungkin nak mengelakkan suntikan.</i> that's what it means. okay, after that er, on this side, if er, don't want to start, it means er why?. o- or you don't want to start maybe to avoid injection.
272	P5	ah
273	DR3	<i>atau: kesan sampingan, ataupun .h rawatan insulin a: mengganggu gaya hidup.</i> or side effects, or .h insulin therapy affects your lifestyle (0.69)
274	P5	[ah]
275	DR3	<b>[a: ]so maknanya s'karang ni, .h saya nak tanya lah, Puan .h a: bersetuju ke, tak bersetuju untuk ambik insulin seb'narnya?</b> er, so that means, now, I want to ask you, er, do you agree, or not agree to take insulin actually?
276	P5	<b>a::h, sek- s'karang say- setu[ju]</b> <i>er, n- now, I agree</i>
277	DR3	[s']karang sudah setuju <i>la:h</i> now you agree lah
278	P5	<i>a:::</i> yes

These two excerpts show how decision talk occurs in Consultation B5, in the form of the doctor's elicitation of patient choice, using a yes/no question and the patient's affirmative response after going through the section about patient values. After P5 has disclosed her acceptance, DR3 begins to check her knowledge, to ensure her patient is making an informed choice, as discussed in the next section.

#### 5.3.2.2 Managing Informed Decision Making

In the PDA, the section on checking patient knowledge precedes the sections on patient values and decision. However, in Consultation B15, the talk follows a reverse order, with the doctor following the decision talk by announcing her intention to check P5's knowledge (279, 281, Excerpt 5.17).

Excerpt 5.17: Although you've agreed

Turn	Speaker	Talk
279	DR3	<i>okey-okey. tapi a: saya nak tanya lagi, walaupun Puan dah bersetuju;</i>
280	P5	<i>okay, okay. but er, I want to ask more although you've agreed</i> a-ah yes
281	DR3	<i>saya nak tanya dengan lebih lanjut lah, a::(( pages being turned)) nak tanya tentang pemahaman lah eh? Pasal insulin ni</i> <b>I want to ask further lah, er to ask about your understanding, eh? about insulin</b>
282	DR3	<i>okey .h s'karang ni Puan, Puan rasa Puan tau tak? Kenapa Puan kena mula insulin.</i> <b>okay. right now, Ms. do you feel you know or not? why you must start insulin</b> (0.38)
283	P5	<i>a:: s:ebab nak kurangkan karas gula.;</i> er to reduce my sugar level
284	DR3	a:h?
285	P5	<i>u:m, (0.80) u:m, m- risiko komplikasi.;</i> um, risk of complications
286	DR3	m-m:h (0.60)
287	P5	<b>tapi, er, yang ni ka::n, saya nak tanya satu::;</b> <b>but er, about this, I want to ask one thing,</b>
288	DR3	m-m:h
289	P5	<i>a:: 'Enggan memulakan rawatan insulin' tu::</i> er, this 'Don't want to start insulin' here
290	DR3	<i>m-[mh]</i>
291	P5	<i>[ke ]san sampingan dia b- berat badan kita naik ke:? Tak de kan.</i> its side effects, will our weight go up? It won't right?
292	DR3	<i>a: maceni</i> er, It;s like this
293	P5	m:
294	DR3	<i>okey so maknanya::, a:: kita nak kena explain balik lah, mungkin ada benda yang Puan tak paham lagi lah, eh?</i> <b>okay, so that means, er we have to explain again lah, maybe there are things you don't understand yet, eh?</b>
295	P5	m:h
296	DR3	<i>(.) .h okey. s'karang ni, a:: s'ap saya tengok eh?</i> okay, now, er, just a minute, let me see eh? (5.11) ((pages turning))
297	DR3	<i>okey, 'Kesan sampingan insulin'. So kita cuba bukak muka surat enam</i> <b>okay 'Side effects of insulin'. So let's turn to page six (3.01)((pages turning))</b>
298	DR3	<i>okay. so: ini, you baca eh? .h a:: okay. cuba-cuba you baca dekat sini, (0.58)</i> <b>okay. so, this, you read eh? er okay. why don't you read from here</b>

DR3's activity management turn in 279 announces the doctor's move from choice-related talk to knowledge-related talk, after which DR3 asks P5 to account for her decision, with phrasing that constructs the decision as an obligation (282-... *why you must*

*start insulin?*). P5 responds by repeating the text in the PDA, reading out the two items listed as reasons to start insulin (283, 285) before she initiates a new topic by asking a question based on the PDA text (287-*But er about this, I want to ask...*). Referring to an item about avoiding weight gain, which is listed under “not starting insulin”, she asks whether her weight will go up, and provides a candidate response (*No*), before eliciting the doctor’s confirmation (287-291). Since weight gain is a common side effect of insulin use, also mentioned in the PDA, the doctor responds to the patient’s question as an indication of a knowledge gap. Telling P5, that “we have to explain again”, she initiates further information exchange (294) asking P3 to begin reading the PDA section about side-effects of insulin (297, 298).

Excerpt 5.17 has shown part of the information exchange which occurs after decision talk in Consultation B5, which is prolonged and iterative and takes up more than a thousand turns over 40 minutes. As the map in Table 5.2 shows, several sequences of information exchange occur after this, in response to patient questions on topics including using insulin, diet and weight loss.

### **5.3.2.3 Concluding Decision Making**

As observed in Consultation B15, the conclusion of decision making in Consultation B15 is gradual, with the patient initiating new topics after the doctor has made pre-closing turns. Given the more active participation of the patient in Consultation B5, it is unsurprising that the conclusion of decision making is more prolonged. As shown Table 5.2, the doctor begins making pre-closing turns, from turn 966 onwards, but new topic initiation by P5, through questions and statements prompts further information exchange/instruction sequences. Excerpt 5.18 begins with the doctors’ third attempt to approach closure.



### Excerpt 5.18: But insulin, I'll start lah

Turn	Speaker	Talk
1100	DR3	<i>okey sekarang ni, a:h, ubat you, you boleh mula:, ah makan, ah, yang, yang sekarang makan tu continue yang sama</i> okay, now, er, your medication, you can start, the oral ones, er, you'll continue taking the same ones
1101	P5	mh (0.25)
1102	DR3	<i>tapi insulin saya start lah</i> but insulin, I'll start lah. (0.51)
1103	DR3	e:h? (0.61)
1104	DR3	<i>e::rh (0.62) kita start yang malam dulu la eh?</i> er we'll start the night time one first la eh? (0.32)
1105	P5	mh
1106	DR3	<i>yang malam, (0.50) kita start dengan ni. lapan dulu, eh?</i> the night one, we'll start with this, eight first eh?
1107	P5	ha (0.60)
1108	DR3	m[:h]
1109	P5	<i>[le]pas cucuk insulin, kita boleh minum air macam biasa kan?</i> after injecting insulin, we can drink water as usual right?

In 1100, DR3 resumes making pre-closing turns, beginning the treatment plan summary with “Now”, which brings the discussion back to the decision at hand. DR3 begins outlining the plan that P5 will continue with her oral medications, then with a contrastive “but” introduces the change to her treatment (1102-*But insulin, I'll start lah*). The silence which follows, of half a second, gives P5 a chance to produce the expected acknowledgement or uptake. However, P5 does not take the turn, leading DR3 to solicit her agreement with the interjection, “eh?” (1103). After another silence, DR3 expands on the treatment plan, providing details of the timing and dosage (1104, 1106), ending each turn with an “eh?”. The rising intonation appears to be soliciting a response from P5, who only produces a minimal acknowledgement. After a silence, P5 asks a question on consumption of water after injecting insulin (1109), which leads to another information exchange sequence in which the doctor explains the use of insulin over about forty turns. After this (not shown), the doctor makes another treatment plan upshot in turn 1154,

which is accepted by the patient with a minimal response, leading to the end of treatment decision making.

Excerpt 5.18 exemplifies the discursive practices during the prolonged and iterative closure of treatment decision making indicated in the structural map (Table 5.2). In the excerpt, the doctor seeks the patient's confirmation of the treatment plan upshot repeatedly, indicating that P5's acceptance is required to close the consultation, from an interactional perspective and to close the decision making process. This facilitates informed decision making by allowing the patient a slot in which to initiate questions, which P5 avails of several times.

### **5.3.3 Section Summary**

In printed form, the content of the PDA reflects the principles and best practices of SDM, following a relatively linear progression through information exchange and decision making. However, the use of the PDA in talk shows the nuanced and iterative decision making process, indicated in the structural maps and analysis of excerpts from Consultations B15 and B5. In the PDA, the decision is not prompted from the patient until the final section, after establishing that the patient is ready to make a decision, with the question, "What is your choice of treatment?" followed by a list of the six available treatment options. Yet, talk about the decision is initiated by doctors and patients while engaging with earlier sections, for example, in the options section (Consultation B15) and the patient values section (Consultation B5).

Moreover, there are only two instances in the data where the decision is presented as a choice among several options, occurring while the doctor is going through the option listing or decision section of the PDA (as shown in Excerpt 5.12 from Consultation B5). Conversely, all other elicitations of patient preferences or choice by the doctor present the decision as a polar option of accepting or refusing insulin, most often with a yes/no

question (as seen in Excerpt 5.14 from Consultation B5). This creates different interactional spaces for patients to express their choice, as evidenced by comparing the patient's response in B15, "I want to start insulin" against that of the patient in B5, "Agree".

Yes/no questions, like "Do you agree to start insulin?" present the decision as a proposal to be accepted or rejected, leaving a burden on the patients if they want to perform the dispreferred, disaffiliative act of refusing the recommendation, as will be seen in the following chapter which looks at negotiation of treatment decisions. This corroborates previous CA studies which concur that listing the options presents a more neutral environment for a patient to select options other than the recommended treatment, which is more compatible with the SDM approach (Toerien et al., 2013).

However, implementing SDM goes beyond the scope of one or two turns. Although P11 is able to choose, rather than agree to, insulin, the remaining instances of decision talk in Consultation B15 are delivered by the doctor in the form of confirmation-seeking statements ("So you're keen for insulin," "So you're ready to make a decision and you want to start insulin"). Such formulations of patient preference aim to elicit, and confirm patients' preferences (Landmark, Svennevig, et al., 2017), but only leave a small space for patient participation, in comparison to the open-ended question presented in the final section of the PDA ("What is your choice?"). Nevertheless, these formulations of patient's perspectives require the patient's agreement to conclude the adjacency pair, thus requiring the patient's confirmation of the treatment decision.

The differences in PDA use are accompanied by varying levels of patient participation. While Consultation B15 follows a more normative sequence, with the PDA sections covered in order, it is largely doctor driven. After the "decision talk" in which the patient chooses to start insulin, the doctor checks her knowledge by asking questions from the

PDA and then delivers instructions on using insulin. This doctor-led pattern of PDA use is common in the data, with patients' participation generally prompted by doctors' enquiries and limited to short responses or statements. In contrast, information delivery in Consultation B5 is prompted largely by P5's enquiries on various topics, including those not covered in the PDA, for example, using topical creams and drinking water before injecting insulin. While DR3 actively elicits P5's questions, many questions are patient-initiated. Therefore, information delivery and decision making in Consultation B5 is more collaborative, yet it is also prolonged. It is also likely that patients' individual participation patterns play a role, in that some patients are more likely to ask questions or initiate topics than others.

The doctors' reformulation of the PDA content also has implications for patient knowledge and choice. Although some doctors listed all six treatment options, information delivery was largely oriented towards insulin. This could reflect the content of the PDA, which presents the decision as a polar option in its title ("*Making Choices: Should I start insulin?*") and includes sections which only discuss insulin. Moreover, doctors also selectively present information from the PDA, as seen in Excerpt 5.13 when the doctor skips the content about other treatment options because the patient has expressed her choice to start insulin. This has epistemic implications, in that all options are not equally discussed, which in turn, may limit the patient's choice.

The prolonged and iterative move towards closing treatment decision making described in this section is common in the other consultations, particularly when the patient agrees to start insulin. While the patient may have disclosed his/her intent to start insulin, the doctors continue to solicit their acknowledgement or agreement while approaching closure with treatment plan summaries (future arrangements) and upshots. Not only do these pre-closing sequences fulfil the interactional purpose of indicate

closure, they facilitate informed decision making by providing patients the opportunity to seek information, as P11 (Excerpt 5.14) and P5 (Excerpt 5.18) did. Repeatedly confirming the patient's choice also strengthens the "sharedness" of the decision.

#### **5.4 Discussion and Summary**

This chapter has presented the analysis of PDA use in the consultations in order to answer the second research question: *How do doctors use the PDA to facilitate SDM in routine visits for type 2 diabetes?*, contributing to the limited discursive and interactional data on PDA use. The analysis exemplifies the discursive, interactional and rhetorical practices of doctors and patients, in relation to Charles et al.'s (1999) three analytical stages of SDM, from initial PDA talk, which prompts *deliberation on treatment* (5.1) through *information exchange* (5.2) and the conclusion of *treatment decision making* (5.3). Overall, while the analysis shows how these stages occur reiteratively in real practice (Montori et al., 2006), the PDA is used more for managing knowledge, rather than choice. Moreover, the analysis reveals some of the doctors' practices which are consistent with Elywn et al.'s model (2013) for example, checking knowledge, discussing harms and benefits, providing patient decision support and eliciting preferences. However, the details of how these practices are implemented may constrain, rather than facilitate, patient knowledge and choice.

In Section 5.1, the analysis of turn-by-turn interaction during initial sequences of the Treatment phase (5.1) demonstrate the use of the PDA as an epistemic device, by which doctors determined whether further information exchange was needed, and an epistemic source, from which content was drawn upon to deliver and elicit information from patients. Moreover, the PDA played an interactional function, in that is implicative of the treatment recommendation, and therefore, reference to the PDA functioned to initiate talk on treatment. This explains why treatment decision making was initiated in several

consultations, without the “recommendation” or “option listing” turn which is the first of the three-part decision making structure (proposal-negotiation-acceptance) as suggested by CA studies (Stivers, 2005a, 2005b, 2006; Koenig, 2011; Land et al., 2017), and supports the suggestion that treatment decision making outside acute care maybe more complex than the three-part structure suggests (Landmark, et al., 2015; Weidner, 2012).

The findings of this chapter demonstrate the turn-level practices of doctors and patients in using a PDA, in consideration of its aims to provide information and support the decision making process (Elwyn et al., 2012). For example, during information exchange with the PDA (5.2), doctors made changes in footing to convey the content of the PDA, for example, explicitly referring to the PDA during activity management turns that support the collaborative use of the PDA, or by implicitly using the PDA as a topic guide for information exchange. Moreover, doctors tailored the delivery of information to individual patients, through the use of “initial and closing” questions, by repeatedly eliciting patient questions, and by drawing on patient’s experience during information delivery. In addition, the gradual approach to closure, through formulations of patient’s perspectives, confirmation-seeking summaries of treatment plans (future arrangements) and upshots, allowed patients to confirm their acceptance of the treatment choice, or to initiate issues and ask questions. These practices contributed towards achieving an informed and shared decision, in which patients’ perspectives and values, as well as participation are emphasised.

As shown in this chapter, doctors’ enquiries played a key role in eliciting patient participation. For example, in initial sequences, doctors’ questions about patient knowledge, perspectives and choice, moved the talk towards closure through initiating talk on treatment, information exchange, deliberation on treatment and decision making, depending on patient’s responses. However, as doctors mostly used polar questions,

patient responses were constrained to affirmation or negation. This may have implications on how their knowledge and choice were managed during decision making, for example, through the superficial assessment of patient knowledge in initial sequences of talk (5.1.1) and by conveying the treatment decision as a polar-option of accepting or refusing insulin (5.1.2). Conversely, option-listing, which is more compatible with patient-centred decision making (Toerein et al., 2013), was used minimally and only while going through particular PDA sections, which were skipped by several doctors.

Doctors' selective use of the PDA had other implications, including that information delivery was biased towards insulin, as some doctors skipped the sections which listed and presented information about other treatment options. The PDA was also described in ways that implied different gradients of choice for the patient in terms of starting insulin. These practices may partly be a reflection of the PDA itself, which includes a few sections on insulin (in comparison to the other options which are generally listed together) and presents a polar choice in its title "*Should I start insulin?*". These findings may inform the development and implementation of PDAs on starting insulin in this context (DMIT Group, 2012; (P. Y. Lee et al., 2016).

Moreover, in comparing sequential and non-sequential use of the PDA, the sequential use was largely controlled by the doctor and topics discussed adhered to the order of the PDA content, while the non-sequential use was more patient-centred in that information delivery was prompted by the patient's questions (5.3). However, the latter consultation was also significantly longer, which reflects the findings of previous studies that indicate time is a constraint both in PDA use and in the implementation of SDM (Bekker, et al., 2003; Brown et al., 2014; Gravel, et al., 2006; Légaré, et al., 2008). Moreover, the findings add to research that has identified variations in doctors' PDA use, including

dominating the talk and not consistently using the PDA as prescribed (Abadie, et al., 2009. Wyatt, et al., 2014).

Besides the doctors' practices, this chapter has also shown how patients' talk contributes towards the achievement of a treatment decision. For example, by displaying their epistemic status, or asking questions, patients work collaboratively with the doctor to achieve "informed decision making". Also, a patient's acceptance of, or resistance to, starting insulin can conclude decision making, or prompt further information exchange or deliberation on treatment, both contributing towards reaching a shared decision (5.1.21, 5.1.2.2; 5.3.2.3, 5.3.2.2). In the latter, deliberation on treatment can be prolonged as doctors and patients negotiate their conflicting perspectives on insulin. This negotiation will be further investigated in Chapter 6.



## CHAPTER 6: NEGOTIATING TREATMENT DECISIONS ON INSULIN

The previous chapters (Chapter 4 and 5) have shown that patient's perspectives towards insulin influence the organisation of talk in the consultations, with negative perspectives leading to a prolonged and recursive consultation structure. The excerpts discussed thus far, however, have largely shown neutral or positive patient responses towards insulin. The discussion now turns to consultations in which patients resist the recommendation to start insulin, to answer the third research question:

*RQ3: How do doctors and patients negotiate treatment decisions on starting insulin during routine visits for type 2 diabetes?*

This chapter uses Discourse Analysis, incorporating Conversation Analysis, to examine how doctors and patients negotiate the decision outcome from their opposing perspectives. As a starting point, initial sequences of treatment decision making are presented to show how patients' responses to doctors' initiation of talk on treatment indicate their resistance to the treatment recommendation (6.1). Following this, Section 6.2 describes discursive, interactional and rhetorical practices during negotiation in question-answer sequences (6.2.1) and accounts (6.2.2). In the final section (6.3), practices in closing decision making are investigated (6.4.1). In the next sections (6.4.2, 6.4.3) doctor-patient talk in approaching closure of treatment decision making is analysed, contrasting between doctor-initiated sequences and those in which patients play a more active role.

### 6.1 Initiating Treatment Decision Making

Following the findings in Chapter 5 (see 5.1) that show how patient responses in initial sequences of talk lead to differences in the decision making trajectory, the consultations were categorised according to patients' perspectives towards insulin at two key points of

the treatment decision making trajectory (opening and closing), indicating the decision making process which occurs between these points (Table 6.1). For ease of reference, these categories are referred to as Pattern A, B and C consultations. When a patient responds positively towards insulin (see Chapter 5), deliberation on treatment is generally limited to decision talk, during which the doctor elicits the patient's choice and the patient provides an affiliative response (Pattern A).

**Table 6.1: Three Patterns of Treatment Decision Making**

Pattern	Patient's Initial Response to Insulin	Treatment Decision Making		Decision	Consultations
A	Positive/ Accepting	PT Acceptance		Start insulin	A1, A4, B5, C14
B	Negative/ Resisting	Negotiation	PT Acceptance	Start insulin	A2, B7, B15 C12,
C	Negative/ Resisting	Negotiation	DR Acceptance	Continue current treatment	A3, B8, C11

In contrast, when a patient discloses or displays a negative or resisting perspective towards insulin, the process of treatment decision making tends to be prolonged as doctor and patient negotiate the decision making outcome. This negotiation can end with either the patient accepting insulin (Pattern B), or the doctor accepting the patient's alternate treatment choice (Pattern C), which is to continue with their current treatment. This broad categorisation does not reflect differences in the extent of resistance among Pattern B consultations, with some patients accepting insulin relatively quickly despite a negative initial response (e.g. B15 shown in the previous chapter) while others repeatedly resist insulin leading to prolonged negotiation. Differences in PDA use are also not considered in the categorisation, as the doctors go through the PDA with patients who have not read it, regardless of their perspective towards insulin.

The analysis in this chapter examines how the treatment decision is negotiated between doctors and patients who resist insulin (Pattern B and C), beginning with initial sequences of talk in which patients display or disclose their perspectives towards insulin.

### **6.1.1 Eliciting Patient Perspectives in Initial Talk on Treatment**

As treatment decision making in chronic illness can span over more than one consultation (Murray, Charles, & Gafni, 2006) the preceding interaction that the doctor may have had with the patients is likely to influence how they initiate talk on treatment. For example, as shown in Chapter 5, when patients have been given the PDA prior to the consultation, usually during the last visit, doctors initiate talk on treatment indirectly by asking epistemic questions about the PDA while the doctors' statements in introducing the PDA to a patient for the first time also serve to initiate talk about treatment. In other consultations, doctors initiate treatment decision making more explicitly, by mentioning the treatment recommendation made in the previous visit and following this with a perspective-display invitation.

Whether doctors' initial turns comprise a single question, a series of questions, or longer turns including statements and questions, they lead to patients' direct or indirect display of their perspectives towards insulin. Because insulin has already been recommended to all the patients, initiation of talk on treatment invokes this recommendation whether insulin is mentioned or not and makes relevant the patient's response. In this section, several excerpts of initial talk on treatment will be presented to show the discursive, rhetorical and interactional practices used by patients display their negative perceptions towards insulin, namely withholding participation, disclosing fears, providing accounts and refusing the recommendation.

### 6.1.1.1 Withholding Participation

Excerpt 6.1 from Consultation B7 shows a patient using interactional resources (e.g. silence) and attempting to close the topic to withhold his participation from talk about starting insulin. After a brief Assessment phase (not shown), DR4 initiates treatment decision making by referring to the previous consultation and eliciting P6's views about their discussion about starting insulin.

#### Excerpt 6.1.: Next time

Turn	Speaker	Talk
60	DR4	<i>itu hari masa cakap pasa:l injection uncle rase macam mane:?</i> that day when we talked about injecting how did you feel?
→		<b>(3.10)</b>
61	DR4	<i>boleh baca ini:</i> can you read this?
62	P6	<b>ta- (0.27) takde nampak lah</b> <b>can't can't see lah</b>
63	DR4	<i>tak de nampa::k</i> you can't see
64	P6	m:h
65	DR4	<i>okay, ini buku::, cerita pasal,</i> okay, this book, talks about,
66	P6	[ngh]
67	DR4	[a: :] <i>kenape::, a:: ape::, bagus pasal insulin, apa tak bagus pasal insuli:n,A::, apa yang un[cle ]</i> er, why, er, what is good about insulin, what isn't good about insulin, er, what you
68	P6	[ha::]
69	DR4	= <i>boleh pilihan lah eh? pasal kencing manis juga ada cerita siki:t, e:h?</i> can choose lah, eh? It also talks a little about, about diabetes eh?
70	P6	<b>lai- lain kali, s-,m-, lain kali m-ma[ri lah m- m- mari] Ha::?</b> <b>nex- next time, next time I come lah, huh?</b>
71	DR4	[a: tak pe-tak pe ]= Ya, it's okay, it's okay
72	DR4	= <i>tak pe. Nanti kita cerita</i> =it's okay. We'll discuss it later

P6 does not respond to the perspective display invitation, leaving a lengthy silence (see arrow), which indicates that he does not understand or does not want to respond. DR4 then refers to the PDA (61), asking if P6 can read it. This could refer to P6's sight, as visual problems are common in patients with type 2 diabetes, or to his language abilities,

as a first-language speaker of Cantonese. After P6 states that he is unable to see the text (063), which accounts for his inability to participate in using the PDA, the doctor introduces the PDA. Although the doctor describes the PDA as “something about insulin”, rather than about a treatment decision, she conveys neutrality through the phrases “what is good” and “what is not good” (67) and invokes the patient’s choice (69-*can choose lah eh?*). The doctor ends her description of the PDA with the particle “eh” functioning as a tag question, that only requires P6’s acknowledgment. However, his response, which attempts to postpone the discussion (70-*Next, next time*) attempts to close the topic of insulin. DR4’s “it’s okay”, repeated several times (71, 72), appears to be a reassurance, rather than acceptance of P6’s postponement. As her following turn indicates, the talk about insulin is only temporarily closed and will be reinitiated later in the consultation.

#### **6.1.1.2 Disclosing Fears**

Two patients disclose fears in initial talk on treatment but interestingly, neither patient makes any other resisting turns following these disclosures. In the following excerpt, P9 discloses her fear of insulin in responding to the doctor’s knowledge-focused questions about the PDA (Excerpt 6.2). DR7 begins talk on treatment by recalling the previous consultation and describing the PDA’s contents (13, 15), notably, as a document on starting insulin rather than one to help her decide between several treatment options. He then begins a series of enquiries focused on P9’s reading and comprehension of the PDA (18, 20, 23). P9’s talk mainly comprises token acknowledgements and short replies. There is a pause of 0.66 seconds before she responds to the final question about whether the PDA was easy to read (23).

### Excerpt 6.2: I'm very scared

Turn	Speaker	Talk
13	DR7	=fɪ:ne. O:kə:y. So e::rh, if you can remember, the last visit er I have given you: .hh a::, a booklet,
14	P9	m:[m: ]
15	DR7	[e::r] <u>that</u> booklet is basically: is something on e:r .hh e:r starting in <u>in</u> er insulin [okayh? ]
16	P9	[:hmmm ]
17	DR7	and then <u>that</u> = booklet <u>have</u> e:r contents about er insulin and the way of <u>injection</u> and then de:: e::rm: (0.49) tsk, e:r and the the side effects and <u>ev'</u> ↑rything. Oka:y?
18	DR7	did you go through the booklet? (0.25)
19	P9	yes I did ((nodding))
20	DR7	ah, you went through the booklet.
21	P9	hm
22	DR7	o:kay quite <u>good</u> that you went through .hh
23	DR7	e:r was it easy to read? E:rhh hh((small laugh)) (0.66)
24	P9	<b>easy:::</b> , ((nods, smiling))
25	DR7	hh i[s i: ]:t hh
26	P9	<b>[but ]=</b>
27	P9	<b>=I'm [very] scared of <u>needhle</u> ↑hh=</b>
28	DR7	[m:h ]
29	P9	=[hh hh hh]
30	DR7	=[a-ha-↑ha] ↑hh you're <u>scared</u> of <u>needle</u> . Ohkay, h
31	DR7	<u>so</u> e::rm, do you want to discuss e:rh (0.23) did you understand the: booklet .
32	P9	°ye::s°[ (((nodding 6-8 times)) ]
33	DR7	[ you understand quite we:ll ] Okayh,

The drawn-out last syllable of P9's short response (24-*Easy*) indicates some hesitation as she continues her turn, overlapping DR7's talk. Using "but" to signal a shift in topic (29), the patient voices her fear of needles (027). The mutual laughter indicates that doctor and patient recognise the delicacy of this disclosure. Yet, although he acknowledges the patient's disclosure, DR7 does not immediately address her fears. Instead, he begins asking a question which appears to resume PDA talk (31-*do you want to discuss...*) before rephrasing the enquiry as a knowledge-focused PDA question to check if the patient understood the PDA. P9's affirmative response is accompanied by several nods, emphasising her epistemic claim (31).

### 6.1.1.3 Providing an Account

In initial talk on treatment, accounts against insulin were observed mainly in two consultations, Consultation A3 (see 5.1.2.1) and Consultation A2, both conducted by the same private general practitioner. In Excerpt 6.3 from Consultation A2, the doctor's opening enquiry is far more direct than in other consultations. Indicating that the patient's resistance to insulin is already known, DR2 elicits her reasons for this perspective with an open-ended prompt (001).

#### Excerpt 6.3: Oral medication is easier

Turn	Speaker	Talk
001	DR2	<i>erha ha ((laughing)) okay de reason you tak nak ambik insulin ialah [ se]bab? want</i> erha ha okay the reason you don't want to take insulin is because?
002	P2	[ngh]
003	P2	<b><i>tu lah kata I tengok kawan-kawan I pun &gt;smua&lt;ape ni: macam susah ah kan?</i></b> <b>it's like, I see all my friends even um, it seems difficult, right?</b>
004	DR2	m::h
005	P2	<i>bila tengok mhhm((clears throat)) tengah makan ken- "↑Op! I have to go to the toilet" [(dia kata) ]</i> when I see mhhm in the middle of eating, 'Oh! I have to go to the toilet.' They say
006	DR2	[Mmm hmm ]
007	P2	<i>nak pegi nak buat nak suntik insu↓li:n</i> to go to do to inject insulin
008	DR2	[hm:: ]
009	P2	<i>[pahtu ]kan? Pahtu nak travel pun I tengok, s-susah a: "↑Op! I kena pegi ambi:k ape ni:,insulin"</i> then, right? Then to travel also, I see it's difficult. "Oh! I have to go take insulin"
010	DR2	ah [ha:]
011	P2	<b><i>[se ]bab I rasa kalau ubat, senang aje kan?</i></b> <b>because I feel ((oral)) medication is easy right?</b>
012	DR2	mh

After a brief hesitation, the patient begins an account against insulin deploying a narrative about friends who use insulin. By drawing on her epistemics of experience, rather than simply describing insulin as inconvenient, P2 makes a stronger case for her views. This is strengthened by her use of reported speech or constructed dialogue (Arribas-Ayllon et al., 2008c; Clift, 2006), which supports her claim that insulin is inconvenient (003-009). P2 follows this by disclosing her perspective that taking oral

medication is far simpler (011), presumably compared to insulin. As seen in Consultation A3 in Chapter 5, the doctor contributes only minimal acknowledgement tokens during the patient's account, which involves more substantial patient participation when compared to other excerpts.

#### **6.1.1.4 Refusing the Treatment Recommendation**

Speakers generally avoid disagreeing with others in ordinary conversation (Pomerantz, 1984), and this preference for an affiliative response. Given the epistemic and institutional asymmetry between doctors and patients, this preference for affiliation may be stronger in the context of responding to a doctor's recommendation. Therefore, the indirectness of the patients' responses shown thus far seems expected. However, two patients also explicitly refuse the recommendation to start insulin in initial talks on treatment. Like the disclosures of fear, these rejections come in response to information-focused questions about the PDA.

The following excerpt (Excerpt 6.4), from Consultation C11, opens with the doctor's questions about the PDA. DR6 initiates PDA talk (001) with a rephrased enquiry, asking whether the patient has any problems about, or understands "the book", and beginning what appears to be an invitation to discuss or ask questions (001-*or you want to...*). Interrupting the doctor with her claims of comprehending the PDA (002-*yes, no, no, I understand*), P8 changes topic from the PDA and discloses her treatment preferences, saying that she wants to wait and phrasing her refusal directly albeit without mentioning insulin (004-*now I don't want*). DR6 acknowledges the patient's choice and then resumes asking knowledge-focused PDA questions to check P8's comprehension (005). P8 confirms her understanding of the PDA, handing over her completed copy to the doctor as a form of evidence that she has read the PDA (006).



### Excerpt 6.4: Now I don't want

Turn	Speaker	Talk
001	DR6	-problem about the:: y-you understand (.)about the book or you want to-
002	P8	=[yes, no, no, I understand ]= [((looking for PDA in bag))]
003	DR6	=Yes, [perfect]
004	P8	<b>[but I ] have to wait, now I don't want.</b>
005	DR6	oh, okay, but, anyway, you understand most of the things is talking in book la?
006	P8	yes. ((nods, finds PDA & hands it to DR3))
007	DR6	okay. ((takes PDA & starts looking through it))
008	DR6	so <u>aright</u> , okay so because this is all about, what is the things=
009	P8	[((nods)]
010	DR6	=[what ] is your concerns and everythings right=
011	P8	=(nods))
012	DR6	so, you, you saying you don't want insulin right?
013	P8	((nods))`
014	DR6	can you tell me, what is your concerns?

As DR6 looks through P8's PDA, she describes its contents, while P8 responds with nods, that serve as minimal acknowledgements (012, 014). With the lack of participation from the patient about the topic of the PDA, DR6 begins talking about the patient's choice stated earlier. With a formulation of P8's perspective, DR6 solicits confirmation that she does not want to start insulin (012), to which P5 responds with a nod (013). The discussion on treatment is not over, as DR6 then begins eliciting the patient's concerns about insulin.

#### 6.1.2 Section Summary

The excerpts in this section show how the doctors' initiation of talk leads the patients to disclose or display their perspectives on insulin, whether in response to perspective display enquiries or in response to epistemic enquiries about the PDA. This shows that even though doctors may use PDA talk as a pre-sequence to gradually approach treatment decision making, patients orient to this talk as invoking the treatment recommendation.

Patient resistance is a disaffiliative action which prevents the closure of treatment decision making by withholding the acceptance required to close the proposal-acceptance sequence (Stivers, 2005). Stivers (2006) distinguishes between "passive resistance",

which is the withholding of acceptance through silence or minimal responses, and “active resistance”, which is “any action that questions or challenges the physician’s treatment recommendation” (Stivers, 2005, p.2). However, Stivers’ studies (2005, 2006) were conducted in the acute primary care context, in which patients’ resisting responses occur in the turns after the treatment recommendation is made.

As mentioned in Chapter 5, the chronic care context of this study means that treatment decision making can be conducted over several consultations, or even longer periods, particularly in the case of starting insulin, in which patient resistance is commonly observed (Koenig et al., 2014). Since the patient is already aware of the recommended treatment, explicit treatment recommendations, traditionally the first part of the “proposal-negotiation-acceptance treatment decision making structure, are not necessary. Therefore, treatment decision making can be initiated, through turns that orient to previously delivered recommendations, for example, by recalling the previous consultation (e.g., shown in Excerpt 6.1), bringing up the PDA (e.g., Excerpts 6.2, 6.4), or a direct question eliciting patient’s reasons for refusing insulin (e.g. Excerpt 6.3). In this context, therefore, patients’ resisting turns can be considered to mark the beginning of negotiation as they demonstrate a disaffiliation between doctor and patient that must be resolved for treatment decision making to close.

The excerpts presented in this section (Excerpts 6.1-6.4) also demonstrate different patient participation patterns tied to the use of various resources in negotiation. Where P7 (Excerpt 6.1) participates very minimally using silence as an interactional device to close down the discussion, P9 and P10 (Excerpts 6.2 and 6.3) disclose their perspectives using the contrastive “but”, to introduce perspectives which oppose the treatment recommendation. P2 (Excerpt 6.4), whose perspective is already known, draws on

rhetorical devices such as narratives, reported speech and epistemics of experience to support her perspectives.

While the patients use these resources to exert their deontic right over the treatment decision, deontics are also managed explicitly in doctors' talk, for example, in eliciting an account (*the reason you don't want insulin is because*) and by a patient in disclosing her treatment preference (*now I don't want*). By orienting to the patient as having the final say in wanting or not wanting to start insulin, these turns imply that the patient holds primary deontic rights, i.e., the right to make the decision. As in the previous chapters, these turns which engage explicitly with the patient's treatment preference, or choice, are referred to in this thesis as "decision talk", and are not only observed during initial talk on treatment but throughout the negotiation process, which is discussed in the following section.

## **6.2 Negotiating Treatment Decisions**

On a turn-by-turn level, there are variations across the seven consultations in which patients resist insulin in initial talk, with negotiation more prolonged in some consultations over others. In two consultations, despite initial disclosures of fear, the patients accept insulin after information exchange (Consultation B15, shown in Chapter 5) and information-focused PDA talk (Consultation C12). In the remaining five consultations, negotiation is considerably longer, with doctors and patients making repeated turns in which the treatment decision is explicitly and implicitly managed. The negotiations in these consultations can be distinguished according to the main interactional patterns identified in the mapping in Chapter 4: doctor-led question answer sequences (e.g., Consultation B7, 4.3.1.4) and consultations which mainly comprise statements and elaborations from doctors and patients (e.g., Consultation A3, 4.3.1.2).

## 6.2.1 Question-Answer Sequences in Treatment Negotiations

Previous chapters have demonstrated the important role of doctors' questions in the interactions. Similarly, in three consultations (B7, B8 and C12), the negotiation of treatment decisions is doctor-led, mainly through question-answer sequences. These can generally be divided into affective enquiries, and epistemic enquiries, about the patient's treatment choice.

### 6.2.1.1 Affective Question: Eliciting Concerns

When the patients resist insulin but do not offer an account for their perspective, the doctors attempt to elicit their concerns, through open-ended perspective display invitations, yes/no questions, confirmation-seeking formulations of patient choice and account solicitations. Despite the doctors repeated attempts at eliciting patients' concerns using various enquiries, patients are not forthcoming with their concerns, if any, and respond with denials, assertion of treatment preferences and by withholding participation, as seen in the following three excerpts.

Excerpt 6.5 (Consultation B8) shows how the doctor manages the delicate topic of "fear" with P7, who has disclosed that she has stopped taking her oral medications and is only taking *ayurvedic* (traditional Indian) medicine. After discussing the patient's recent blood test result, showing a very high sugar level of nineteen, the doctor initiates talk on insulin with an open-ended perspective display invitation (Maynard, 1989), which presumes that the patient has undisclosed concerns about insulin (175).

### Excerpt 6.5: What is your concern

Turn	Speaker	Talk
175	DR5	↑what is your main (.) worry or concern about regarding the insulin.
176	P7	o:ka::yo
177	DR5	what, what is your concern. baru kata insulin kan, a: a lot of people “alama::k, itu jarum sangat be[SA:OR” like that]. what, <i>what is your concern. When you just mention insulin a lot of people say “Oh-no! That needle is really BIG”</i>
178	P7	[No, No: I don’t] anything, of that sort£ hhhh((laugh))
179	DR5	[ah-okay.] [if ]
180	P7	[a: hh ] [hh h] a: h

Since P7’s response (176-*Okay*), does not provide any information, DR5 continues eliciting P7’s concerns about insulin. She asks another open-ended question (177) and then proposes fear of needles as a candidate concern by describing needle fear as a common reaction. Here, DR 5 switches to colloquial Malay to voice this patient concern that “the needle is very big”. Through increased volume, elongated vowels, and the interjection (177-*Alamak*) used to show alarm, DR5’s turn emphasises the salience of affective reasons in patients’ refusal of insulin. The doctor’s change in footing using ventriloquism, or reporting the imagined speech of another person, can be seen as a form of indirectness, used to distance oneself from the message particularly in face-threatening circumstances (Tannen, 2010). While fear of needles is a common patient reaction to insulin, suggesting and admitting to fear may be face-threatening, therefore requiring the delicacy of indirectness. Therefore, DR5’s turn does not directly propose that P7 is the one who might be scared of needles. However, P7’s response (178-*I don’t anything of that sort*) treats DR5’s turn as an enquiry about her fears. That this is a delicate topic is further reflected in the laughter that surrounds P7’s strong denial.

A similarly strong denial can be seen in the following excerpt from Consultation C11, in which the patient has earlier refused insulin (see 6.11.4). The doctor has tried eliciting P8’s fears of insulin, getting no response (not shown). Excerpt 6.6. begins as the doctor

continues her efforts to encourage P8 to share her concerns. The doctor frames her enquiry by assuring P8 that she is not going to pressure her to use insulin (45, 47,49).

#### Excerpt 6.6:Just share with me

Turn	Speaker	Talk
45	DR6	a- I'm <u>just</u> sharing with you la=
46	P8	=((nods))
47	DR6	=it's nothing, I don't want, I, not say I'm going to push you
48	P8	=((nods))
49	DR6	=about in[sulin things]=
50	P8	[M::, m::, ]
51	DR6	<b>=just share with me what, actually what is your fear, a[bout insu-]</b>
52	P8	[my fear ] <because <u>why</u> I can do exercise,
53	DR6	m::[h::m ,]
54	P8	[I can] be <u>strict</u> diet. (0.49) That's [all. ]
55	DR6	[it ] [you,] you think you can <u>do</u>
56	P8	[ye:s] yes. because <u>now</u> , I'm doing also.
57	DR6	o:ka:yh,
58	P8	m::h
59	DR6	<b>↑what is the <u>problem</u> actually for you. if let say want to start with insulin.</b>
60	DR6	<b>you anticipate any problem?</b>
62	P8	> <u>no</u> , no, no , no, no.<
63	DR6	<u>no</u> =
64	P8	=[no:,no: ]
65	DR6	=[any prob]lem
66	P8	no

By framing her following talk as “sharing”, rather than “pushing”, the doctor orients to the possibility that P8 may perceive her continued talk about insulin as pressure to accept insulin. Moreover, her statement (47-not say I'm going to push you) acknowledges P8 as having the final say while also acknowledging that as a doctor, she may attempt to influence P8's decision. Her perspective display enquiry in 51, presumes that P8 has underlying fears about insulin (51-Just share with me, actually what is your fear). P8 appears to initiate a disclosure (52-My fear) but quickly accounts for her ability to carry out her preferred treatment option of exercise and diet. This excerpt shows how a patient may resist the doctor's attempts to elicit the patient's perspectives, not only with minimal or non-verbal responses, but also by not directly responding to the question.

In line 59, DR6 attempts again to elicit P8's concerns about insulin, this time using the word "problem" rather than "fears". She begins with an open-ended perspective display invitation, and then reformulates it into a yes/no question, asking if P8 anticipates any problems with starting insulin. P8 emphatically denies have any negative affective perspectives of insulin, with a string of hurried "No"s (62), and repeats this negation as DR6 repeats her response as an indication of acknowledgement (64-66).

Doctors also use repeated questioning to encourage patient disclosure of their perspectives, particularly with less participative patients. As seen in Section 6.1.1.1, P6 has so far resisted participating in any talk on insulin. In Excerpt 6.7 DR4 continues trying to elicit his perspectives using various types of enquiries, including confirmation-seeking formulations of the patient's choice, yes/no questions and account solicitations.

#### Excerpt 6.7: Don't want insulin?

Turn	Speaker	Talk
75	DR4	<i>okay.uncle seka[rang ni]</i> okay, right now
76	P6	[angkat,] angkat ubat lu- dulu Take, take medicine first
77	DR4	<i>Uncle sekarang ni tak nak, tak nak in- injection ke</i> Uncle, right now you don't want, don't want injection, right?
78	P6	[ <i>ta tau</i> ] don't know
79	DR4	[ <i>tak nak</i> ]insulin don't want insulin?
80	P6	[ <i>ta tau</i> ] don't know
81	DR4	[ <i>kenapa</i> ] <i>tak nak insulin?</i> why don't you want insulin? (0.48)
82	P6	> <i>ta tau</i> < don't know
83	DR4	<i>tak tau. kenapa tak nak insulin?</i> don't know. why don't you want insulin? (0.685)
84	P6	<i>ta' tau lah.</i> don't know lah. (0.462)
85	DR4	<i>tak tau, kenapa. uncle rasa takut dengan jarum ke::.</i> don't know, why. are you scared of needles? (0.86)

In turn 76, P6 pre-empts DR4's re-initiation of talk by requesting to pick up his regular medications, indirectly refusing insulin. DR4 then attempts to confirm P6's perspective with a formulation of his choice (77), repeating this (79) upon receiving P6's "don't know" response, which neither confirms nor denies having fears. While such responses technically answer the question, they serve to halt the progressivity of interaction (Stivers & Robinson, 2006) thereby resist the agenda of the talk. This pattern continues over several turns, with DR4's repeated elicitations meeting P6's resisting responses. DR4's account solicitations (81, 83) show her orientation to P6's responses as indicating his refusal of insulin, while also imposing an obligation on the patient to account for this refusal. In response, P6 continues resisting participation with "don't know" responses (82, 84), adding an emphatic "lah" which conveys an oppositional stance. Nevertheless, DR4 continues to elicit P6's perspective, this time offering a candidate reason, that P6 is scared of needles, which is also met with silence.

The three excerpts shown in this sub-section exemplify doctors' attempts to elicit disclosures from patients with enquiries that presuppose affective reasons for their resistance to insulin. The patients' denial (Excerpts 6.5 and 6.6) or withheld participation (Excerpt 6.7) support their refusal of insulin, albeit indirectly.

#### **6.2.1.2 Epistemic Questions: Negotiating Knowledge and Choice**

Since doctors must ensure that patients are making informed decisions, patient knowledge is a focal theme in the doctors' talk during treatment negotiation, as shown in the following excerpts. Doctors use epistemic enquiries and information delivery not only to ensure that patients are making an informed choice, but also to forward their treatment recommendation by challenging the patient's perspective. In response, patients construct their preference as "informed" by claiming or displaying their epistemic status.



(a) *Contrasting Medical Evidence against Patient Perspectives*

In Chapter 4, we have seen how doctors draw on medical evidence, such as the patient's high blood sugar, to support their recommendations in the Assessment phase. During treatment negotiations, justification of the recommendation is not always explicit. The two excerpts that follow show how the doctors challenge the patient's treatment choice by presenting evidence which contradicts the patient's claims, and then eliciting their perspective. These excerpts from Consultations B8 and C11 occur after the talk on patient concerns (shown previously).

In Excerpt 6.8 the doctor initiates PDA talk, asking if P7 has read it. Receiving P7's affirmative response, the doctor confirms P7's preference for traditional Indian medicine (204), the word "still" in her question presenting a contrast between the patient's knowledge and her treatment choice.

**Excerpt 6.8: From this Sugar Level**

Turn	Speaker	Talk
202	DR5	so u.m, have you read about ↑this? your , a[: ]
203	P7	[y:]a:p
204	DR5	<b>okay. .h you feel that you want (.) to still try the ayurvedic?</b>
205	P7	y:as, m::h
206	DR5	o::hm-[kay ]
207	P7	[goi]ng on with it.
208	DR5	so it means you feel that you (.) you feel that ayurvedic can help you
209	P7	yah can <help me>
210	DR5	<b>&gt;okay&lt; from this sugar level nineteen point nine, do you feel that it's helping you?</b>
211	P7	you can see me in the £next appointment£, =whe[ther it's help]inghh me or not [hh hh]
212	DR5	[oka:y alri:ght] [ fine ]
213	P7	=[hh hh] ((laughing))
214	DR5	=[fi:ne ] (0.30)

After P7's confirmation, DR5 elicits her perspectives about her preferred treatment, with a formulation that elicits P7's views about whether traditional medicine can help her (208). P7 again gives the required confirmation, which supports her treatment choice (209). In the following turn, DR5 makes a perspective display enquiry eliciting P7's

opinion on the efficacy of *ayurvedic* medication, but this time foregrounds the patient's high sugar level in her question (210). Although phrased as a yes/no question, it can be deduced that DR5's enquiry does not seek information but fulfils a rhetorical purpose. P7's extremely high sugar level contradicts the assessment of *ayurvedic* medicine as effective, precluding an affirmative response. Yet, a negative response would contradict P7's choice of *ayurvedic* medicine over insulin. Presented with this conflict, P7 avoids giving a yes/no response and challenges the doctor to defer her judgement until the next consultation. The "smiley" voice (indicated by £) and laugh particles in the patient's talk indicate that this might be a delicate, or potentially face-threatening, situation. In 214, the doctor accepts this response.

The next excerpt is from Consultation C11, in which P8 has earlier stated that she wants to control her sugar level with diet and exercise. The talk begins with a discussion of P8's recent blood sugar results. In turns 94-96, DR6 problematizes P8's blood sugar level, while confirming P8's awareness of this (94-*You know nine is also not good right?*). P8's responding affirmation (97-*yes, yes*) is followed by an explicit epistemic claim (97-*I know*), further upgraded by an epistemic display in her citing of blood sugar targets. Having determined that this last test was taken three months ago in November (lines omitted), the doctor proposes that the patient's blood sugar has not changed much since then (105), eliciting P8's minimal agreement with a tag question "isn't it?".

In 106, DR6 makes a perspective-display invitation, eliciting P8's opinion about the details which have been established about her blood sugar. Because her previous statement implicitly challenges P8's preference to continue with diet and exercise by implying that this has not worked so far, DR6's perspective-display invitation presents a challenge to P8 in responding. Rather than address the question, P8's response is to refuse insulin (108), which shows that she orients to DR6's question as furthering the treatment

recommendation. Moreover, her contrastive “but” (108) acknowledges that her refusal of insulin contradicts the statements in the previous turns.

### Excerpt 6.9: Tsk, So what do you think about this

Turn	Speaker	Talk
93	P8	last reading, <u>nine</u> , ah,
94	DR6	<u>ni:ne a:h</u> . you know [ <u>nine</u> ]=
95	P8	[ <u>nine</u> ]
96	DR6	=is also not good <u>ri[:ghɪ?</u> ]
97	p8	[>yes ]yes<, I know it should be seven or six (lines omitted)
105	DR6	<b>so, that means it's about, even (.) if I see you from November until now oso is: (0.45) is still around that, isn't [it ]</b>
106	P8	((nods)) [M:h,] M:h, hm
107	DR6	<b>okay (0.27) hm::h, tsk, so what do you think about this.</b>
108	P8	but I don't want insulin now.
109	DR6	<u>h:mh</u>
110	P8	I'm very <u>strict</u> ((gestures with head)) in that. ((puts elbow on doctor's table & covers mouth with hand)).
111	DR6	you very strict in that. >Is soka:y, is soka:y No problem,
112	DR6	so ((opens PDA)) ↑how how you find about the booklet (0.33) you find the booklet useful for you.
113	P8	ye:s, yes but I already told my children already
114	DR6	<u>o::h ho:</u>
115	P8	m:h, I won't

With only a minimal response from the doctor (109) indicating lack of uptake, P8 upgrades her assertion stating that she is very strict about her choice. In turn 111, DR6 accepts the patient's choice with reassurances (111-*it's okay, no problem*) and then changes topic to discuss the PDA, eliciting P8's opinion on its usefulness (112). P8's response, a hurried agreement, followed by “I already told my children, I won't”, responds to the previous turns, by further upgrading her refusal of insulin. By describing the treatment decision as finalised and delivered to family members who may have their own deontic rights in the decision, P8 minimises her deontic rights over the decision and therefore, her ability to accept the doctor's recommendation.

The two excerpts in this sub-section show how the doctors indirectly challenge the patients' perspectives, by contrasting them against evidence, namely, the patients' high blood sugar. Although the doctors elicit the patients' perspectives, the patients are unable

to respond to the questions without contradicting either their treatment preference or the evidence presented. This leads P7 to defer her response, while P8 asserts her treatment choice. Moreover, P7's laughter and P8's upgrading of her treatment choice indicate that they may orient to the doctors' talk as pressure to accept insulin.

(b) ***Facilitating Informed Decision Making***

Compared to their epistemic enquiries about the PDA in initial talk, the doctors engage more thoroughly with the patients' knowledge during treatment negotiation. However, these knowledge-focused turns are concerned not only with information delivery but also with supporting the doctor's perspective. For example, in checking whether patients know about complications of high sugar, they invoke the medical justification for recommending insulin. Moreover, the doctors foreground patients' knowledge in formulations of patient choice, implying that these are contradictory. In response, the patients assert their epistemic status to portray their treatment choice as informed. The two excerpts show how information is managed during information delivery with the PDA, as well as with a patient who has already read the PDA.

Excerpt 6.10 shows the doctor and patient discussing the PDA content on complications, with the patient demonstrating her knowledge, after which the doctor elicits the patient's choice by contrasting it against the information just discussed. In turn 307, DR5 makes an epistemic display enquiry, asking P7 to list the potential complications of high sugar, beginning with those affecting the head. P7 then displays her knowledge by mentioning headaches (308), to which DR5 adds the more serious risk of "strokes". Similar exchanges of epistemic displays from P7 and information delivery from DR5 occur (omitted) as they discuss the complications, reaching the lower extremities in turn 330, when DR5 prompts P7 to describe potential complications

affecting the feet. With no turn taken by P7, DR5 provides the answer in 331 (*numbness*), which P7 echoes before mentioning another complication.

### Excerpt 6.10: What will happen

Turn	Speaker	Talk
307	DR5	some a- how about? = Okay. We start from your head. Okay what will happen to you: r from (0.98) <i>atas, daripada atas</i> , ((from the top)) what will happen if your sugar level is high (1.30)
308	P7	I'll get headaches and a:ll, =
309	DR5	=you can get ↑stroke (0.81)
310	P7	ya: ((further exchange omitted))
330	DR5	=and what happen if a:: there is a:: (0.71) pain, a no, whatever: r a:: your foot. (1.14)
331	DR5	your foot will- you feel a bit slightly numbness right. There's feel [numbness. ]
332	P7	[there'll be] numbne:[:s: ] =
333	DR5	[ha::.]
334	P7	=burning sensatio[ :n.]
335	DR5	[ye:]:s. Pain claudicatio:n you = =[told me you're] =
336	P7	[er ↑herh ↑hh ]((laughs))
337	DR5	having cramping on your l-, those are the things that what will happen when your sugar level is not er contro:lled. .h and if there is any luka, if any: a:[wound there?]
338	P7	[yiah cuts ] and wounds n- not giving [healed.]
339	DR5	[ In::] y:es ih [I think you are bri]lliant lah,
340	P7	[but touch wood, I ]
341	DR5	I think I'm I'm tal[king to a ]
342	P7	[but ↑thhouch] whhood is not hh any = =[cuts ] also it's healed up
343	DR5	[hm:: ] (0.66)
344	DR5	tak [payah beritahu you tau dah ha: a lot] = <i>no need to tell you, you already know a lot</i>
345	P7	[£there is a God£ hh ↑herh hh ]hh h]
346	DR5	=of things so:::, (0.97)
347	DR5	<b>after a- knowing all this thing, you want to wait for another one month, not [taking our medication] ↑yet?</b>
348	P7	[ya: I (.) because ]
349	P7	because I have to obey my son. otherwise he will ghet hh hh ((laughs))
350	DR5	okay. you have to ask your son. okay.

DR5 then refers to the symptoms which P7 has complained about earlier, a form of evidentiality, which links P7's current condition to the complications being discussed. In

338, P7 completes the doctor's conditional clause (338-*If any wound there*), describing the potential complication of slow healing wounds. Here, DR5 responds to P7's epistemic display with an explicit assessment of her knowledge, calling her "brilliant". DR5 continues to positively assess P7's knowledge, which casts her as being informed. However, P7 continues speaking about wound-healing, emphasising that all her cuts have healed well. This self-presentation contradicts the doctor's earlier reference to her cramping symptoms by highlighting what is healthy about her condition rather than what is unhealthy, thereby distancing her condition from the complications being discussed.

Several turns pass as doctor and patient talk at cross purposes (339-343), before DR5 engages with the patient's treatment choice, foregrounding P7's knowledge of complications in her formulation of the patient's choice (347-*So after knowing all this, you want to wait for another month*). This implies a contradiction between P7's knowledge and treatment choice, which P7 orients to by offering an account instead of a simple affirmation, indicating that her choice is somewhat problematic and must be accounted for (Cody & Braaten, 1992). She invokes deontic aspects of the decision by referring to her son who she has to "obey". By transferring her deontic rights to her son, P7 avoids the disaffiliative act of rejecting the doctor's recommendation while her incomplete statement and accompanying laughter mark the talk as delicate (349-*Otherwise he will get hh hh*). In accepting P7's account, D5 acknowledges the patient's familial obligation and reduced deontics in the decision (350).

In the next excerpt (Excerpt 6.11), from Consultation C11, doctor and patient talk about the PDA, but do not go through its contents, as DR6 has confirmed earlier that P8 has read it. Continuing from P8's assertion that she is strict about not wanting insulin (shown in Excerpt 6.9), DR6 brings up the PDA (120).

### Excerpt 6.11: So you understand

Turn	Speaker	Talk
120	DR6	((looking through PDA) O:h <u>so</u> , you understand all this about insu[lin <u>things</u> ]=
121	P8	[M::h h::m ] Yes
122	DR6	=your sugar <u>things</u> and all this things <u>la</u> :
123	P8	m::, m:::
124	DR6	<b>okay so you:, you still feel that, you still feel that [you don't want insulin] la</b>
125	P8	[yes, I get, ah, yes, yes ]
126	DR6	<u>hm</u> .hh ok- I, I <u>think</u> I er, talked to you about this, er, the: side- e:r, the complication that means the [(.) ]=
127	P8	[Mh: ]
128	DR6	=what insu- what er, high sugar will cause you right?
129	P8	<b>yes yes ↑yes ↑you ↑also have my book&lt; [a:ah]</b>
130	DR6	[Ya ]=
131	P8	= so you <u>know</u> [aware about <u>this?</u> ]= [>Yes, yes, ye:s< ]
132	DR6	[ye:s ] [okay] <u>so</u> you know what will make you about= =[(causing a stro]:ke,
133	P8	= [yes, yes, ye:s ] = (0.45)
134	P8	=stroke, (0.51) e:r, kidney problem nerve [problem]=
135	DR6	[m::m, ]
136	P8	=everything I wrote

DR6 begins inquiring into P8's understanding of the PDA contents (121), "insulin things", "sugar things" and "all this things" (120,122). After P8 confirms her comprehension, DR6's next turn seeks to confirm P8's preference, which has already been expressed several times (124-...*you still feel that you don't want insulin*). The repetition of "still feel" contrasts the patient's perspective against her knowledge of the complications discussed in the previous turn. P8's overlapping response is a string of affirmations, asserting her knowledge, or her choice, or perhaps both. As DR6 continues discussing complications or "what high sugar will cause you", P8's outbreath (127), rising intonation and repetition (129), which may indicate affect, or emotion, intensify her repeated epistemic claims (129). She supports this by referring to her PDA which DR6 is holding (129) as the doctor continues to question her (131, 133). P6 then displays her knowledge by listing complications such as stroke and kidney problems (134) and mentioning the notes she has made in the PDA (136-*everything I wrote*), to support her

epistemic claims and present her preference to continue with diet and exercise as an informed choice.

The previous sections have highlighted two salient types of question-answer sequences in treatment negotiations, affective enquiries and epistemic enquiries. While these enquiries can be said elicit patient concerns, and check and manage patient knowledge, respectively, the excerpts have also shown how these questions serve to support the doctors' treatment recommendation, with patients asserting their choice in different ways. While the negotiation discussed so far is largely doctor-driven, another pattern of negotiation observed in the data is that of doctor-patient accounts, which will be described in the next section.

## **6.2.2 Accounts in Treatment Negotiations**

In the excerpts discussed so far, patients have resisted insulin but have not elaborated much about their reasons for doing so. However, patient accounts were also observed in the data, particularly in Consultations A2 and A3, in which patients offered several accounts to support their preference not to start insulin. These accounts were relatively self-initiated, in that doctor did repeatedly elicit them; therefore, negotiations of this type involve the patient presenting accounts while the doctor responds with information delivery or assurance (see Excerpt 6.12). The following sub-sections will discuss participants' use of health and life-world accounts.

### **6.2.2.1 Health Accounts**

Health and medicine is considered the doctors' domain of expertise, but as shown in the following excerpts, both the doctor and the patients draw on health-related knowledge and evidence to support their preferred treatment option. While the patients seek to normalise their conditions, implying that insulin is not necessary, the doctor problematises the patient's current condition.



(a) *Positive Self-Assessments*

In the initial talk on treatment in Consultation A3, as shown in Section 5.1.1, the patient responds to the doctor's PDA questions by negatively assessing the PDA before presenting the view that insulin and lifestyle control "don't go together". In the following excerpt (Excerpt 6.12), the patient continues to account for his stance against insulin, drawing on various rhetorical and interactional resources to create an account which discounts the need for insulin.

**Excerpt 6.12: I'm at the borderline**

Turn	Speaker	Talk
034	P3	that's <u>o:ne</u> (0.93) and er the <u>ne:w</u> blood test just taken last <u>week</u> , (0.66) showed that I'm at the border line.
035	DR2	right
036	P3	off e:r contro:l e:r diabetic.
037	DR2	right
038	P3	so, at the moment, I cannot make a decision to go for insulin or <u>not</u> ,
039	DR2	right
040	P3	<u>e:r so: even in this booklet</u> , (0.86) they show a guideline <u>where my: (0.67) sugar glucose level, is at the border-line</u> [as ]as <u>well</u>
041	DR2	[right]
042	DR2	right
043	P3	erh <u>so:</u> if I were to decide <u>no::w</u> (0.56) I will not use it, at the moment <u>lah</u> .
044	DR2	o:right, (lines omitted)
051	P3	= but so <u>far</u> , my <u>kidney</u> , e:r (0.56) and my <u>eyesight</u> e:r (0.81) >they are still <u>good</u> <
052	DR2	o[kay]
053	P3	[ be]cause even e:r the doctor from e:r (0.47) Tun Husei:n:
054	DR2	m:-hmh?
055	P3	Tun Huseinn Omn Eye Clinic, say I am okayh,
056	DR2	m:h
057	P3	a:nd for my <u>age</u> , for my age I'm okay
058	DR2	okay,

In turn 34, P3 supports his account of being on the "borderline" (see 5.1.1), rather than being poorly controlled, by citing a recent blood test (034). He then postpones the decision to start insulin (038), an indirect refusal. The doctor offers neither counter arguments nor affirmation, contributing only unmarked acknowledgements tokens (35, 39, 42). P3 strengthens his account further by referring to the PDA ("even in this booklet")

040), followed by more explicit statement of his choice (“*I will not use.*”). The references to the PDA and blood test results, both authoritative sources from the doctor’s domain, support P3’s claim of being on the borderline. His decision talk, however, is phrased indirectly, framed with temporal phrases such as “at the moment” and “if I were to decide now”, that leave future decisions open. This tentative decision talk continues in the same manner (omitted) with the doctor continuing to respond minimally. Perhaps because the doctor does not take up any turns, P3 then introduces a second point to support his positive self-assessment, that his organs are healthy (51).

In assessing his kidneys as “still good”, P3 refers to the side-effects of oral diabetes medication, which at prolonged high dosage can cause kidney damage, thereby requiring patients to switch to insulin, while his reference to his eyesight relates to the complications of high sugar, which can cause glaucoma and other eye issues. These claims are further upgraded by P3’s reference to the opinion of a specialist at a renowned eye hospital, paraphrasing a positive, albeit qualified, assessment of his health as “okay” (53, 55).

Similarly, the following excerpt shows how a patient presents her sugar control as normal, as an account against starting insulin. Excerpt 6.13 starts with P2 explaining that her blood sugar is “very good” during the Muslim fasting month of Ramadhan (150-152).

DR2 does not disagree with her statement, responding with a “yes” that ends with rising intonation, which invites P2 to continue (154). P2 then emphasises the positive aspects of her sugar control, stating that when she controls her diet, her sugar is eight or nine, and prefacing this with a “well, yeah”, which seems to concede that this number may not be optimal (157). However, she continues with an assessment of her sugar level as “normal”, inviting DR2’s agreement with the Malay particle “kan”, that functions as a

tag question, and offers an even lower sugar level of seven, which increases her chances of gaining DR2's agreement (157).

### Excerpt 6.13: Eight, nine, that's normal

Turn	Speaker	Talk
150	P2	<i>h:m. &gt;Tu sebab&lt; I cakap dengan you dulu kan?</i> em, that's why, I told you before, right?
151	DR2	ah
152	P2	<i>bila bulan puasa, I [pun]ya tu very good</i> during fasting month, my that is very good
153	DR2	[mh]
154	DR2	ye:s?
155	P2	<i>a: le[pas ] tu, bila: I: control I punya makan=</i> rhen, when I control my food
156	DR2	[mmh]
157	P2	<b>=&gt;ya lah&lt; lapan, sembilan tu, biasa lah kan? atau pun tujuh</b> <b>yes lah, eight,nine,that's normal lah right? or seven</b>
158	DR2	<b>tak bia[sa ],=</b> <b>not normal</b>
159	P2	[yieh]? yes?
160	DR2	=fasting should be: <u>six</u> , five and six
161	P2	<i>but, bila I tanya opinion kawan-kawan lain e-doktor lain,lah</i> but when I ask the option of other friends, er other doctors lah
162	DR2	a[:h?]
163	P2	[dia] ka- a:h,dia kata kalau: m-like, my age he sa- ah, he said if m- like, my age
164	DR2	[m:h?]
165	P2	[if ] (.).six[ty:], dia kata kalau spuluh tu, o↑ <u>kay</u> if sixty, he said if ten it's okay
166	DR2	[a:h]
167	DR2	<↑ <i>tak,nanti I tun[juk you] guideline</i> no, later I'll show you the guideline.
168	P2	[tak okay]. not okay
169	DR2	<i>tak okay heh heh he: ((laughing))</i> not okay heh heh he
170	P2	ah he ((laugh)) No I I just [let ]=
171	DR2	[a:h]
172	P2	=you know lah [ be ]cause sapa yang,apa yang I tau lah kan? you know lah because who, what I know lah right?
173	DR2	[a:h]
174	DR2	a:h

However, DR2 explicitly disagrees with P2's assessment, stating that the normal fasting sugar level is five or six. In response to DR2's disagreement, P2 upgrades her assessment by citing an "authoritative" source, recruiting the opinion of a friend who is doctor to support her assessment of her own sugar level as normal, and adding a qualifier

(her age) (161-165). In response, DR2 also upgrades her disagreement, stating that she will show P2 the “guidelines” (167), as a form of evidence. The doctor’s laughter indicates the potential face threat in this exchange (169), which P2 mitigates by qualifying and downgrading her earlier claim (170-172-*No I, I just let you know because, who what I know*). The dysfluencies which accompany her talk indicate hesitation and could be due to delicate situation of disagreeing with the doctor’s assessment of her blood sugar.

(b) *Medical Justifications*

In contrast with patient’s positive representations of their health, doctors’ medical accounts foreground the “problematic” aspect of the patient’s health. The following excerpts show how the doctor responds with information delivery sequences that contradict the patients’ accounts, by listing the complications of high sugar and linking these to the patient’s current sugar control.

Excerpt 6.14 begins after P3 has put forward several points to account for not wanting to start insulin (see previous section). With neither counter arguments nor acceptance forthcoming from DR2, P3 begins to close his extended account, using a summary marker (*Basically*) to rephrase and account for his perspective (67). He rephrases his statement that he is “not ready”, replacing the affective adjective with a health-related one, that his diabetes is currently controlled. Using “should not”, P3 presents his decision not to start insulin as a recommended action based on his current health, qualifying this with “at the moment”.

After the doctor’s minimal response and a short silence, P3 expands on his previous turn (69), further qualifying his decision, which shows that he may be orienting to the doctor’s withheld participation as disagreement. His listing of future conditions in which he would consider insulin also serves to mitigate his rejection of the treatment recommendation (69-70). The doctor still does not take up any turns, contributing only

continuers before P3 extends his account. However, the silences after the doctor’s turns are increasing in length (68, 71,72), indicating that P3 may be allowing DR2 an opportunity to step in and take the next turn. When this does not happen after a lengthy silence (2.77 seconds), P3 explicitly indicates that he is ending his turn and handing the floor to DR2 (73-*that is my comment...after reading the book*). This brings to a close P3’s extended response to DR2’s PDA question.

#### Excerpt 6.14: To answer your question

Turn	Speaker	Talk
67	P3	<b>ah, so: basically:, I’m not ready lah ah that’s (1.56) or I should not take it at the moment lah when I can still control it lah.</b>
68	DR2	right (1.38)
69	P3	but if become erratic, and I still, I cannot control within my: h a:h knowledge ah? or with a doc- with doctor’s <u>advice</u> , I still cannot control?
70	DR2	ya:h?
71	P3	then definitely I will consider it (1.89)
72	DR2	right (2.77)
73	P3	kay, that is my:: e:r this one <u>nah</u> , my comment on (.) after reading this <u>↑book</u> h
74	DR2	<b>okay. to answer your question what happens if the blood sugar stays hi::gh?</b>
75	P3	m-hmh
76	DR2	a: ith will: go to your e:yes, [and ] then=
77	P3	[M:h]
78	DR2	=it will cause a: either blurring of vision [or ] it will .h encourage e:r new vessel <u>formation</u> . =
79	P3	[Mmh]
80	P3	m[ hmh]
81	DR2	[then] these new vessel are not stable and they can <u>bleed</u>
82	P3	m-[hmh ]
83	DR2	[yea?] <b>so when they <u>bleed</u>, a: then the eyes can become blind [that’s one] thing,</b>
84	P3	[ya, ya ]

After a minimal acknowledgment (“*Okay*”), DR2 begins listing the potential effects of high blood sugar in turn 74, making use of an *if-then* structure, which is common in advice delivery (Shaw, Potter, & Hepburn, 2015). While this is framed as a response to a question P3 raised about the PDA (see Excerpt 5.3, 5.1.2.1) it also supports the treatment

recommendation, by presenting potentially negative consequences of high sugar, including the “extreme” or “worst-case scenario” of blindness (76-83). DR2’s presentation of these negative future events, which includes the use of extreme-case formulations, depicts the patient’s current condition as problematic (Pilnick & Coleman, 2003), contradicting his positive self-assessment.

Excerpt 6.15 continues from the previous excerpt, as the doctor continues listing the complications of high blood sugar, moving from the eyes to other organs (not shown) and ending the information delivery sequence with the “worst-case” effects to the heart and kidney (97, 99). She then presents an account for her recommendation, referring to the patient’s records as support (99).

**Excerpt 6.15: The fasting is high**

Turn	Speaker	Talk
97	DR2	=heart <u>attack</u> (0.69)Then they al-can also: the damage the <u>sma:ll</u> vessels in the kidne:ys, and then [they can] cause er=
98	P3	[M-hm ]
99	DR2	chronic kidney failure .hh <b>the reason I want to ask you to conside::r insulin is becau:se, .h for um I've l- looked through the records and I've found [that]=</b>
100	P3	[Yep ]
101	DR2	= <b>on <u>three occasio:ns</u> [your fast]ing sugar=</b>
102	P3	[Ya: correct ]
103	DR2	= <b>was about nine point something</b>
104	P3	correct
105	DR2	we normally like to keep our fasting blood sugar between five to <u>six</u>
106	P2	ye:p
107	DR2	and e:rm even though the haemoglobin is norma- haemoglobin A1C is considered s- er borderli:ne,
108	P3	m::h
109	D3	u::m it means that you:r .h your <u>food</u> intake is good(0.47) Yer? That means you are the: it is within the control limits .h ya:?
110	P3	[m:h]
111	DR2	[the ] fasting is <u>high</u> , is <u>because</u> at <u>night</u> ,you may have a:h over eaten, which you do <u>not</u> need the <u>food</u> ,

The doctor's recommendation is tentatively phrased, resembling a request (99-*the reason I want to ask you to consider insulin*), which orients to the patient's primary deontic rights. She goes on to support her recommendation by referring to the patient's records (101, 103), contrasting his sugar level of nine against the benchmark range of five to six, and invoking medical authority with the pronoun "we" (105). This high fasting sugar is contrasted against the patient's HbA1c results, which she acknowledges is on the borderline, making a noteworthy rephrase from "normal" (107). The medical justification provided by the doctor in these turns not only supports her recommendation, but also contradicts P3's account that his sugar control is on the borderline by bringing up another measure of sugar, fasting sugar level.

In the information delivery sequence in Excerpt 6.16, DR2 makes use of evidentiality devices, if-then and worst case formulations, and benchmarking, in addition to foregrounding her concessionary actions, which depict her as being cooperative with the patient's perspective. This excerpt from Consultation A2, shows DR2 continuing to disagree with P2's positive assessment of her sugar level of seven to nine (see Excerpt 6.14). She invokes an authoritative source as evidence (126-*the government says, (it) must be five, four point four to six*) but presents the concessionary benchmark of six as acceptable for the patient's age group.

In the following turns, DR2 elaborates on these targets, explaining the targeted fasting sugar and post-meal sugar levels as P2 makes minimal acknowledgement tokens (e.g. 127, 129). In 130, after stating that post-meal sugar level should not exceed eight, DR2 gives another concession to the benchmark, stating that P2 can aim for less than ten. By using the phrase "I give you leeway", DR2 invokes her professional authority for adapting the benchmark and foregrounds the concessions made for the patient, before cautioning the patient that ten is not an acceptable sugar level. This refers to P2's earlier turn, which

offered the opinion of a doctor friend that ten was “okay” for someone her age (previous excerpt). Although DR2 has already disagreed with this, she provides further evidence, listing all the complications that can result from a sugar level of ten (130). Using the definitive “will”, rather than a weaker modal such as “can” or “may”, DR2 presents these negative effects as a given future event, using colloquial language to describe the worst-case scenario of organs being “conked out” (132).

### Excerpt 6.16: Before you know it

Turn	Speaker	Talk
126	DR2	<i>they're not e- kerajaan kata, kena lima:,empat point empat hingga enam. tapi I tengok kalau orang tu macam, ah, older kan, macam you? Er- six pun, I dah okay 'ready they're not, er the government says must be five, four point four to six. but I consider, if the person is like, er older right, like you? er-even six,I'm okay already.</i>
127	P2	erh [her]
128	DR2	[to ] <i>me six, her ah, six alright 'ready kalau dah fasting to me, six, er, six is alright already. if fasting</i>
129	P2	m::h
130	DR2	<i>lepas makan, tak boleh lebih daripada lapan kalo you&lt;less than ten pun it's okay jugak . (0.33) I bagi leeway jugak tapi for fasting to be ten, it's(.) memang tak boleh =dia akan rosak mata You, dia akan rosak jantung you, [dia akan] rosak kidney you. after meals, it can't be more than eight. for you, less than ten even is okay also I give you leeway also but for fasting to be ten, it definitely can't be. it will spoil your eyes, it will spoil your heart it will spoil your kidney</i>
131	P2	[mm hm ]
132	DR2	<b>before you know it, all the organs conked out</b>
133	P2	m:[hm]
134	DR2	[if ] <i>you keep on having te:n, macen tu, fasting for ten .hh if you keep on having around ten, fasting of ten (0.44)</i>
135	P2	o[kay]
136	DR2	[a::], <i>sebab dia oghang dah buat study, because they've done a study</i>

Since P2 has described her fasting sugar level of seven to nine as “normal”, and this too when she controls her diet, the doctor’s statements not only contradict her positive self-assessment but also project the complications as likely outcomes of her current sugar levels. With P2 already taking oral medications at a high dose, these medical justifications support the doctor’s recommendation that she should start insulin.



### 6.2.2.2 Life-world Accounts

Patient-centred care emphasises the inclusion of patients’ non-medical concerns in the treatment decision making process. As insulin involves a different, and considerably more daunting mode of delivery than oral medication, adapting insulin therapy into daily life is a common concern for patients. The following excerpts show how doctors and patients utilise life-world accounts to foreground positive or negative aspects of insulin.

#### Excerpt 6.17: I’ve experienced twice

Turn	Speaker	Talk
180	P3	otherwise, if I’m used to it, (0.39) then my life is (1.08) er <u>routine</u> , (0.39) and I know what I’m (being) (0.25), day-to-day, (0.67) ah, then I <u>think</u> I may consider <u>lah</u> . <b>If, at the same time, if there’s a effect, (0.32) side effect, (0.69) on my existing e:r, condition,(.) on my eyes kidney or prostate</b>
181	DR2	hmh (0.93)
182	P3	so <u>that</u> , that is my opinion nah,(.) at the moment
183	DR2	<b>okay .h I agree with you. but er, when <u>we</u> give- when <u>you</u> start on insulin, <u>you’re</u> not alone, [ .h] we will give you a:: a=</b>
184	P3	[Mh]
185	DR2	=pamphle:(t), we give you the dex- strostix for you to test your sugar,
186	P3	m-hm
187	DR2	and then a: we wi:ll a:: educate you on the use of the insulin. There is e::r there is e:r what d’you call e::r .h label or a chart to show, if your sugar is this amount this amount, you don’t <u>inject</u> . (lines omitted as DR2 elaborates)
190	P3	<b>what, a- e:r (.) my: my: e::r (1.95) wh- what I’m e::r, this o:ne,</b>
191	DR2	wor↑ried
192	P3	particularly worried <u>now</u> ,=
193	DR2	a:h
194	P3	<b>=is that (0.48) I’ve experienced <u>twice</u> (1.05) where (0.35) I over controlled myself (0.79) e::r</b>
195	DR2	and you went into hypo.
196	P3	nearly leh=
197	DR2	=nearly went into [ hy]po
198	P3	[Ya]
199	P3	I nearly because,er morning after breakfast, I take my pill, <at that time I was using only five hundred ((continues narrative))

Excerpt 6.17 shows P3 concluding a life-world account, which emphasises the incompatibility of insulin with his present busy and unpredictable lifestyle (180). This “inability to comply” account mitigates his refusal of insulin as something outside his

control (Ekberg & LeCouteur, 2015). Also, by stating life-world and health conditions in which he would consider starting insulin, P3 indirectly rejects insulin as these hypothetical conditions contradict his present reality. In 183, DR2 acknowledges P3's perspective with an agreement, before responding to his life-world concerns with assurance of support, following this with descriptions of tools and materials which help patients learn how to administer insulin (183, 185, 187).

Following DR2's explanation, P3 initiates another account disclosing his concerns about hypoglycaemia or low sugar, which is a common side-effect of insulin (190). Emphasising his experience of "over-control" supports P3's concerns as valid by citing occasions when he had "over-controlled" his sugar, in a turn marked by pauses (194) and preceded by dysfluencies (190-*What a- e:r, (.) m: my: e::r*). In 199, P3 begins a narrative account of a "hypo" episode he has experienced. During P3's disclosure of his experience and concerns, the doctor's collaborative turns display her orientation to the patient's perspective (191, 195, 197). In addition, by offering phrases to complete P3 turns, DR2 displays knowledge of hypo episodes, casting them as expected occurrences. After P3 completes his account (not shown), the doctor responds with assurances of support, similar to those in 183-187. These assurances act to address P2's concerns and mitigate his account by offering a solution.

The next excerpt (Excerpt 6.18) shows the doctor drawing on the patient's life-world concerns and building them into an account for insulin. In response to DR2's elicitation of her concerns (160), P2 accounts for her high sugar, attributing it to her occasional consumption of sweetened coffee (161-164). DR2 contrasts P2's current issue against a potential benefit of insulin using an if-then structure, stating that P2 could enjoy her favourite beverage if she starts insulin (165). She repeats her statement (167) after P2 shows interest (*Oh yeah-166*).

In 167, DR2 qualifies her statement cautioning P2 against excessive consumption. She continues making a case for insulin, using an if not-then clause to highlight the unfavourable conditions (dietary restrictions) the patient currently faces as a consequence of not being on insulin (167, 169).

**Excerpt 6.18: You can drink that**

Turn	Speaker	Talk
160	DR2	<i>ape:, ape lagi you punye: <u>issues</u>, a::h erh her herh [herh]((laughing))</i> <b>what, what else are your issues, erh ((laughter))</b>
161	P2	[the ] <i>issues dia, ya lah <u>tulah</u> kata, kadang [bi]la I minum ai:r tu=</i> the issues, well, yeah like I said, sometimes when I drink that drink
162	DR2	[a:]
163	P2	= <i>dia tinggi: bila I er minum especially with Nescafé, [kan?] A:h?</i> it's high. when I er drink especially Nescafé, right?
164	DR2	[tapi ]= but
165	DR2	= <i>kalau you bagi injection, you boleh minum air tu</i> <b>if you do the injections, you can drink that beverage</b>
166	P2	<i>o ye::</i> oh yeah
167	DR2	<i>a:h. if you're on injection insulin, then then you can drink that- that- tapi jangan berlebih-lebihan la:h=</i> yes. if you're on insulin injections, then then you can drink that- that but not too excessively lah
168	P2	= <i>e:h, tak de [lah ]</i> eh, of course not
169	DR2	[a:h ], <i>in moderation lah (.)kalau you: ape? kalau you tak ah, on insu↓li:n, banyak restriction=</i> yes, in moderation lah <b>if you, er, if you aren't er, on insulin, there are many restrictions</b>

By invoking the life-world benefits of insulin, the doctor's account contrasts against her more typical medical accounts for insulin as a way to minimise risk (Excerpts 6.15, 6.16). This demonstrates her orientation to the challenges patients face in managing insulin, which requires increasing restriction of diet as the disease progresses and oral medications become less effective

**6.2.3 Section Summary**

Section 6.2 has discussed two patterns in negotiations about starting insulin: doctor-led question and answer sequences and patient-led account-response sequences. The first

section has shown how doctors use affective and epistemic enquiries to elicit patient's concerns, check their knowledge and confirm patients' perspectives and choice with patients who resist insulin. While these questions do not explicitly support the treatment recommendation, they do so implicitly by continuing the talk on insulin and withholding acceptance of the patient's disclosed choice for another treatment option.

In response, patients support their alternative treatment choice, not only with explicit expressions of their preferred treatment or refusal of insulin but also by utilising various discursive and interactional resources to resist the doctor's agenda. P6 who is less participative halts the doctors' talk on insulin by withholding his participation with silence, postponements and "don't know" responses, while P7 and P8 support their alternate treatment choice by portraying their decision as informed and not due to fears about injecting.

In the second section, the patients present successive accounts against insulin, which the doctor responds to with contrasting information, both drawing on various rhetorical and discursive devices in their health and life-world accounts. As neither party concedes the other's perspective, the patient's continued initiation of new accounts prevents the closure of decision making.

The disaffiliation caused by the participants' opposing views is problematic, given the preference for progressivity and affiliation in talk, bringing with it the potential of face-threatening acts. Orienting to this, various discursive practices are used to perform actions indirectly, not only in the patients' indirect refusals of insulin, including by stating an alternative choice (Excerpt 6.9) and attempts to postpone the decision (Excerpt 6.9, Excerpt 6.12). Changes in footing (Goffman, 1979) are also used, for example, the doctor's use of ventriloquism to propose that the patient may be scared of injections (Excerpt 6.7), and the patients' utilisation of reported speech to recruit the voices of other

doctors which portray their health positively. *If(not)-then* clauses used commonly in advice giving (Shaw, Potter & Hepburn, 2015) also enable the participants to forward their perspectives less directly. While these are mainly used by the doctor to describe the negative consequences of sustained high sugar (e.g., Excerpts 6.10, 6.12, 6.14), they are also used by the patients, for example, in P3's presentation of hypothetical conditions in which he would start insulin (Excerpts 6.10, 6.14).

While the management of patient knowledge is a key theme across all the consultations, in comparison to the consultations discussed in Chapter 5, patient knowledge and choice are addressed more extensively in treatment negotiations as both parties need to establish that the patient's treatment choice, which contradicts medical advice, is made with knowledge of its risks. In addition to information delivery, doctors make explicit reference to patient knowledge in epistemic enquiries as well as in foregrounding patients' knowledge in formulations of patient choice (e.g., *So after knowing all this, you still...*). These formulations appear not to be aimed at eliciting or confirming the patient's choice, but more to present these choices as incompatible with the evidence (Landmark et al., 2016; Landmark, Ofstad, et al., 2017).

To construct their choice as informed, patients do epistemic work, not only with explicit epistemic claims but also through epistemic displays to show their knowledge and by drawing on medical information in their health-related accounts. While doctors claim epistemic primacy to medical information, both doctors and patients support these health-related accounts by referring to an authoritative source, including government guidelines, the patient's blood sugar results, or in the case of the patients, the opinions of other doctors. In addition, both doctors and patients draw upon the patient's experience as an epistemic resource in negotiations.

By halting the progress to closure, doctors and patients exercise their deontic rights over the treatment decision, although the patient is given primary deontic rights. Deontic matters are also managed more directly, for example in the doctor's assurance that her attempts to discuss insulin do not impact the patient's right to decide on treatment, saying (*not saying I'm going to push you... Just share with me*) (Excerpt 6.8), and the patients' invocation of their family members' deontic rights, to avoid directly rejecting the recommendation (Excerpts 6.7 and 6.8). While doctors ultimately defer to the patient's deontic rights, some of their language implies the opposite, for example, DR2's statement, "I give you leeway,"

Deontics are also invoked in "decision talk", in which the patient's preference is elicited or disclosed, which is used as a negotiation resource. Patients disclose their choice, for example, in direct assertions (e.g., Excerpt 6.9) or accompanied by hedgers and qualifiers (e.g. Excerpt 6.12), while doctors elicit patients' choice with yes/no questions (e.g. Excerpt 6.7) and formulations of patient choice (e.g. Excerpt 6.8 and 6.9). By explicitly bringing the patient's preferences into the talk, decision talk plays an important role throughout treatment decision making, but ultimately is oriented towards achieving agreement and closure. The final section of this chapter discusses closure of the decision making process in Pattern B and C consultations.

### **6.3 Closing Treatment Decision Making**

As shown in the mapping of the Treatment phase (Section 4.3, Chapter 4), most consultations end with an iterative management of patient knowledge and choice, in which sub-phases involving explicit expressions of the treatment decision alternate with sub-phases concerning information about insulin, or concerning the patient's perspective. This depicts the gradual closure of treatment decision making, which has been discussed in Chapter 5 (Section 5.3), showing how treatment decision making is performed during

PDA use. In those consultations, patients show limited resistance towards insulin, therefore talk towards closure is largely concerned with ensuring they are making an informed decision.

In the present chapter, the patient's continued resistance to insulin adds a disalignment which must be resolved rhetorically and discursively to achieve closure. This involves managing aspects of knowledge and choice, which requires the use of various resources by doctor and patient. The following sub-sections will discuss features of talk in concluding decision making in Pattern B and C consultations, distinguishing between doctor-initiated and patient-initiated closure.

### **6.3.1 Pattern B Consultations: Managing Knowledge and Choice**

While Section 6.2 has discussed some of the resources used by doctors to negotiate the treatment decision, it cannot be concluded that the doctors' main concern is to gain patients' acceptance of insulin. Analysis of the talk shows doctors' efforts towards ensuring that patients are making an informed choice, whether they choose to start insulin or not. In Pattern B consultations in which patients eventually accept insulin after repeatedly resisting insulin, matters related to choice become a larger concern.

The structure and discursive practices in managing these concerns naturally differ across individual consultations, particularly considering the differences in patient participation and resistance towards insulin across the four Pattern B consultations (A2, B7, B15, C12). As has been shown in Section 6.2, in two consultations (A2, B7), the patients repeatedly resist insulin using very different resources, whether indirectly, through silence and attempts to postpone the discussion (B7) or directly, through accounts against insulin (A2). These varying patterns of patient participation lead to differences in how knowledge and choice are managed towards closure of treatment decision making, as shown in the following excerpts.

### 6.3.1.1 Confirming Patient Acceptance

The first consultation shows doctor-led management of patient knowledge and choice in Consultation B7, which involves a less participative patient, who resists talking about insulin despite the doctors' repeated prompts. Excerpt 6.19 begins as the doctor continues trying to elicit the patient's concerns. Instead of disclosing concerns, the patient's responding question (155-*Can I take it now?*) seems to indicate that he wants to start insulin. After a silence, the doctor attempts to confirm the patient's sudden change of stance with a formulation of patient choice (156-*You want to take insulin now?*). The patient makes a minimal confirmation, before repeating his question (157), asking if he can pick up the insulin.

#### Excerpt 6.19: I want you yourself

Turn	Speaker	Talk
154	DR4	<i>ada lagi ke benda lain yang uncle ta[kut?]</i> is there anything else you're scared of?
155	P6	<i>[bo- ]= bo- boleh angkat kah,</i> <i>s'karang</i> <i>ca- can I take it now?</i> (0.53)
156	DR4	<i>mau: angkat insulin s'karang ke:?</i> you want to take insulin now? (0.31)
157	P6	<i>ha (.) boleh angkat ka:?</i> ya, can I take it? (0.56)
158	DR4	<i>kalau you-, kalau: tak you- saya tak mau you angkat insulin sebab</i> <i>(0.41) you rasa doktor suruh.</i> <i>if you, if not you, I don't want you to take the insulin because (.)</i> <i>you feel the doctor told you to</i> (1.25)
159	DR4	<i>saya mau you sendiri:, nanti kalau tidak nanti:, you kata "oh, doktor</i> <i>suruh" tapi balik rumah, you taku:t-taku:t, tak pasti:, nanti tak- tak</i> <i>nak juga:k</i> I want you yourself, otherwise later you'll say "oh, doctor told me to" but back at home, you'll be scared, unsure. Then you won't, you won't want it either (0.91)
160	DR4	<i>okay, ini insuli:n, insulin ialah</i> okay, this insulin, insulin is

The doctor's response does not answer this question. Marked with dysfluencies (158-*If you, if not you, I don't want you*), she expresses concern that the patient's change of



perspective may not reflect his actual choice, alluding to the considerable power doctors may have over the treatment decision (158-*I don't want you to take insulin because you feel the doctor told you to*). With no response from the patient, DR4 continues addressing the patient's choice, explaining that the patient has to choose to start insulin for himself, otherwise he might be too afraid to administer it at home (159). These two turns (158 and 159), in which the doctor addresses the patient's choice at length, indicate that the patient's sudden acceptance of insulin is unexpected. With P6's continued silence, DR4 moves from decision talk to knowledge focused talk, beginning with an information delivery turn on insulin (160). In talk that follows (not shown), the doctor begins information exchange using the PDA as a topic guide to explain matters such as diabetes, sugar levels and complications of high sugar. The doctor's move to addressing epistemic matters instead of engaging in further decision talk indicates her uncertainty that the patient is making an informed choice.

As shown in the structural mapping in Chapter 4 (4.3.1.4), Consultation B7 is highly iterative, with information delivery turns alternating with decision talk, during which the doctor elicits and probes the reasons for the patient's agreement to start insulin. More than two hundred turns pass in this manner, with the patient's participation remaining minimal. Then, as shown in Excerpt 6.20, DR 4 initiates decision talk again, with a reformulation that seeks to confirm P6's choice to start insulin (turn 386). P6 responds by repeating the doctor's question (*Take it, take it now?* Turn 389), placing the doctor in the position of confirming the choice. DR4 provides the confirmation (390) but returns the deontic rights over the decision to P6, with a minimal prompt (391-*Hm:h?*). P6 provides a minimal agreement, albeit accompanied by a display of resistance (392-*It doesn't matter lah*). The particle "lah", an emphatic marker, could also serve to emphasise P6's oppositional stance (Bell & Sert, 1989; Goddard, 1994).

Excerpt 6.20: Take it, take it, lah

Turn	Speaker	Talk
386	DR4	<i>tapi ini hari uncle mau start insulin</i> <b>but, today you want to start insulin</b> (0.57)
387	P6	<i>angka:t =</i> take
388	DR4	=injection (0.84)
389	P6	<i>mau angkat? s'karang mau angkat, [ka]</i> take it? take it now?
390	DR4	[a:]:h mau= =tacham yes, going to inject (0.58)
391	DR4	<i>nge::rh? =</i> <b>hm:h?</b>
392	P6	= <i>haa. tida'pa lah, angkat [lah,]</i> <b>ya. it doesn't matter lah. ((I'll))take it lah</b>
393	DR4	[a:]:nh? Hmh?
394	P6	<i>angkat, angkat lah,</i> take it, take it <u>lah</u> , (3.25)
395	DR4	<i>boleh.</i> you can? (.)
396	DR4	[e:]:h? huh?
397	P6	<b>[boleh]lah</b> <b>can lah</b> (0.24)
398	DR4	<i>oka:yh.</i>

Perhaps in response to the grudging agreement conveyed by P6's response, the doctor seeks further confirmation from P6 (393), during which he continues to express resignation (*take it, take it lah*). Moreover, P6's decision talk mentions picking up the medicine from the clinic rather than starting insulin, which may lead DR4 to seek confirmation of P6's ability to start insulin (395-(you) *can?*). After a second prompt, P6 affirms that he is able to start insulin in turn 397. Again, the use of "lah" in his affirmative response may mark the reluctance of his agreement, but the doctor appears to be satisfied as she indicates the closure of the sequence with an "Okay" (398).

### 6.3.1.2 Proposing Conditional Acceptance

In contrast with the doctor-led interaction in Consultation B7, the following excerpts from Consultation A2 show the patient asserting considerable control by negotiating a conditional acceptance of insulin. Prior to the talk in Excerpt 6.21, the doctor has responded to the patient's accounts against insulin with contrasting information or assurances, and then eliciting the patient's choice.

#### Excerpt 6.21: If I try

Turn	Speaker	Talk
208	P2	<i>so macamana ni, nak-</i> so how, want to-
209	DR2	<b>=so macamane you ↑nak ke tak nak insulin tu</b> <b>so how, you want or don't want that insulin</b> (1.2) ((DR putting BP cuff on PT))
210	P2	<b><i>kalau I try:: a::h,(1.66)y- you akan bagi saya berapa lame.</i></b> <b>if I try, er, you'll give me how long</b>
211	DR2	e:rh one <u>month</u> ? (0.5)
212	P2	<b><i>e:rh, y- try one <u>month</u> lah macamane. boleh</i></b> <b>er, y- try one month lah see how? can I?</b>
213	DR2	<i>boleh?</i> yes (0.57)
214	P2	<b><i>lepas tu kalau I rase dah okay, I <u>stop</u> lah?put on medicine balik,</i></b> <b><i>boleh</i></b> <b>then if I feel I'm okay, I stop lah? put back on medicine.</b> <b>can I?</b>
215	DR2	<i>boleh?</i> yes (3.53)

The patient's response to the doctor's decision talk thus far has been to initiate new accounts against insulin (see Section 6.2). However, in turn 208, after the doctor has discussed the benefit of insulin in allowing a more varied diet (6.2.2.1), it is the patient who seems to move towards the decision (*So, how now?*). However, P2 stops short, and the doctor takes this up in her next turn, eliciting the patient's choice between starting or not starting insulin (209). Responding with a conditional question, P2 asks how long the doctor will allow her to "try" insulin, which presents her potential acceptance of the recommendation as temporary (210). After DR2 suggests one month, P2 proceeds to

negotiate a trial period to use insulin (212), following up with a question to confirm that she will be able to stop insulin if she feels okay after a month (214). The doctor's agreement is followed by a silence, before P2 initiates a new topic, injecting and needles, shown in the following excerpt (Excerpt 6.22).

### Excerpt 6.22: I'll try lah

Turn	Speaker	Talk
216	P2	<i>tapi dia p' nya:, &gt;tu lah tanya tadi&lt;, dia p' nya: jarum tu::</i> but its, that what I asked just now is its needle (0.34)
217	DR2	I will <u>teach</u> you((starts inflating BP cuff))
218	P2	<i>panjang, ke::[: ]</i> long?
219	DR2	<i>[ve::]ry, very short.</i> (0.78)
220	DR2	<i>very, very short. maceng kena gigit se↑mut aje</i> very very short. like being bitten by an ant (Turns 221-223 omitted-further exchange about needles)
224	DR2	<b>so you agree lah, nak ambik insulin. (0.2) ↑ye:rh?</b> <b>so you agree lah, to take insulin. yes?</b> (0.87)
225	DR2	a[gree.]
226	P2	[m::h ] m:[:h]
227	DR2	<i>[ka]lau agree I nak stop,</i> if you agree I'll stop ((referring to recording device?)) (0.34)
228	P2	<b>(bole: 'gree)</b> ((mumbling voice))
229	DR2	<i>a: . okay, I stop.</i> er, okay I'll stop
230	P2	<b>I try lah.</b> <b>I'll try lah</b>

As P2 gradually introduces the topic of the insulin pen needle (216), DR2 overlaps with assurances (217), minimising the needle size and injection pain (219). After further discussion on injecting (omitted), the doctor begins to approach closure of the decision making process by eliciting P2's agreement to start insulin with a confirmation-seeking formulation of the patient's choice (224). The omission of the "trial" aspect of the agreement in the doctor's formulation could be the cause of ensuing P2's silence. This leads DR2 to repeatedly seek confirmation of her agreement, first with a short prompt (225) and then a longer one (227), which appears to imply that the interview recording will end upon the patient's agreement. P2 provides a barely perceptible agreement (228),

before following the doctor's response with a final statement that reinforces the temporary nature of her agreement (*230-I'll try lah*).

As shown in the excerpts from both consultations, as well as in Chapter 5, the closure of decision making can be drawn out. Moreover, depending on whether the patient is more or less participative, matters of knowledge and choice are managed differently. In the first consultation, the patient's sudden change of perspective towards insulin leads the doctor to explicitly address deontic matters, foregrounding the patient's choice as necessary for the decision to be concluded. She then begins addressing epistemic concerns by initiating information exchange. Given the patient's continued reticence throughout the consultation, the doctor relies on repeated enquiries to confirm that the patient agrees to start insulin. In the second consultation, with a more participative patient, the doctor and patient have already exchanged several accounts against and for insulin. In this consultation, deontic matters are managed implicitly, with the patient exerting control over the decision by bargaining or negotiating for a trial period rather than an outright agreement to start insulin. Despite both patients having indicated that they will start insulin in earlier talk, treatment decision making in both consultations ends with the doctor's repeated enquiry seeking the patient's confirmation that they agree to start insulin.

### **6.3.2 Pattern C: Achieving Alignment**

In the three Pattern C consultations (A4, B8 and C11), in which patients maintain their stance against insulin, treatment decision making is concluded when the doctor accepts the patient's choice not to start insulin. As has been seen in earlier excerpts, patients disclose their perspective against insulin with varying levels of directness and participation. The doctors' actions also vary, in terms of how much they have to elicit the patient's disclosures, and the extent they pursue the patient's acceptance of insulin.

As in the previous section, the excerpts that follow will show different patterns of patient participation in closings, which begin 1) when the patient refuses to engage in further negotiation and 2) when the patient proposes an alternate treatment choice. As with all the consultations, knowledge and choice are a concern in these treatment decisions; however, in Pattern C consultations there is the further concern of the disaffiliation between doctor and patients, in relation to the recommendation to start insulin. Although the patient does not accept the recommended treatment, alignment is achieved in different ways.

### 6.3.2.1 Validating Patient's Choice

The first excerpt, Excerpt 6.23 shows how a patient withdraws from negotiation, which leads to the closure of treatment decision making. As shown in previous sections, P8 has refused insulin from the initial turns of the consultation; however, she does not provide an account for her perspective and repeatedly denies having any fears of insulin (e.g. 6.2.1.1). However, much later in the consultation, P8 has disclosed a deep fear of needles, after repeated probing by the doctor (not shown). In 344 (Excerpt 6.23), P8 reiterates this fear in response to the doctor's attempts to seek her agreement to start insulin, with hand gestures that emphasise the affective content of her talk.

DR6 then attempts to provide assurance, by downplaying the size of the needles (347). As she begins talking about the insulin pen (350), P8 moves to close the topic with an apology (353-*Very sorry doctor*) and waving gesture. The apology indicates that the patient's refusal of insulin could be potentially face-threatening and marks P8's withdrawal from the negotiation. DR6's response appears to attempt to repair the face-threat by assuring P8 that no apology is necessary (354), before explicitly invoking P8's deontic rights in the treatment decision (356-*because it's all up to you right*).

Excerpt 6.23: Very sorry, Doctor

Turn	Speaker	Talk
344	P8	<b>I don't want, I'm not, I'm, that's why I said ((puts both palms on either side of face)) I'm so scared. I down now.</b>
345	DR6	m::h you're scared of the needles <u>lah</u>
346	P8	m:h m:h
347	DR6	<u>but</u> (0.36) you ↑ <u>know</u> , ↑ri:ght, I think you saw the needles is very <u>small</u> , is like hair only [right,] the size of the needles
348	P8	[M:h ] (0.55)
349	P8	needles I never see, I-, she <u>told</u> me, she show me the=((gestures as though holding the insulin pen))
350	DR6	=the pɛ::n, [she show you.] <b>Actually, the =</b>
351	P8	[M:h, m:h ]
352	DR6	<b>=needles is very sma::ll.</b>
353	P8	<b>very <u>sorry</u>, Doctor NAME ((waving gesture))</b>
354	DR6	<b>m:. yah. okay. is oka:y, no sorry for me</b>
355	P8	[mh hh hh]
356	DR6	<b>[because it's] <u>all up to you, right</u></b>
357	P8	m::h
358	DR6	okay, hh so, the:n, (0.49) okay, so this is all you have done already [la, <u>ha:?</u> ] ((looking at P8's PDA ))
359	P8	[m:h m:h]
360	DR6	Okay, <so it's okay if you> <b>understa:nd, okay, about the (0.22) complication of diabetic, (0.36) and the need to start insulin, but you <u>choose</u> for strict diet and also exercise is a good things</b> [also ]= [m:h ]
361	P8	[m:h ]
362	DR6	<b>okay? it's okay, it's o:kay, if you down to start insulin now,</b>
363	P8	mmm ((Nods))
364	DR6	then I think maybe if that (0.34) in that case, ((Looking through PT file)) I think I might be able to see you back in about four months' <u>ti:me</u> ,
365	P8	<b>m:h h:m, okay.</b>

As P8's participation continues to be limited to minimal tokens (355, 357), DR6 looks through the PDA (358), referring to P8's notes in the PDA (358-*So this is all you have done already*) beginning to validate the patient's choice as a "good things also". Her formulation of the patient's treatment choice casts it as an informed decision although the knowledge of complications is contrasted against the patients alternate treatment choice (360-*It's okay if you understand about the complications...but you choose for strict diet and also exercise...*). With the patient continuing not to take any turns, DR6 does further work to accept and validate P8's choice (362-*It's okay, it's okay if you don't want to start insulin now*), indicating that the potential face-threat may not be due to P8's refusal of the

recommendation but more so by the doctor's pursuance of acceptance despite her repeated refusals.

By assessing P8's as "good" and "okay", the doctor's turns attempt to repair the disaffiliation between doctor and patient, which the patient receives with a token and a nod. In 364, the doctor begins making future arrangements, marking the closure of decision making. The patient then verbally indicates her acceptance with an "Okay".

### **6.3.2.2 Proposing an Alternative**

In contrast with the previous example, the patient in the following excerpt has participated actively throughout the consultation, presenting several accounts against insulin. As discussed in Section 6.2.2, the doctor has responded with medical justifications, reassurance and information delivery. In the talk preceding Excerpt 6.24, DR2 has made a strong argument for insulin, addressing both the patient's health and life-world accounts. The excerpt begins as the doctor ends her account, by stating that starting insulin early will prevent organ damage (274).

After several silences, with overlapping minimal tokens from both participants (275, 276), it seems that the doctor is handing the floor to the patient. Instead of initiating another account as he has done previously, the patient tentatively asserts his preference not to start insulin, with pauses, throat clearing and hesitation (277). With epistemic phrases, "I think", "I have some doubt", and "...knowing" that cast his choice as informed, A2 exerts his deontic rights with the phrase "I still prefer ano- a different way..." before proposing an alternative to the recommended treatment. Constructed as a postponement of the decision, he asks the doctor to "give me a chance, about one or two months to decide", which gives the doctor the right to accept or reject his proposal. This mitigates his refusal of the recommendation and preference to do things "my own way". The doctor's minimal response does not proffer the acceptance needed to close the



negotiation (278) (Stivers, 2006), leading P3 to work towards gaining acceptance by further qualifying his proposal with an *if-then* structure, committing to reconsider the decision if he fails to control his sugar (279, 281).

**Excerpt 6.24: Give me a chance**

Turn	Speaker	Talk
274	DR2	you- if <u>we</u> give you the insulin befo <u>re</u> you develop the organ damage, maybe another fifteen, twenty years .h that's: (.) what we're trying to do <u>lah</u> (0.94)
275	DR2	[a:h ]
276	P3	[okay] (2.45)
277	P3	<b>okay I think, er:r ihh ((clears throat)) (0.70)I have some doubt ah</b> , some other things that,er, using this.(0.88) e::r knowing: some other patient may be using <u>it</u> , (1.12) maybe::, I still prefe:r er:r ano-different way of doing <u>it lah</u> . (.) <b>so, if I:: (0.91) e- give me a chance about one or two months for me to decide, (0.62) and I'll try to (0.70) use my own way of controlling my sugar level lah</b>
278	DR2	right
279	P3	a:: If I <u>can't</u> do <u>that</u> , maybe I'll definitely see:,
280	DR2	<b>via:h</b>
281	P3	and decide again <u>lah</u>
282	DR2	<b>via:h actually we give you <u>six</u> months,</b>
283	P3	ngh
284	DR2	<u>three</u> to six months. because the next haemoglobin A1C will be done three months' time [from now]
285	P3	[o:h kay ]
286	P3	m:-hm
287	DR2	then the second h- haemoglobin A1C. (0.69)
288	DR2	ye::?
289	P3	<b>o:kay.</b>

The doctor accepts the proposal (280), upgrading the proposed time-line to fit the schedule of routine blood tests (282-*Actually we give you six months*). This upgrade serves to complete the proposal-acceptance adjacency pair, and segues into a “future arrangement”, indicating the approach towards closure. With silence following the doctor’s turn, she seeks P3’s acceptance with a prompt (288). After P3 gives the necessary response (289-*Okay*), decision making is concluded with mutual acceptance.

The two excerpts in this section demonstrate how mutual agreement in the consultations when patients do not accept insulin (Pattern C consultations). Like the Pattern B consultations, with the less participative patient (Excerpt 6.23) the doctor addresses matters of knowledge and choice explicitly, while the more participative patient initiates an alternate proposal (Excerpt 6.24), implicitly enacting his deontic rights over the decision. In the latter case, affiliation is achieved when the doctor accepts and upgrades the patient's proposal. In the former, since the patient withdraws from participating in further negotiation, it is the doctor who must work to remove the disaffiliation by validating the patient's treatment choice as a "good" option. In both consultations, the doctor moves to close the decision making phase by discussing future arrangements, which is completed by the patient's acceptance.

### **6.3.3 Section Summary**

This section has discussed the closing phases of treatment decision making, examining closing sequences in Pattern B and C consultations. Decision talk, or talk in which patient's treatment choice is explicitly elicited or disclosed, is used to negotiate and approach closure of treatment decision making. This includes polar questions and formulations of patient choice, from the doctor, as well as alternate proposals from the patients, delivered as requests.

The representation of the treatment decision as polar options anchored to the treatment recommendation, as well as the doctors' continued pursuance of talk on insulin despite patient's repeated resistance may appear to be in conflict with the principles of SDM. Nevertheless, as shown in the closing sequences in Pattern B and C consultations, doctors and patients manage knowledge and choice explicitly or implicitly to achieve the decision. While the two patients in Pattern B consultations indicate their affective stance towards insulin through phrases that indicate reluctant or conditional acceptance" (i.e. "*It*

*doesn't matter lah*" or *"I'll try lah"*), their acceptance is solicited repeatedly by the doctor. In Pattern C consultations, in which the doctor ultimately accepts the patient's treatment preference, closure is also initiated by the doctor with a question-response adjacency pair in the form of a "future arrangement" that requires the patient's confirmation of the decision. These final sequences cast the treatment decision on a "shared" footing, albeit at a very basic level, with mutual agreement achieved.

According to Quirk et al.'s (2012) typology of shared decisions (see Chapter 2, 2.2.2.2), "pressured decisions" are those in which the doctor's and patient's contrary wishes are communicated, with the patient resisting the doctor's continued pressure, like the Pattern B and C consultations discussed in this chapter. Such decisions are rarely concluded without one party losing face, with patients giving grudging acceptance, if at all, and only "owning" the decision if their preference is accepted (Quirk et al., 2012). A similar pattern is observed in the reluctant and conditional acceptance given by the two patients in the Pattern B consultations, and the withdrawal of the patient in the Pattern C consultation, which requires the doctor to restore affiliation, through her explicit validation of the patient's choice.

#### **6.4 Summary and Discussion**

Chapter 6 has described the negotiation of treatment decision making between doctors and patients who resist the recommendation to start insulin, using turn-by-turn analysis of interaction to examine how knowledge and choice are managed when there is a rhetorical disaffiliation between participants. The chapter began with analysis of initial turns of talk in which patients' resisting perspectives are made evident (6.1), followed by a discussion of doctors' and patients' interactional, discursive and rhetorical practices in negotiation through question-answer sequences (6.2.1) and accounts (6.2.2). Finally, practices in closing treatment decision making were described (6.3).

Overall, Chapter 6 demonstrated how the doctors and patients managed knowledge and choice in negotiating their conflicting perspectives on insulin to arrive at a decision. While the doctors and patients utilise various resources to support their stance, they simultaneously orient towards each other. Doctors pursue their medical agenda while also eliciting patient knowledge and perspectives and orienting to their affect and life-world. In response, patients assert their preferences and perspectives while displaying their understanding of the clinical justifications for insulin. In terms of interaction as well as the rhetorical aspect of the decision, both parties require acceptance or confirmation from the other in order to conclude decision making, thereby achieving shared footing, however minimally. The analysis adds further interactional evidence on treatment negotiation practices in the context of treatment decision making on insulin.

Moreover, specifics of the clinical context, including aspects of the decision and the individual patient's illness trajectory may lead to different decision making practices (Hudak, Clark, & Raymond, 2011; Koenig et al., 2014; Landmark et al., 2015). For example, the doctors' interactional sensitivity to whether the patient whether the patient has arrived at, or is approaching the "treatment intensification" point, in terms of their blood sugar level may explain why doctors pursued patient acceptance with some patients more than others (Koenig et al., 2014).

From the patient's perspective, aspects of their illness trajectory other than clinical considerations may also explain differences in patient's negotiation practices, including that some patients readily offer various accounts against insulin (6.3.2), while others do not explicitly explain their refusal of insulin despite repeated elicitation of their concerns (6.3.1). These varied practices hint at the diverse psychosocial factors that influence decisions on insulin and lead some resisting patients eventually accept insulin while others do not. Moreover, considering the prolonged nature of diabetes, a patient may go

through several treatment decision making episodes, from those in which the doctor accepts his alternate treatment choice (e.g. Pattern C consultations) to the consultation in which he finally accepts insulin (e.g. Pattern B or A consultations) (6.4). Thus, similar negotiations may have occurred prior to the observed consultation.

The analysis in this chapter contributes interactional data from the Malaysian setting and that of chronic care, to the literature investigating doctor-patient talk in treatment decision making. Certain similarities with previous CA studies have been found, for example, patients' active resistance through minimal responses and silence (Stivers, 2005a, 2005b), reluctant acceptance in Pattern B consultations (Quirk et al., 2012) and the use of formulations of patient perspectives, either to elicit patients' perspectives or imply they are less than valid (Landmark et al., 2016; 2017). The findings also show differences, which may be linked to the clinical context, for example, in the doctors' and patients' assertion of epistemic and deontics in negotiating the decision, unlike the findings of Landmark et al. (2015) which show doctors and patients conceding to each other's epistemic and deontic rights in preference-sensitive decisions about invasive treatment options.

Moreover, to add to the identification of PDA use (Chapter 5) as a means of initiating treatment decision making, this chapter shows how treatment decision making in chronic care may be initiated with an explicit recommendation through turns that invoke past conversations about insulin. This further strengthens the suggestion that the three-part decision making structure may not sufficiently account for treatment decision making in various clinical contexts (Landmark et al., 2015; Weidner 2012). Further, the analysis contributes examples of talk in Malaysian English and Malay, where distinctive features, particularly the use of particles "lah", "kan" and "eh" carry pragmatic functions in the accomplishment of treatment decisions.

The findings underline the importance of considering the interactional trajectory, as well as illness trajectory, when investigating patient-centred decision making. While specific practices by the doctors may appear to conflict SDM, they are likely a result of the clinical context of the decision, in which a patient who is considered at risk of complications resists the one medically advised option. Moreover, the immediate interactional context, in which some patients participate less than others, may lead doctors to employ practices that may appear to more or less aggressively pursue acceptance. Considering the well-documented patient resistance to insulin, the interactional accomplishment of mutual agreement in the final turns and the foregrounding of patients' perspectives and knowledge throughout the talk may be the extent to which patient-centred decision making in this context resembles the models in the literature.

Following this analysis of consultations in which doctors and patients negotiate their conflicting perspectives towards starting insulin, the discussion will now consider the perspectives of individual doctors and patients outside the consultation. In the following, and final analytical chapter of this thesis (Chapter 7), the practices of doctors and patients in constructing accounts of their treatment decision making experiences will be examined.

## CHAPTER 7: ACCOUNTS OF TREATMENT DECISION MAKING

The preceding analytical chapters have presented the findings from Activity Analysis of routine visits for type 2 diabetes, examining the practices of doctors and patients in making a treatment decision about starting insulin. To examine the construction of treatment decisions about insulin from a different perspective, this chapter applies Accounts Analysis to interviews with doctors and patients to address the fourth research question:

**RQ4:** *How do doctors and patients construct accounts about their experiences of treatment decision making on insulin therapy for type 2 diabetes?*

Preliminary analysis of the research interviews identified “control” as a focal theme in the doctors and patients accounts, which in its different meanings is salient in the management of type 2 diabetes (Warren et al., 2013). This chapter therefore reports the findings of Accounts Analysis of doctors’ and patients’ accounts of treatment decision making on insulin, according to the theme of “control”.

The chapter begins with an overview that describes the multiple meanings of control invoked explicitly (7.1.1) and implicitly (7.1.2) in the doctors’ and patients’ accounts. In Section 7.2, the accounting practices of the doctors are discussed, beginning with their construction of retrospective accounts of treatment decision making (7.2.1) and followed by their use of contrast to deploy their orientations to patients’ control over the treatment decision (7.2.2). The next section presents the accounts of patients (7.3), describing their discursive and rhetorical practices in deploying different meanings and orientations to control in their accounts of treatment decision making. The final section summarises and discusses the findings.

## 7.1 Meanings of Control in Doctors' and Patients' Accounts

As discussed in Section 2.3.1 (Chapter 2), references to control and its multiple meanings are salient in discourse about type 2 diabetes (Broom & Whittaker, 2004; Warren et al., 2013). Firstly, the biomedical sense of blood sugar control is a central focus of routine diabetes visits (Koenig et al., 2014; Warren et al., 2013). Moreover, in the literature on doctors' and patients' perspectives and experiences of managing type 2 diabetes, the focus on patients' self-management of their conditions, and their doctors' efforts to facilitate this, invoke additional meanings of control, which are *controlling the disease*, *controlling the self* and *controlling the patient*. These meanings of control are linked in doctors' and patients' accounts of their joint efforts in managing the patient's health.

To recap, *controlling the disease*, from the patient's perspective involves acts of self-management, with an emphasis on dietary control in order to control the blood sugar. This is linked to the patients' overall sense of control about their lives, or *controlling the self*, while adapting to their condition on a personal and broader social level. From the doctor's perspective, efforts to achieve clinical benefits for the patient involve encouraging certain patient behaviour. This other-oriented control, or '*controlling the patient*', ironically deploys discourse about the patient's control over the disease, through talk on self-management and empowerment, which orient towards institutional discourses about patient-centredness and patient autonomy.

In the present study, an additional meaning of control was deployed in the doctors' and patients' accounts, which is *controlling the decision* about whether or not to start insulin. In their retrospective accounts of treatment decision making experiences, doctors and patients describe their efforts to influence or control the decision outcome using various discursive and rhetorical devices. This meaning of control orients to the



collaborative, and often conflicting perspectives of doctors and patients, which are negotiated in treatment decision making over the trajectory of managing type 2 diabetes. Examples of the types of explicit references and implicit orientations to control observed in the accounts are provided in the following sections (7.1.1 and 7.1.2).

### 7.1.1 Explicit References to Control

In their accounts, both doctors and patients make explicit references to “control” framing their retrospective accounts of treatment decision making according to the measures of successful control. Table 7.1 shows examples of explicit references to control by doctors and patients.

**Table 7.1: Explicit references to “Control”**

<b>Doctors’ Accounts</b>	<b>Patient’s Accounts</b>
Biomedical measure of sugar level -Adjective/passive verb	Controlling the disease -Active verb
<p>DR C: “Okay, um::: (0.5) I had a lady, who (.) was a diabetic. And she was, actually I was (.) e::r, checking the husband regularly. She was under somebody else, as a follow up. Then the husband requested it because, husband was also diabetic, and <b>he was very well controlled</b>...U::m, then the husband said, ‘If you don’t mind, can you check my wife also.’ So she came under me. .hh When I first time checked her, .hh <b>she was really uncontrolled</b>”</p> <p>DR B: “So (.) e::r, my patient, yesterday, er I had meet er one lady, around (.) fifty plu:s, was e::r, on maximum hypoglycaemic agent, oral hypoglycaemic agent. So er erm, she’s actually refused insulin, because er she’s a muslim and she thought that insuin is er non halal... So er, she agreed that,(.) <b>her diabetic is bad. control</b>, er the A I C, was er eleven.”</p>	<p>PA: “At this moment ah...I feel that <b>I still can control my: (0.76) sh- [sugar] level</b> sometime it go up because...of certain: know? (0.8) .hh reasons er maybe the food intake I took must see, so, I: ,(0.3) tell them that <b>I can control certain thing.</b>”</p> <p>PC: “Er- but I (.) avoided. Er every time the doctor suggested (.) to go (.) on insulin...Because because sometimes is- <b>I can’t I can’t control my my this thing, so insulin levels and all...</b>You know? So she said er insulin is the best thing, you one jab per night, and er thi- er that will b-bring you down, to the level, desired level lah”</p>

Doctors use the word “control” as a modifier, for example, in the passive form, to describe the patient (*she was uncontrolled*) or to describe the patient’s diabetes (*her diabetic is bad control*), with an evaluative aspect through the modifiers of “good/well” versus “poor/bad/un” that refers to benchmarks of sugar control. This invokes the biomedical sense of the word and does not ascribe responsibility to the patient. Conversely, the patients use “control” in the verb form, with the first person pronoun (I) as the active subject. This explicit use of control, from the patient’s perspective of controlling the disease, implies a sense of responsibility for managing their blood sugar.

In framing their accounts about treatment decision making on insulin, these explicit references to control reflect the different perspectives doctors and patients bring to the medical encounter: the doctor’s professional orientation to the biomedical aspect of the patient’s case and patient’s personal orientation to his diabetes as an aspect of his life to be controlled. The implied responsibility in the patient’s talk carries a certain culpability if the patient fails to meet the targets imposed by clinical guidelines. Moreover, while insulin is prescribed by doctors as an external means of “controlling the disease”, its prescription implies that the patient’s own attempts to do so have failed. Given the expectations that individuals should act in a manner that is conducive to health (Broom & Whittaker, 2004; Galvin, 2002), the doctors’ recommendation to start insulin, thus, becomes the logical and moral choice.

### **7.1.2 Implicit Orientations to Control in Treatment Decision Making**

As seen in the previous chapters, when a patient does not accept insulin, a negotiation ensues. This negotiation is constructed in doctors’ and patients’ accounts of treatment decision making on insulin, through descriptions of their efforts towards “controlling the decision”, constructed through the use of various discursive and rhetorical devices.

For example, in their accounts about treatment decision making with patients who resist insulin, the doctors describe their attempts to influence the decision outcome. As can be seen in the following excerpt, the doctor describes her success in gaining patients' acceptance of insulin, using the word "comply", which orients to a paternalistic notion of medical authority. In the final sentence (*I suppose they get fed up of me talking about it*) she orients to the patients' perspectives of her efforts to gain their acceptance of insulin.

*DR C: "But, a::h, we explain it all to them, that, this is what's produced in the body. But since your body is deficient in it, so we have to give from outside (0.7) One two visits, majori- I haven't had any problem with the patients, majority of them by (.) third visit, (.) .hh They would they usually do comply. I suppose they get fed up of me hhtalking about it hh hh"*

In the following excerpt, DR A deploys several meanings of control in addition to deploying concepts related to patient autonomy. Firstly, operationalising the category of "shy" patients, she alludes to the limits of her influence over their decision (*no matter you lecture them or whatever, it's not gonna go in, so you just leave it*), while simultaneously alluding to her professional authority by using the term "lecture". Next, in proposing a hypothetical dialogue to be used with such patients, she explicitly invokes the patient's ultimate ownership, and hence, control over the decision (*the decision is yours*).

*DRA: If they are the shy- ty- sort of person the they'll be like 'No lah, Next time lah' and they don't wanna even talk about it, so...No matter you lecture them or whatever, it's not gonna go in, so you just leave it and that, and um you see, um you know, or we can say 'Well the decision is yours, so um, well, just think about it lah' So that's why the: decision aid that um, er ProfNAME made...Um, the one to, Decision to Start Insulin...for diabetics, that was really useful. 'Cause I tried that out, on a few of the patients, and, it, not to say it convinced them to start, but at least it gives them idea about what they're*

*dealing with. You want insulin to control, or you want to try other things to control, the choice is in your hands. So at least they feel empowered that way."*

Talking about using the patient decision aid, DR A orients to her attempts to influence the decision outcome and describes how the PDA provides patients with information, thereby giving them greater control. This deploys multiple meanings of control: controlling the disease (*you want insulin to control or ...other things to control*), the patient's control over the decision (*the choice is in your hands*) and the patient's overall sense of control (*so at least they feel empowered*).

The patients' accounts also deploy various meanings of control, emphasising their exertion or loss of control over the decision and over management of their condition. For example, in the excerpt below, Patient C explicitly describes his ultimate control over decisions to do with his health, invoking the personal dimension of the disease (*it's my body*). However, by qualifying the kinds of decisions that he has to retain control over, Patient C allows for situations in which his control may be relinquished.

*PC: There are cer- certain decisions, critical decisions that I have to make for myself...  
ya know, ya know...That's because it's my body*

On the other hand, Patient B implicitly invokes her control over the decision in constructed dialogue about her conversation with the doctor. Her construction of the doctor's speech invokes his attempts to persuade her to accept insulin, her response to which is an explicit exertion of control over the decision (*I said No!*).

*PB: "We want you to try one week. I said No!...From the beginning I'm not interested.  
Sorry. No insulin for me for the time being."*

In comparison, Patient D's account about her decision to start insulin conveys her diminished control over the decision. The order of events in her account; her initial

refusal, the doctor's mentioning of insulin (*the doctor asked*) and finally the decision to start insulin (*had to do it*) construct the decision as largely controlled by the doctor.

*PD: "Mula first kita (taknak) buat, pah tu, the: doktor tu tanya kan kena buat jugak lah, sebab tsak sebab takut risiko lebih-lebih tinggi lah, dia cakap"*

*"At first I didn't want to but then the doctor asked, had to do it anyway lah because tsak because scared the risks will-will increase lah, she said"*

Moreover, while Patient D offers a medical justification for starting insulin, employing the evidence-based discourse of risk, this is attributed to the doctor (*...risks will-will increase lah, she said*).

As demonstrated in this section, the doctors and patients explicitly and implicitly deploy different meanings of control in their accounts of treatment decision making. While the doctors' accounts emphasise their attempts to influence the decision, the patient's ultimate control over the decision and in a broader sense, are common in both the doctors' and patients' accounts. The discursive and rhetorical practices used by doctors and patients in these accounts will be discussed in the following sections.

## **7.2 Doctors' Accounts of Treatment Decision Making**

The doctors were asked for an account of a typical treatment decision making episode related to starting insulin, as well as about decision making in general. In both types of accounts, the decision is constructed as belonging to the patients, largely for pragmatic reasons. However, doctors also orient to ethical discourses of patient-centredness in constructing their accounts.

## 7.2.1 Constructing a Retrospective Account of Treatment Decision Making

While the doctors' retrospective accounts naturally differ in discursive practices and specifics, all three doctors recount situations involving patients who initially refused insulin but eventually accepted it. In constructing these accounts, the doctors balance between their professional responsibility to achieve better clinical outcomes for the patient and their orientations towards the patient's perspectives and control over the decision. As seen in 7.1.1, the retrospective accounts were framed against clinical considerations which justify their recommendation and their attempts gain the patient's acceptance of insulin. However, the accounts also foregrounded the patient's perspectives, including misconceptions about insulin, lifeworld concerns. In this section, excerpts from the interview with DR A are shown to demonstrate the rhetorical and discursive practices observed, including constructed dialogue, character and event work.

### 7.2.1.1 Professional Perspective

DR A begins by giving the patient's background, with demographic details typical of a case presentation (fifty-year-old, Malay lady), before characterising her as "very very stubborn" about starting insulin. The intensified adjective indexes the misalignment between doctor and patient regarding the recommendation to start insulin, while also emphasising the prolonged nature of the decision making process. Using constructed dialogue to recount the conversation (lines 7-12) DR A invokes the differing perspectives of sugar control. In reporting her own speech, the doctor frames the recommendation to start insulin against the clinical assessment of sugar control (*8-not well controlled*) while in reporting the patient's speech, control takes on its lifeworld meaning in the Malay phrase "*jaga makan*", referring to the patient's controlling of her food intake. Moreover, DR A's repetition of the patient's reported speech (13-14), supports her earlier characterisation of the patient as "very very stubborn".

### Excerpt 7.1: Through the roof

Line/Speaker	Talk
1 DR A	Um, I had (.) a fifty year old lady,
2 R	Okay
3 DR A	a Malay lady who was very, very stubborn,
4 R	Mhh
5 DR A	about insulin,
6 R	Okay
7 DR A	Um, er from the moment I told her “Oh, <b>your blood sugars are really</b>
8	<b>not well controlled you’ve been seeing me a few times, already.</b>
9	<u>um, y- you, you sure you don’t want insulin?”</u> ,
10	and each time she <i>cakap</i> ((said)) “No, um doctor, I want to (.) just
11	‘ <i>jaga maka::n</i> ,’((control my diet))” and a:
12 R	Hmm
13 DR A	“I just want to <b>control my diet</b> . I’m pretty sure I can
14	<b>control my diet”</b>
15 R	Alright
16 DR A	So, um, I think that went for two visits and then on the third one,
17	I said “you know what, <b>I’ve got to hhput my fhoot down</b> ” uh er
18	“Your,” er, we have, you know the blood test, the HBA1C?
19 R	Right, yah
20 DR A	So the <b>HBA1C was, through the roof</b> at the time,
21 R	Okay
22 DR A	I think it was <b>more than: thirteen er twelve, or thirteen</b> , it was
23	<b>very very high</b> (.) Said, “You know what”, “It’s, it’s <b>ghhoing higher</b> .
24	<u>Are you sure you don’t want to start insulin?”</u>
25	Then um then, finally she- said, “actually doctor”, I’m scared of the needles,

In Line 16, DR A provides a temporal detail (16-*that went on for two visits*) that emphasises the prolonged nature of the process. The idiomatic phrase “I’ve got to put my foot down” legitimises the doctor’s attempt to exert influence over the treatment decision by pursuing the recommendation despite the patient’s resistance, by alluding to concessions that have been made. In lines 18-23, DR A changes footing, speaking directly to the researcher, a non-clinician, to confirm that she knows the term HbA1c (18-*you know we have the blood test, HbA1C*, before describing the patient’s results using idiomatic language (20-*through the roof*), citing specific figures (*thirteen or twelve*), and adding intensifying adverbs (23-*very, very high*), all of which emphasise the problematic nature of the patient’s health. The patient’s disclosure in line 25-26 comes after the adverb “finally”, emphasising the doctor’s prolonged and continuous efforts to discuss insulin with the patient.

In DR A's account, the patient's uncontrolled diabetes forms the basis for recommending insulin therapy, where the recommendation of insulin (underlined text) directly follows descriptions of the patient's sugar control. Since the high sugar places the patient at risk of developing complications, the doctor's actions in the account are in line with her professional responsibility. The constructed dialogue of the patient, in which the doctor is referred to by her title invokes this professional identity. Moreover, the doctor's dialogue orients to the performance of this professional duty by attempting to exert control over the decision (*put my foot down*) in the face of the patient's potential risk, while also alluding to considering the patient's perspective in conceding to her preference not to start insulin thus far.

#### **7.2.1.2 Patient's Perspective**

In Excerpt 7.2 DR A continues her account, describing the consultation after the patient met with a diabetes educator (nurse). The adverbial time phrase "two weeks later" sets a chronological context for the listener, before the doctor recounts their conversation using constructed dialogue. The patient's speech, characterising the nurse as "pushy" for wanting her to start insulin immediately, supports the doctor's medical agenda with an aligning opinion from another medical professional, and in contrast, positions the doctor's behaviour, for example, in the recommendation that follows, as patient-centred rather than "pushy". However, although DR A's recommendation is phrased very mildly as a suggestion (28-*You know, I think you should be on insulin*) it is followed by the clinical justification which renders insulin as imperative (29-*there's no other way*). In line 30, DR A conveys the patient's disclosure of fear upon seeing the nurse demonstrating how to use the insulin pen through constructed dialogue, before making a change in footing to summarise the patient's experience from her own perspective (*it was so scary for her*). She then describes her own actions in the treatment negotiation, detailing her efforts



towards gaining the patient's acceptance of insulin (32-*So er, it took me a lot of convin-*), emphasising the duration of the process over several visits.

### Excerpt 7.2: She sees my face

Line/Speaker	Talk
26 DR A	<b>So, then two weeks later</b> she came back and said, "Oh, you know that nurse
27	was so pushy, she really wanted me to start insulin there and then!" so I said
28	"Yah, ah, well, what do you think?" er, "You know, I think you should be on
29	insulin, because, you know, there's no other way, you've taken all the
	medicine already, so .hh"
30	"No lah, doctor, I'm still very sc-, I- I saw her demonstrate it, tapi macam:"
31	<u>It was so scary for her.</u> It's a new (.) thing.
32	<b>So er, it took me a lot of convin- I think I saw her two more,</b>
33	<b>two or three times after that,</b> then only she:
34 R	O::h
35 DR A	<u>She re- realised she had no choice .h yeah</u>
36 R	So it's like, five, maybe four ((consultations))
37 DR A	<b>Er more than that</b>
38 R	Visits
39 DR A	<b>More than that I think,</b> and um, because I was, <b>I felt that it was</b>
40	<b>necessary for the patient,</b> so <b>I kept seeing her more frequently</b>
41 R	Okay
42 DR A	Not to say more frequently, er, less:er period of time between visits,
43 R	Okay
44 DR A	<u>So, at least she sees my face, she knows that "Aiya, I have to (.)</u>
45	<u>think about insulin" right?</u>

The underlined text shows how DR A characterises her patient's perspectives throughout the process of treatment negotiation with affective phrases (33-*it was so scary for her*) and epistemic phrases (37, *She realised she had no choice*; 46-47, *She knows that 'Aiya, I have to think about insulin' right?*). In describing her motivations to schedule more frequent visits, she invokes her medical expertise as an account (39-*I felt it was necessary for the patient*) and then uses ventriloquism to voice the response she hoped to prompt from the patient in doing so (44-*Aiya, I have to think about insulin*). The exclamation "*Aiya*" a borrowed expression from Chinese dialect used in colloquial Malaysian English to respond to a dispreferred or undesired event or news, indexes the patient's discomfort at DR A's continued talk on insulin. By doing so DRA alludes to the

fact that the patient may not be entirely comfortable with her efforts to influence the decision about insulin.

### 7.2.1.3 Patient's Control over the Decision

Despite conveying their attempts to influence the decision, the doctors' accounts depict the decision as ultimately belonging to the patient. Continuing from the previous excerpt, Excerpt 7.3 shows the doctor recounting the following visit with the patient. In reporting her own talk with the patient (54-56) DR A, invokes the patient's control over the decision (52-*it's up to her*), using humour and colloquial speech to convey her limited control over the patient's diabetes in her lifeworld (52-*I cannot go to her house, knock on the door and say "Ey, you taken it or not"*).

#### Excerpt 7.3: You know what do to

Line/Speaker	Talk
46 R	Then you said she came back to see you, and she said the nurse was
47	Pushy
48 DR A	Very pushy ah
49 R	Very pushy, and then what happened with the
50 DR A	U:::m
51 R	decision, did she (.) postpone
52 DR A	Ah, um, I told her that it's, <u>it's up to her. Because I cannot, even if I give the</u>
53	<u>medicine, I cannot force, I cannot go to her house,</u> knock on the door and say
54	"Ey, you taken it or not?", Cannot lah, right?
55 R	Hhhh
56 DR A	Hh um but, um but sort of <u>persuading</u> her to see that (.) <b>if it's your</b>
57	<b>responsibility, because it's your health (.)then, you know what to do lah</b>
58	(.)
59 DR A	Right?
60 R	M-hm
61 DR A	<b>To know, to do what's important for you. If you think your health</b>
62	<b>is important then you do it lah. Ya.</b>
63 R	So what did she decide? What
64 DR A	<b>She decided to take it lah hh HH</b>

Continuing to describe her conversation with the patient, DR A invokes the moral dimension of health and responsibility (56-*if it's your responsibility, because it's your health*) but allows for subjectivity in the patient's values (61-*If you think your health is*

*important, then you do it lah*). Nevertheless, this deployment of moral obligations conveys the doctor's orientation towards starting insulin as the clinically and morally right choice. In response to the researcher's question about the decision outcome, DR A discloses that the patient decided to start insulin.

As seen in this section, DR A constructs an account of treatment decision making in which she succeeds in gaining a patient's acceptance of insulin, despite the patient's strong fear of injections. The doctor utilises event and character work, and constructed dialogue, to give authenticity to this account in which she performs her responsibility of helping the patient "control the disease" by starting insulin. The doctor uses words such as *persuade, convince, put my foot down* to depict her efforts to "control the decision" as part of the larger aspect of "controlling the patient", in managing type 2 diabetes. However, these efforts to influence the decision outcome are framed as a performance of professional responsibility which does not challenge the patient's ultimate control over the decision, vis-à-vis her right to accept or refuse insulin. Moreover, the moral dimension of the patient's responsibility for her own health is deployed as a rhetorical strategy used to gain the patient's acceptance of insulin.

### **7.2.2 Using Contrast in Accounts of Treatment Decision Making**

In general accounts about their treatment decision making practices, doctors use contrast to convey their orientations to the patient control over the treatment decision and align their practices to patient-centred ideals. The following sections show how doctors contrast their decision making practices against the patients' control in the life-world, patients' conflicting preferences and illegitimate use of force

### 7.2.2.1 Doctors' Limited Influence vs. Patients' Life-World Control

In the following excerpts, the doctors contrast their limited influence against the patient's control over their conditions in the life-world, delineating the limits of their responsibility.

When asked about who had more influence over the decision described earlier, DR A points to the patient as having had more influence, in terms of the time and resources consumed during the decision making process (Excerpt 7.4). She describes the patient's control over the decision using the idiomatic expression "the ball is in her court" (73), and then describes her role in the decision as limited to giving her "professional opinion"(75). The patient's choice is invoked as the final say in the decision.

#### Excerpt 7.4: Up to you

Line/Speaker	Talk
65 R	So who was more influential in that decision?
66 DR A	She was hh hhh , I – I feel that she was
67 R	Okay
68 DR A	Because
69 R	Okay
70 DR A	She w- a- was influential in the sense that she took a lot of our time, and our
71	resources so, it i-
72 R	M::h
73 DR A	<b>The ball is in her court</b> , she has to (.) you know?
74 R	Decide
75 DR A	<b>Ya, all I can say is "this is my professional opinion lah",</b>
76	<b>but what you choose to do with that opinion, up to you lah, right?</b>

In the following excerpt (Excerpt 7.5), DR C describes the decision as "shared" (84, 90), deploying the SDM concept and resisting the assumption of the researcher's question that one party was more influential than another. In her next turn (86), DR C contrasts this "shared" decision against attempts to "force" the treatment on the patient, emphasising the patient's control over administering insulin. In line 92, DR C again contrasts forcing against a shared decision. The decision is constructed as a joint effort (88-*we give our part*), but ultimately belonging to the patient (*the decision still lies with the patient*). DR C offers a practical explanation, contrasting the limits of the doctor's

influence over the decision (89-*writing in the computer*) against the patient's control in implementing the decision (90-*if the patient is not taking*). Her repetition of "no point" (underlined), emphasised with a rhetorical question (96) underscores the pragmatic reasons for her orientation to the patient's decisional control.

### Excerpt 7.5: The decision still lies with the patient

Line/Speaker	Talk
77 R	Um, the:: patient you described, who started using insulin, who do you think
78	had the most influence on the decision, you or the patient?
79	(.)
80 DR C	<b>It's a shared.</b>
81 R	O:kay
82 DR C	<u>No point</u> we <b>forcing</b> ourselves,
83 R	M-hm
84 DR C	And then the patient doesn't want to take,
85 R	Oka::yh
86 DR C	It's a shared
87 R	Shared decision?
88 DR C	<b>You cannot force anything...hh we give our part. The decision still lies</b>
89	<b>with the patient. <u>There's no point in us, .hh writing in the computer and</u></b>
90	<b><u>there's no point if the patient is not taking it.</u></b>
91 R	M::h, ya
92 DR C	<u>What is the point?</u>

#### 7.2.2.2 Patients' Preferences vs. Patient Control

The doctors also recruit scenarios which depict certain patients as preferring the doctor to make decisions for them, contrasting this patient preference against their own preferences for the patient to decide, due to pragmatic and ethical reasons.

In Excerpt 7.6, DR B is ending a description of her strategies in dealing with individual patients, according to their preferences. She recruits the voice of the patient to construct a situation in which the patient asks her to make the decision on his behalf (95-*Some, just "kay, what do you think doctor?"*) to describe a category of patient who tend to ask the doctor to make decisions for them. This is followed by further characterisation of patients according to the urban setting of the university hospital and the rural community clinics (lines omitted).

### Excerpt 7.6: It depends on you

Line/Speaker	Talk
93 DR B	Ya different ways, definitely. Because, er some patient work this way, some
94	k- likes to read, some likes to find, some just want to share.
95	<b>Some, just, “Kay, what what do you think doctor?”</b>
96 R	Kay
97 DR B	<b>Ya, they just (.) er give the trust to us and(.) please decide for me.</b>
98 R	Okay (omitted lines as different clinic settings are discussed)
99 DR B	But, we have to emphasise that (.) whatever the decision.
100	<b>It’s actually reflect (0.5) to YOU.</b>
101	<b>Okay, you are the one who carried out (.)</b> the process. Afterwards. Okay,
102	to get the medic:ine, or to injec:ct, or to monitor, even, okay <b>it’s depends</b>
103	<b>on you. So it’s not me who decides,</b> so if you happy, agree:,
104	then only it makes sense later.
105 R	Right
106 DR B	But if you (.) er half-hearted, then you might feel regret later.
107	So that’s why I’m:, I’m:, usually,(.) <b>I prefer them to decide themselves.</b>
108	And then only we go forward

Using “but” to indicate contrast DR B constructs the decision as belonging to the patient, as they will implement the treatment (100,101-*It’s actually reflect to YOU. You are the one who carried out...the process*), linking this to her limited control over the decision (102-*it’s depends on you. So it’s not me who decides*).

In Excerpt 7.7, DR A responds to the researcher’s question about differences across healthcare settings, by contrasting the implementation of SDM against the preferences of rural patients. In 120, this tension between doctors’ and patients’ decision making practices is voiced using constructed dialogue. Elicitation of the patient’s perspectives, offered as a key feature of SDM (115-*“What do you think about it?”*), is contrasted against the patient’s responding elicitation of the doctor’s perspective. The patient’s dialogue, voiced in Malay, deploys the doctor’s primary epistemic rights as the reason they should determine the decision outcome (116-*You answer doctor, You’re more knowledgeable*).

### Excerpt 7.7: That is the patriarchal model

Line/Speaker	Talk
109 R	So do you find a difference between the patients in the
110 DR A	Hh hh yes
111 R	rural clinic and in the hospital
112 DR A	Oh ye:s, yes
113 R	In what way?
114 DR A	If you. If you, actually this decision making model ((SDM)), like
115	What do you think about it?" <b>they'll say "Doctor yang jawab, doktor yang</b>
116	<b>lebih arif" ((You answer, doctor. You're more knowledgeable))</b> hh kan
117 R	A:::h
118 DR A	<u>That is the patriarchal model, they expect that the doctor will tell</u>
119	<u>them what to do. Well, here it's not that because they are empowered.</u>
120 R	So do you apply decision making differently here and there?
121 DR A	No, no, <b>I try to do decision making ((SDM)) there,</b>
122	I'm just saying that, the responses are very hh different and (.) er
123	they always look puzzled erh herh herh

In the next turn (123), DR A characterises this scenario as the “patriarchal model”, which is expected by her rural patients, contrasting this against decision making with her “empowered” patients at the hospital (118-*Well, here it's not that because they are empowered*). This term deploys patient-centred discourse, emphasising the empowerment of patients to self-regulate their conditions, in contrast with the patriarchal/paternalistic model in which doctors tell patients what to do.

DR A's account depicts ethical tensions in her practice, in trying to implement patient-centred practices which may not fit the expectations of some patients. In response to the researcher's next question about her decision making practices, DR A emphasises her implementation of SDM across healthcare settings, clarifying that the difference lies in patients' expectations rather than her own practices.

#### 7.2.2.3 Pushing vs Patient-Centred Decision Making

The doctors also contrast their patient-centred decision making practices against illegitimate exertion of control over the decision. The word “pushing” is used to distinguish this from their own efforts to gain patients' acceptance of insulin.

As seen in Excerpt 7.8, DR C describes SDM as necessary in her practice (125-*you can't work without that*), offering a practical explanation (127-*no point you pushing, adding medicines when you know the patient is not taking*). This deploys a contrast between patient-centred decision making and the illegitimate exertion of control over the treatment decision (127-pushing), while also contrasting the doctor's limited influence against the patient's control over managing the disease in his daily life (128).

### Excerpt 7.8: No point you pushing

Line/Speaker	Talk
124 R	Right. So er do you practice shared decision making?
125 DR C	A lo::t, here <b>you can't work without that</b>
126 R	Okay,
127 DR C	<b>No point, (.) no point you pushing::: adding medicines when</b>
128	<b>you know the patient is not taking.</b>

The following excerpt (Excerpt 7.9) occurs after DR A has described her approach to decision making (not shown). She then contrasts this against challenges she may face in implementing SDM in the future when she qualifies as a specialist (129). DR A refers to the sugar targets determined by the Ministry of Health as a potential source of external control on doctors, which could lead them to “press” or “push” insulin on patients. As in the previous excerpt, “pushing” is cast as a negative action, but for ethical rather than practical reasons. The motivation to pursue patient acceptance of insulin because of the sugar targets is contrasted against her present ideal (137). DR A then equates the act of “pushing” with the “patriarchal model”, contrasting this against the patients making their own decision (141-*instead of the patients deciding what's best for them*). Through this contrast against the potentially patriarchal pushing which may occur, DR A aligns her present practices to patient-centred ideals.



### Excerpt 7.9: You're already pushing

Line/Speaker	Talk
129 DR A	<b>Maybe it will be a different reality when I become a specialist.</b>
130	Because you know when you go into the government,
131	K. K, like KKN ((Ministry of Health))
132 R	Mhm
133 DR A	<u>They have targets lah, you know, like as much as you can, try to bring</u>
134	<u>the patient's HBA1C levels down a certain point, and if you can't ah,</u>
135	<u>how come you couldn't? Ah so I think then <b>there'll be more</b></u>
136	<b>pressure for doctors to press insulin on them,</b> so (.) to you know,
137	<b>so then it doesn't become so ideal anymore.</b>
138 R	Right
139 DR A	<b>Because then, you're already pushi::ng,</b>
140 R	Right
141 DR A	So then, <b>it becomes like a patriarchal model already</b> (.) instead of the
142	patients deciding what's best for them.

Comparing the language used by doctors to refer to unproblematic actions in their retrospective accounts (convincing/persuading) against their constructions of problematic actions in the excerpts above (pushing/forcing), the difference may lie in that the former terms allude to attempts to influence the decision by changing patients' perspectives on insulin through communicative means, be it by providing information or assurance. In contrast "pushing" and "forcing" invoke only externally-directed force without any communicative implications. Moreover, while pushing/forcing implies that one party is more powerful than the other, persuading/convincing invoke collaborative interactions in which one party attempts to "pull" another party towards their perspective, acknowledging the influence of both parties.

As shown in this section, the doctors' accounts of their practices foreground patient control over the decision as a practical necessity and ethically preferred. Their limited influence is contrasted against the patient's ultimate control over implementing insulin on a daily basis. The doctors also align their accounts of practice with patient-centred concepts through the use of terms such as "shared" decisions and "empowerment", and contrasting their practices against the illegitimate exertion of control over the decision, or "pushing".

### **7.3 Patient's Accounts of Treatment Decision Making**

The patients' accounts differ according to whether or not they decided to start insulin. The retrospective accounts of Patients C and D, who accepted insulin, invoke their loss of control over the decision, although they orient to a general sense of control when talking generally about managing their condition. In contrast, the two patients who refused insulin (Patients A and B) emphasise their self-control, and therefore, their ability to control the disease without insulin. The accounts of the two patients who accepted insulin will be discussed first.

#### **7.3.1 Controlling the Disease with Insulin**

In their accounts, Patients C and D utilise constructed dialogue and event work to construct accounts of treatment decision making in which they relinquish control to the doctor by accepting insulin. The doctor is characterised as having primary epistemic rights over the decision, and like the doctors' accounts, their influence over the decision is not treated as problematic, as it is framed against the doctor's responsibility to facilitate the patient's best interest, in terms of improved sugar control.

##### **7.3.1.1 Relinquishing Control over the Decision**

The process of accepting insulin is succinctly conveyed by Patient C, who humorously draws on a literary reference to describe the prolonged treatment decision making process as "something like the, taming of the shrew, ya know". In the accounts of Patients C and D the doctors' actions are depicted mainly through their efforts to gain the patient's acceptance of insulin, for example, by using active verbs such as "convince", "persuade/*iya-iyakan*", while the patient conveys eventual but reluctant acceptance.

Excerpt 7.10 is from the beginning of the interview, during which PC foregrounds his affective response to insulin, describing it as "frightening" (6). PC then describes his treatment regimen at that time, foregrounding his general adherence to the prescribed

treatment (10-*I'm taking all the medicines prescribed by the doctor*) against his resistance towards starting insulin (17-*but I avoided*). Referring to his sugar control, PC offers his inability to control his levels as reason for the recommendation. He uses constructed dialogue to convey the doctor's perspective, using an extreme-case formulation (Pomerantz, 1986) (*the best*) to highlight the clinical benefit of insulin (23-27).

### Excerpt 7.10: I gave in

Line/Speaker	Talk
1 R	Okay, so I wanted to ask you about (.) firstly about your experience in
2	making (.) the decision, you recently started (.) insulin
3 PC	Ah, okay er, er I was diabetic about twenty years ago,
4 R	Right
5 PC	Er, the decision (.) <b>well, I- I- I want to I don't want to use insulin er</b>
6	<b>we- I- I- i- is: (.) frightening er ah</b>
7 R	Okay:
8 PC	<b>that you are o- on insulin you know</b>
9 R	Okay
10 PC	I'm I'm actually a taking the er medicine given by the doctors the
11	tablets, you know?
12 R	Right
13 PC	Tablets related to diabetics lah you know?
14 R	Mmh
15 PC	N- n- dia er, er, er, glupharge and all this stuff, you know
16 R	Ya
17 PC	Y' know? <b>Er- but I (.) avoided. er every time the doctor suggested</b>
18	<b>(.) to go (.) on insulin</b>
19 R	M-hm
20 PC	Because because sometimes is- <b>I can't I can't control my my this</b>
21	<b>thing, so insulin levels and all</b>
22 R	Right
23 PC	You know? So 'e said er insulin is the best thing, you one jab
24 R	M-hm
25 PC	Per night, and er thi- er that will b-bring you down, to
26 R	Okay
27 PC	The level, desired level lah
28 R	Okay
29 PC	You know? <b>So, after much convincing two three times, I said no,</b>
30	<b>no, no (.) and then er, after that, I gave in. to the doctor</b>

In 29-30, PC summarises the treatment decision making process, backgrounding the doctor's significant efforts in trying to change his mind (29-*after much convincing, two three times*) against his repeated refusal of insulin (29-*I said no, no, no*), before he finally accepted insulin. PC's description of this acceptance, "I gave into the doctor" constructs the decision as a relinquishment of control to the doctor. Although PC deploys the notion

of reluctant acceptance several times in his account, this does not necessarily indicate a negative orientation to the decision.

In the following excerpt (Excerpt 6.11) PC contrasts his initial perspectives (44-*insulin is bad*) against his current stance towards insulin, alluding to his conversations with the doctor as motivating the change (45-*after meeting several times*). PC constructs a more active role for himself in the treatment decision, using phrases such as “shifted my position” and “I decided to use insulin”, invoking his ownership over the decision, in comparison to the reluctant acceptance conveyed previously (47, 49). He continues with a positive assessment of insulin (49-*is easy*), minimising the injection delivery as “just a small jab”. His action of going back to thank the doctor for “what she did lah” (56), attributes his starting insulin as a direct result of the doctor’s actions. In lines 59-60, PC accounts for his positive perspective on insulin, drawing on both biomedical (*level has come down*) and life-world benefits (*I feel so nice, my mind is clear*).

#### Excerpt 7.11: Shifted my position

Line/Speaker	Talk
44 PC	That probably, ye know, er, ins- insulin is bad and things like that(.) er know?
45	But er, after m- meeting several times, talking to her and all that
46 R	Mh
47 PC	<b>I- I have er, sh- shifted my position lah changed lah</b>
48 R	Okay
49 PC	<b>Changed it, and er, d- decided to use er insulin, and er, is- is easy, insulin.</b>
50	<b>just a small jab</b> (.) take (.) er ye ye know
51 R	it’s not (.) what you
52 PC	Tho-
53 R	What you thought
54 PC	Wha- what it’s about ah- I mean ah it- help help a lot and er in fact,
55	after that, af after the- er insulin jab, I went back to, y’ know,
56	<b>I talked to her and thanked her</b>
57 R	Hh hh okay
58 PC	W- w- what she did lah <b>Because I feel, felt so nice</b> , after taking insulin,
59	fin fin find that the er <b>level has come down</b> to about (.) six seven and
60	<b>my mind is clear</b>

The following excerpt, from Patient D’s interview (Excerpt 7.12) also invokes the tensions between the doctor’s perspectives and her initial response to insulin, although

with less emphasis on her affective response to insulin. PD uses constructed dialogue to construct the recommendation of insulin (93-101). Her reported speech indexes her response as an indirect refusal, asking to try another treatment option, namely of waiting to see whether her sugar control improves. PB introduces the doctor's response with a characterisation of the doctor as the type who "doesn't force us" (97), which invokes the possibility that other doctors may impose decisions on patients.

### Excerpt 7.12: It's our fault

Line/Speaker	Talk
93 PD	<i>Macam mana, bila cakap, ah doktor kata a::h er buat insulin kan,</i>
94	<i>er saya cakap boleh tak, car lain dulu lah</i> How, when I spoke, er the doctor said ah, er to do insulin right, er I said, can't we, another way first lah
95 R	A::h
96 PD	<i>Ah, ki- tengok dulu macam mana. Pahtu doktor tu pun,</i>
97	<i>jenisnya macam, dia takde paksa kita tau, ha::,</i> Ah we, see first how it is. Then the doctor is also the type, <b>like, she doesn't force us, you know</b>
98 R	Okay
99 PD	<i>Dia cuma cakap, "okay, kita cuba dulu" ah ka takpe, tapi a::h tengok dulu</i>
100	<i>akan datang, macam mana kan? Kalau tak bagus dia kate kena buat jugak</i>
101	<i>lah, dia kata macen tu</i> She just said, "okay, we'll try first" er it's okay, but ah, see first how it is in the future, right? <b>If it's not good, she said, we have to do it</b> anyway lah, she said that
102 R	O::h
103 PD	<i>So memang tak bagus, kena buat jugak lah. Kita kena terima lah</i> <b>So it wasn't good, had to do it lah. We have to accept it lah</b>
104 R	<i>So Puan tak rase:: berat lah, nak menolak dia</i> So you didn't feel it was hard lah, to refuse her
105 PD	<i>Tak, tak de lah, sebab benda ni kita tau diri kita macam mana kan.</i>
106	<i>Kalau kita tak buat, sebab kita: tak control suma, salah kita jugak lah kan</i> <b>No, no lah because this thing we know what will happen to us right if we don't do it, because we didn't control everything, it's our fault also right?</b>
107 R	M:h
108 PD	<i>Sebab jadi, dah keturunan kan. Main makan je hh tu lah masalah tu</i> Because, it's already in the family right. Just eating everything, that's the problem

In the doctor's dialogue, PD conveys the doctor's acceptance of her preference to wait and see, followed by a caution that she will "have to" do insulin if her sugar remains uncontrolled. Her next turn summarises the following consultation, during which her

sugar control remained high, leading to her acceptance of insulin. PD's use of the phrase "tak bagus/not good" to describe her sugar control, compared to the alternative "tak tinggi/not high" orients to the moral dimensions of sugar control.

Like PC, PD's construction of her decision to start insulin indexes her reluctant acceptance (103-*had to do it. Have to accept it lah*), which is understandable given the circumstances. When the researcher asks whether she found it hard to refuse the doctor's recommendation, PD's response (106) takes ownership for the decision as an informed choice, referring to complications risk (106-*we know what will happen*). This is followed by a self-blaming account, in which PD takes responsibility for her condition (106-*because we didn't control, it's our fault also right?*), attributing the disease to a lifestyle of eating "freely" despite knowing about a familial predisposition to diabetes.

### Excerpt 7.13: The best for their patients

Line/Speaker	Talk
109 R	<i>So Puan: pendapat Puan tentang pengalaman Puan dalam membuat keputusan ni macam mana</i>
110	So Ms. what's your opinion about your experience of making the treatment decision?
111 PD	<i>M::h rasanya first tu susah jugak lah nak buat keputusan kan</i>
112 R	Mm, it felt, at first it was quite hard lah to make a decision right
113 PD	<i>Mh</i>
114	<i>Tapi bila dah kali kedua: jumpa doktor tu macam iya-iya kat kita kan.</i>
115	<i>Ye lah doktor mesti nak er setiap pesakit dia, dia mesti nak, apa, yang terbaik untuk pesakit dia kan</i>
	But the second time meeting the doctor was like persuading me right
	<b>Of course, doctors must want er, each of their patients, they must want, what is the best for their patients, right</b>
116 R	Ya ya
117 PD	<i>Ah so, kita pun (.) ikut je lah (.) erh Heh heh hh</i>
	<b>Ah so, I just (.) followed lah erh</b> ((laughs))

In the next excerpt (Excerpt 7.13), Patient D follows a description of the doctor's "persuasion" with a positive characterisation of doctors (119-120). This characterisation not only invokes responsibility of doctors, but alludes to their primary epistemic rights to know what is "best" for their patients. In deploying this characterisation, PC orients to

the doctor's efforts to persuade her to accept insulin as legitimate and validates her treatment decision.

As seen in these excerpts, the patients who accept insulin construct their acceptance of as a result of the doctors' continued encouragement or persuasion that overcomes their initial fears or reservations. Constructed dialogue is used to portray the clinical justifications for insulin, mostly attributed to the doctor, and their personal response to the prospect of starting insulin. However, despite invoking a relinquishment of control over the decision to the doctor in their language (e.g., *I gave in, taming of the shrew, I just followed*) the doctors' efforts to influence their acceptance are conveyed as consistent with the duty of a "good" doctor towards her patient.

### **7.3.1.2 Controlling the Self, Controlling the Disease**

Despite conveying their relinquishment of control over the decision to start insulin, both patients invoke their personal sense of control when talking generally about managing their illness. As seen in this section, PC and PD give examples of behaviour in which they assert control over their health, deploying their individual autonomy while also acknowledging their adherence to medical advice.

In Excerpt 7.14, the researcher elicits PC's account about the patient's role in decision making. PC describes the patient's role as passive (85), accounting for this by foregrounding the doctor's primary epistemic rights over medical knowledge (87-93). Interestingly, PC follows this typical characterisation of the "doctor as expert" with an observation that appears to question it. In 94, PC indirectly raises questions about the prescribing practices of the doctors at his hospital "I don't know whether there are any kind of ah checks or not", offering the observation that the dosage of his medications does not change over a long period.

### Excerpt 7.14: I don't take all of the bags

Line/Speaker	Talk
84 R	But what is the patient's role in decision-making?
85 PC	Well, I think, <b>basically we have the pash- passive role. We play passive role</b>
86 R	Okay (.) what do you think about that?
87 PC	Well, well, I think <b>the doctors know, know the best</b>
88 R	Okay
89 PC	I mean, th- they are more knowledgeable in that
90 R	M-hm
91 PC	I mean er, I- dunno what, you don't have the medical knowledge to counteract
92 R	Right
93 PC	What the doctor er says 'e know?
94 PC	<b>Ye know? But erm, I find the lot of a lot of this medicine that</b>
95	<b>is administered , over the period, I dunno whether there are any kind of</b>
96	<b>ah checks or not, you know?</b>
97 R	Okay,
98 PC	W- w- whether they should increase, or decrease the thing like that, 'y know?
99	They all, seems to be (.) the same amount constant, the same amount,
100	over over (.) a period (.) 'know?
101	(.)
102 PC	So- so: sometimes er a: <b>I-ah (.) honestly speaking, I- ya know, I</b>
103	<b>don't (.)take all of the bags of the drugs prescribed by the doctor. I select</b>
104	<b>the most effective ones</b>

He then makes the disclosure that he does not take all the medications prescribed to him (102-104). While the honesty phrase that precedes the disclosure (102-*honestly speaking*) indicates PC's orientation to potentially problematic implications of his disclosed action, PC non-adherence is warranted against his concerns about prescribing practices. The disclosure implicitly mobilises PC's autonomy (control over self) to determine which medications are suitable for him and to regulate his medication consumption independently of the doctors' instructions (104-*I select the most effective ones*).

This idea of the maintaining overall control is further emphasised in the following excerpt (Excerpt 7.15), show PC's description of a responsible patient as one who considers medical advice but retains overall control and responsibility. PC draws on notions of active participation, including asking questions, within the moral frame of individual responsibility (144-*It's your body, you got to take care of your body*). He uses contrast to define this responsibility as retaining overall control (146-*not to handover*



*hundred percent to the doctor*) while considering medical advice, albeit in a secondary position to the individual's own decisions (147).

### Excerpt 7.15: Not to handover hundred percent

Line/Speaker	Talk
143 PC	Y- y- you must be m= more inquisitive and in asking questions (.)
144	you <b>it's up to you lah. It's your body. You got to take care of your body</b>
145 R	Right.
146 PC	<b>But not to handover hundred percent to the doctor.</b>
147	But I do keep the advice of the doctors, er okay lah, by the side, ye know

As shown in Excerpt 7.16, Patient D also invokes her personal sense of control in a general account about treatment decision making, foregrounding her desire to control her disease on her own terms.

### Excerpt 7.16: Nak sendiri control

Line/Speaker	Talk
126 PD	<i>Ah, kena nak berterus terang tu, kadang-kadang kita ni susah jugak kan</i> To be open, sometimes for us, it's quite hard right
127 R	M::h
128 PD	A::h
129 R	<i>Kenapa tu, rasanya, susah?</i> Why do you find it hard?
130	(.)
131 PD	<b><i>Ye lah kadang-kadang, sebab kita rasa, macam kita nak sendiri control</i></b>
132	<b><i>kita punya penyakit lah</i></b> <b>Yeah, sometimes, because we feel like we want to control our own condition lah</b>
133 R	O::h
134 PD	<i>A::h, macam-macam, macam kadang-kadang tak nak kongsi lah.</i>
135	<i>Ah, sebab bila-bi dia dah bagi kita cadangan kan?</i> Er, many reasons, like sometimes we don't want to share lah Er because when she has already given us suggestions, right?
136	M::h
137	<b><i>Kadang-kadang kita ikut, tapi mungkin tak se:: ratus peratus</i></b> <b>Sometimes we follow, but maybe not a hundred percent</b>

In line 126, she characterises “open discussion” with the doctor as difficult and when probed further by the researcher (R) offers the desire to control one's own disease as the reason for the reluctance to share information (131-*Yeah, sometimes, because we feel like we want to control our own condition lah*). Continuing, Patient D ties the reluctance to share information with the doctor, to conflicts between her daily practises and the doctor's

advice. Her description of this non-compliance, however, is situated within an overall picture of adherence, aligning with the notion of a responsible patient who follows (nearly) all the doctor's advice (137-*sometimes we follow, but maybe not one hundred percent*).

As seen in the previous excerpts, both Patients C and D utilise the phrase “not....one hundred percent” to delineate the limits between adhering to medical advice and retaining control. The numerical expression is used convey retention of the final say within the larger context of adhering to the doctor's advice. Through these accounts, Patients C and D account for their acceptance of insulin while still projecting overall control over their health. In the following section, the accounts of patients who refused insulin will be discussed.

### **7.3.2 Controlling the Disease without Insulin**

As insulin is recommended to patients whose sugar control has been high for several visits, the recommendation to start insulin is justified against clinical reasons and may also imply the patient's failure to control the disease. This makes the choice to start insulin the logical and responsible choice, given the expectation that people should try to remain healthy and avoid risk. The patients who refused insulin, therefore, utilise various resources to legitimise their refusal of insulin. In 7.3.2.1, excerpts are presented to show how Patient A and Patient B construct competing versions of their control, in terms of their blood sugar level and their ability to control it. Next, in 7.3.2.2, selected excerpts show how the patients employ character work to distinguish between themselves and patients who use insulin, in terms of their self-control.

#### **7.3.2.1 Competing Versions of Control**

Both the patients account for their refusal of insulin by foregrounding their ability to control their disease without it. This involves emphasising the positive aspects of their

sugar control, and their self-control, which supports their refusal of insulin as logical from a clinical perspective.

The following excerpt (Excerpt 7.17) begins with Patient B describing her consultation with the doctor, by recruiting the doctor's voice in recommending insulin not only to control her blood sugar but also so that she can relax control over her food consumption, saying that "you can eat anything" (179-180). In response to the researcher's prompt for an account, PB makes an explicit claim of her ability to control her blood sugar, citing figures which are close to the benchmark of five (*five, six, seven*) as evidence for her claim. She acknowledges the higher measurements of her sugar level, while also minimising it (184-*the most it will go*) presenting it as atypical.

#### Excerpt 7.17: It's usually quite low

Line/Speaker	Talk
179 PB	But he said, this is better, <b>because (that one) will control your blood</b>
180	<b>sugar, and then you don't have to worry about (.) food...you can</b>
181	<b>eat anything</b> but I said I'm, I'm not
182 R	Why
183 PB	<b>I've managed to , er , to keep my blood sugar, five, six, seven.</b> The
184	most is <b>the most</b> it will go to eight.
185 R	Okay,
186 PB	But <b>usually, it's quite low</b> , five to six
187	(( further talk about blood sugar omitted))
188 PB	We want you to try one week I said No!
189 R	Okay
190 PB	From the beginning I'm not interested. Sorry. No insulin for me for
191	the time being.
192 R	M:::
193 PB	<b>I manage my food, my diet</b>
194 R	Okay
195 PB	<b>My sugar level is only five, six, seven. Once in a while it goes up to</b>
196	eight when we go out to eat outside. When I go out with my friends,
197	forget myself Hh hh I take the ice kacang and all that, there

PB then reports the doctor's attempts to negotiate her conditional acceptance of insulin, before recounting her response which invokes her control over the decision through the forceful phrasing of her refusal (188-*I said No!* 190-*Sorry, No insulin for me*). Her claim, "I manage my diet", deploys a self-characterisation of self-control, which she

follows by describing her blood sugar control, emphasising the lower readings (195-*only five, six*) and explaining the reading of eight as atypical (195-*once in a while*) and caused by occasional lapses in her self-control.

Similarly, Patient A constructs his refusal of insulin as warranted by foregrounding his ability to control his sugar level (203, 207), as shown in Excerpt 7.18. In 198, PA reports the doctor's recommendation of insulin as a means of controlling his blood sugar, to which PA's response contains an epistemic claim (199-*I just understand what it mean*), while also drawing on affective elements (200-*deep in my heart*). His refusal of insulin, however, is conveyed not as a preference or affective stance but as a considered action, using the modal of obligation "shouldn't" (201). In the following line, PA emphasises his ability to control his sugar level, which makes insulin unnecessary (203). Like Patient B, Patient A acknowledges his high sugar level readings, but casts this as atypical (203-*sometime it go up*) and explained by specific instances of food consumption, implying this is within his control.

#### Excerpt 7.18: Still can control

Line/Speaker	Talk
198 PA	<b>He telling me that insulin will help you: to: y' know? (1.27) to:</b>
199	<b>regulate you::r blood suga::r so:, (1.24)that time I just</b>
200	<b>understand</b> what it mean, but I =deep in my heart I still think (0.42)
201	I shouldn't start insulin so st-, y' know? [at this]moment ah
202 R	[ˈka:y]
203 PA	<b>I feel that I still can control my: (0.76) sh- [sugar] level sometime</b>
204 R	[hmm ]
205 PA	<b>it go up because of certain, know? (0.8) .h reasons er maybe the</b>
206	<b>food intake I took must see, so, I: , (0.3) tell them that I can</b>
207	<b>control certain thing</b>

By emphasising their ability to control their blood sugar through dietary control, and characterising incidences of high sugar as atypical and easily explained, the patients offer competing versions of their blood sugar control, as well as their ability to control it, thereby negating the need for insulin.

### 7.3.2.2 Other-oriented Characterisations of Self-Control

The two patients further legitimise their treatment choice by constructing characterisations of patients who use insulin as lacking self-control, which contrasts against their self-characterisations that emphasise their ability to control their food consumption.

In the next excerpt (Excerpt 7.19), Patient A recruits a character from his working life, categorising her as an insulin user by describing her thrice-daily injections using gestures (211) and sounds (*chop, chop*). When PA hesitates to complete his turn in 216, the researcher responds to this characterisation as representing the inconvenience of insulin in daily life, offering the conclusion that starting insulin is “a big decision” (217). PA acknowledges this contribution and goes on to recruit the hypothetical voice of such patients in describing their use of insulin.

#### Excerpt 7.19: That’s their life

Line/Speaker	Talk
208 PA	And, y’see? And every day I- I- I used to see my, one of my colleague
209	(.)she’s female
210 R	Hm?
211 PA	Everyday m- (makes injecting gesture)
212	Aah, have to go and ( <i>chop, chop</i> ) at least, you see
213 R	Ya
214 PA	About three times a day
215 R	Okay
216 PA	So, it’s-it’s a::
217 R	It’s a big decision
218 PA	Ya, ya
219 R	Mm
220 PA	Ah, maybe they say, okay lah, <b>I take this one .hh I can eat anything</b>
221	<b>I like.</b> you see er so:: er that’s that’s life lah
222 R	M-hm
223 PA	<b>Ah that’s their life, you see. They- they they want that type...eat</b>
224 R	Mhm
225 PA	Some of them are willing to to to take (.) insulin. so that (.) they can

The constructed dialogue (200-*Maybe they say okay lah, I take this one. hh I can eat anything I like*) proposes that insulin is a means of relaxing dietary control, as invoked earlier in Patient A’s constructed dialogue of her doctor’s recommendation (Excerpt

7.17). In 223, PA builds this characterisation further, foregrounding the desire to eat freely as important to such patients (223-*That's their life, you see. They want that type...eat*), and the reason they accept insulin (225). By offering the desire to eat as a motivation to start insulin for these patients, PA deploys the moral dimensions of food consumption, where a lack of control is failure. By contrast, PA's refusal of insulin is aligned with notions of self-control.

A similar use of character work and constructed dialogue is observed in the interview with Patient B (PB), in which she explicitly contrasts herself against "some people", who need to be persuaded by the doctor, before introducing a negative characterisation of a patient who uses insulin (Excerpt 7.20).

#### Excerpt 7.20: Some people, not me

Line/Speaker	Talk
226 R	So you think it's okay for (doctors) to persuade
227 PB	Yes, yes, because um, <b>some people, not me some people, need a lot</b>
228	<b>of persuasion.</b> (.)but I know a few of my friends, (.) No, but I know a
229	lot of ladies (.) afraid about the insulin (.) you know.
230 R	Mmh
231 PB	There's one lady, my neighbour, she will take the pills as well as
232	insulin So, <b>but, she (.) I don't like it, will gobble, no, no I'm</b>
233	<b>disciplined.</b> I can eat..If she eats, eh, " <i>sedap, sedap, sedap, semua sedap</i> "
234	((tasty, tasty, tasty everything is tasty))
235 R	Okay
236 PB	The food is nice (.)" <b>she eats so much. Ah she eats so much</b>
237	<b>I said 'My goodness!' How can she eat so much? Erh hh hh hah heh</b>
238	<b>You know, I can take one spoon of rice.</b>

The excerpt is taken from a general discussion about treatment decision making. Patient B responds to the researcher's enquiry about whether doctors' persuasive acts are acceptable. After agreeing, she offers two distinct categories of people, those who need a lot of persuasion and those like herself, before referring to friends who are afraid of insulin. In rephrasing "a few" to "a lot of" (229), PB emphasises that fear of insulin is typical. However, the next character introduced by PB is unrelated to the topic of fears. In her extended turn, PB describes a neighbour, offering two characteristics of this

individual, first as someone who uses insulin, and second, as someone with uncontrolled eating habits (231-238).

Interrupting her description with a moral judgement, PB describes the neighbour's overeating as typical behaviour, contrasting this against her own self-control (232-*she (. I don't like it, will gobble, no, no, I'm disciplined*). She follows this with another contrast of herself and the neighbour, using constructed dialogue and codeswitching to add authenticity to her account of the neighbour eating uncontrollably (234-*Tasty, tasty, tasty, everything is tasty*). The exclamation and rhetorical question (239-*My goodness! How can she eat so much?*) assign a moral judgement to her neighbour's overeating and implies the difference between her neighbour and herself, which is emphasised by her contrasting self-characterisation of her own self-control (238-*I can eat one spoon of rice*).

As seen in this section, Patients A and B construct accounts which legitimise their refusal of insulin, by implying that insulin is not necessary given their ability to control their blood sugar without it and secondly, by mobilising characterisations of patients who use insulin as lacking self-control. The explicit or implicit contrast of these other-oriented characterisations against their claims of self-control link the acceptance of insulin to a desire to overeat, thereby implying that the refusal of insulin is a responsible choice.

#### **7.4 Discussion**

This chapter has examined the discursive and rhetorical practices used by doctors and patients with type 2 diabetes to construct accounts about treatment decision making on insulin. The analysis echoes the findings of previous studies showing the salience of "control" in professional and personal experiences of managing type 2 diabetes and other chronic illnesses. Four meanings of control, *biomedical sugar control*, *controlling the disease*, *controlling the self* and *controlling the patient* from the literature (Loewe et al., 1998; O. Parry et al., 2005; Warren et al., 2013) were also identified in this study, in

addition to a fifth sense of control related to the research context, of *controlling the decision* on insulin. These multiple meanings of control are linked in complex ways in the doctors' and patients' accounts of their joint efforts in managing the patient's type 2 diabetes.

As demonstrated in the analysis, the accounts of both doctors and patients are displays of responsible behaviour. In the case of the doctors, these accounts serve to justify their professional practice (Arribas-Ayllon et al., 2008b), while the patients accounts can be considered as justifications of their responsible behaviour as patients and individuals. By using discursive and rhetorical devices, the doctors and patients construct versions of treatment decision making in which they orient themselves to larger discourses on professional and personal responsibility. Constructed dialogue, temporal details and descriptions of people lend authenticity to their accounts and contrast is utilised as a rhetorical device, for example, by the doctors, to emphasise their alignment with patient-centred notions and by the patients, to justify their refusal of insulin.

From the professional perspective, the patient's blood sugar control is foregrounded in the doctors' accounts as the rhetorical basis for their actions, although the patient's opposing perspectives and affective responses are also conveyed. Doctors' accounts reflect the other-oriented control, or "controlling the patient", as part of their professional duties to improve patient adherence to medical advice (Loewe et al., 1998; Lutfey, 2005). Within this clinical frame, the doctors' actions are constructed as logical and moral, and also aligned with the patient-centred ideals that guide their practice. However, the references to "*controlling the decision*" in the accounts, in the doctors' choice of words, such as "persuade", "convince" and "lecture" and the patient's language, for example, "had to follow the doctor", "like the taming of the shrew", depict the tensions inherent in decision making insulin when patients resist the recommendation. Yet, whether they have



accepted or refused insulin, patients' accounts do not cast these actions as problematic in their accounts. In this sense, in both doctors' and patients' accounts, the doctors' efforts to "control the patient" are congruent with their professional duty to seek better health outcomes for the patient, i.e., to "control the disease."

However, Anderson and Funnel (2010, p.4) point out "the socialisation of HCPs to take responsibility for their patients' care and outcomes conflicts with the existential fact that patients control and are responsible for 98% of that care". This is echoed in the doctors' construction of the patient's ultimate control over the decision, through phrases such as "it's up to her" and "the ball is in your court", as well as the doctors' use of contrast to delineate their limited responsibility against the patients control over their conditions in their daily lives, which is linked to moral notions of health and responsibility (Broom & Whittaker, 2004; Galvin, 2002). Ideas of personal responsibility are deployed by both the doctors and patients, for example, in DR A's constructed dialogue of her conversation with the patient who refuses insulin, "if it's your responsibility, because it's your health, then you know what to do" and Patient D's statement, "it's up to you lah... it's your body... you got to take care of your body".

In contrast, Patient A and B's characterisations of insulin users as unable/unwilling to control their eating habits, deploy the reverse side of this moral dimension, whereby lack of control is moral failure. By linking uncontrolled eating to insulin use in their characterisations of other patients, Patients A and B imply that their refusal of insulin is a responsible choice, in terms of "*controlling the self*". Moreover, by minimising their sugar levels and downplaying incidents of high sugar as atypical, Patient's A and B construct a competing version which foregrounds their success in "*controlling the disease*", negating the clinical justification for insulin. In emphasising their controlled eating practices, Patients A and B deploy self-discipline as a morally-preferred attribute

(Broom & Whittaker, 2004; L. H. Clarke & Bennett, 2013; Greenhalgh et al., 2011). This contrasts with the accounts of Patients C and D, whose retrospective accounts of accepting insulin are framed against their inability to control their sugar, which implicitly or explicitly invoke self-blame.

The emphasis on the patient's control over the disease, through self-management education and patient-centred approaches presents a potential conflict as type 2 diabetes progresses. As lifestyle changes begin to lose efficacy in controlling the blood sugar, "treatment intensification" (Koenig et al., 2014) becomes necessary. Having been socialised to exert control over their bodies, the patient is then asked to hand over control to oral medication, or insulin, a conflicted orientation to control that patients must adapt to over the course of their illness (O. Parry et al., 2005).

Aujoulat et al. (2008) propose a reconsideration of empowerment to fit the context of chronic illness, which distinguishes between empowerment and control. According to this conceptualisation, patient empowerment involves accepting that control can be both gained and lost as part of the illness journey (Aujoulat et al., 2008). The accounts of Patients C and D demonstrate this duality, whereby their inability to control their blood sugar leads to relinquishment of control over the decision to start insulin. Yet their accounts invoke a personal sense of control over other aspects of their treatment, for example, by using the phrase "not one hundred percent" to describe their overall adherence to medical advice while retaining the final say. This echoes the "strategic non-compliance" that characterises successful self-management of patients with type 2 diabetes (Campbell et al., 2003).

Moreover, while tensions between efforts to gain better clinical outcomes for patients and the obligation to respect the patient's autonomy have been identified in doctors' accounts (Lutfey, 2005; McMullen, 2012; Shortus et al., 2013), the accounts of the

doctors in the present study do not reflect such tensions. The doctors explicitly and implicitly align themselves with SDM and patient-centred practices while also constructing accounts of their efforts to influence patient acceptance of insulin, and constructing the decision as belonging to the patient, without conveying any ethical conflict. This may reflect the different professional articulations of autonomy outside the liberal West (Fan, 1997; Schicktanz, et al., 2010; Tsai, 2001; Naemitrach & Manderson, 2006). However, the similarities between the present study and previous research, for example, in patients' orientations to self-control, the tensions between doctors and patients, and the moral dimensions of control and responsibility indicate that there are certain common themes in the experience of treating and living with type 2 diabetes.

The analysis shows that treatment decision making in this context is less a duality of control versus loss of control (or patient-centredness versus paternalism) and more a continuum along which both patient and doctor exert and relinquish control in terms of the decision to start insulin. These complex negotiations are managed and re-managed in consideration of extenuating clinical and patient factors over the long-term illness trajectory. The analysis also adds to existing research on professional and personal experiences in managing chronic illness, describing how Malaysian doctors and patient make meaning of their experiences in managing type 2 diabetes.

## **7.5 Summary**

As the final analytical chapter in this thesis, Chapter 7 approaches treatment decision making on insulin from the perspectives of doctors and patients with type 2 diabetes. This chapter has described the discursive and rhetorical practices of doctors' and patients' in constructing accounts about treatment decision making on insulin and managing type 2 diabetes in general, around the theme of control.

The multiple meanings of control invoked explicitly and implicitly in the accounts display potentially conflicting professional and personal orientations which are brought together in the context of managing type 2 diabetes (7.1). In conveying their professional responsibility, doctors must manage the clinical agenda, alongside the professional and institutional expectations about their behaviour in addition to the practicalities of patient's self-management (7.2) Patients, on the other hand, must balance clinical considerations against their personal preference, while still displaying the identity of a responsible patient (7.3). Together, these accounts show how doctors and patients construct their individual experiences within the collaborative effort of managing the patients' blood sugar over the course of the illness.

In the following chapter (Chapter 8), a summary of the findings of this study, along with some concluding remarks will be presented.

## CHAPTER 8: CONCLUSION

The final chapter of this thesis will present concluding remarks about this study. The first section (8.1) summarises the study, describing the study's overall purpose and how the research was carried out in order to achieve this. A summary of the findings presented in the four analytical chapters (Chapters 4 to 7) will then be presented (Section 8.2), followed by the limitations of the study (Section 8.3). In Section 8.4, the implications of the findings will be discussed, followed by suggestions for future research (Section 8.5).

### 8.1 Overview of the Study

Considering the high prevalence of type 2 diabetes in Malaysia, the serious complications linked to high sugar levels mean that improving diabetes control is of great importance. Consultations in which treatment decisions about insulin are made can, therefore, be considered to have critical outcomes for patients. Reflecting the growing acceptance of patient-centred treatment decision making, several patient decision aids (PDAs) have been developed locally, including a PDA to support decision making on insulin (DMIT Group, 2012). Such efforts are motivated by potential clinical and psychological benefits for patients as well as current ethical discourses of what constitutes good healthcare. However, in addition to limited information on how PDAs are used in talk, there is limited data available on treatment decision making practices and doctor-patient talk in Malaysia.

The overall purpose of this study was to provide insight to medical practitioners about the social practice of treatment decision making about insulin therapy. To achieve this, the study was guided by the following objectives:

- 1) To ascertain how doctors and patients make treatment decisions using a PDA on starting insulin; and
- 2) To describe how doctors and patients make meaning of their experiences of treatment decision making about insulin.

Utilising Theme Oriented Discourse Analysis, four research questions were devised to address the objectives. First, to ascertain how doctors and patients make treatment decisions using the PDA, eleven doctor-patient consultations were analysed using Activity Analysis to answer the first three research questions:

**RQ1:** *How is talk organised in the activity of routine visits for type 2 diabetes when a PDA on starting insulin is used?*

**RQ2:** *How do doctors use a PDA on starting insulin to facilitate SDM during routine visits for type 2 diabetes?*

**RQ3:** *How do doctors and patients negotiate treatment decisions on starting insulin during routine visits for type 2 diabetes?*

Second, to describe how doctors and patients make meaning of their experiences of treatment decision making about starting insulin, seven research interviews (with three doctors and four patients) were analysed using Accounts Analysis to address the fourth research question:

**RQ4:** *How do doctors and patients construct accounts about their experiences of treatment decision making on insulin therapy for type 2 diabetes?*

By combining these research questions, analytical methods and data types, the research design endeavoured to produce a “thick description” of treatment decision making on insulin, in keeping with a theme-oriented approach (Roberts & Sarangi, 2005; Sarangi

2010a; 2010b). Analysis was informed by “thick participation”, through continued engagement with the professional context.

First, Activity Analysis was applied to investigate the performance of treatment decision making, beginning with analysis of whole consultations through structural, interactional and thematic mapping (RQ1). A closer perspective was then taken, using Discourse Analysis and incorporating Conversation Analysis to analyse the discursive, rhetorical and interactional practices of doctors and patients, first in the use of the PDA to facilitate SDM (RQ2) and second, in the negotiation of treatment decisions about starting insulin (RQ3).

Accounts Analysis was then applied to investigate how doctors and patients talk about their treatment decision making experiences in research interviews. The practices of doctors and patients in constructing accounts about treatment decision making on insulin were analysed (RQ4), showing how participants used discursive devices, such as constructed dialogue and character work, and rhetorical devices, such as contrast, to construct justifications of professional and personal responsibility.

Throughout the process of this study, an attempt has been made to attain “ecological validity” by utilising multiple data types and analytical methods and through continued engagement with the professional context (Cicourel, 2007; Sarangi, 2007a). Moreover, an attempt to remain oriented to the professional context has been made throughout the analysis, by considering evidence-based models and frameworks which are accepted in the medical community, aiming to produce findings which have “external validity” in the professional setting (Sarangi, 2010a). The main findings of the study are discussed in the next section.

## **8.2 Summary of Findings**

This section summarises the findings presented in the four analytical chapters of this thesis (Chapters 4 to 7). The main findings of Chapter 4, on how talk is organised in the doctor patient consultations, are discussed in sub-section 8.2.1. The following sub-section (8.2.2) discusses the main findings of Chapter 5, which examined the doctors' use of the PDA to facilitate SDM, followed by a discussion of Chapter 6, on negotiation of treatment decisions (8.2.3). The final sub-section (8.2.4) summarises the findings presented in Chapter 7, on doctors' and patients' accounts of treatment decision making on insulin.

### **8.2.1 Structure of Routine Visits for Type 2 Diabetes**

The structural, interactional and thematic mapping discussed in Chapter 4 provided a systematic means of unpacking the whole consultations to describe the organisation of routine visits for type 2 diabetes as an activity type. Mapping began with analysis of whole consultations, revealing similarities and differences in content, form and participation. Structural mapping showed two main phases: Assessment and Treatment.

Analysis of the Assessment phase (Section 4.2) showed how information about the patient's sugar control, health-related daily practices and illness experience was managed in the collaborative construction of the patient's current health. While these turns involved both the doctor's "epistemics of expertise" and the patient's "epistemics of experience", doctors largely controlled the talk, eliciting specific information from the patient, and reformulating patient-initiated disclosures to fit the clinical agenda. Moreover, the Assessment phase appeared to serve a more rhetorical, rather than informational function, with assessment of the patient's sugar control used to "build a case" for insulin and to approach the Treatment phase.

The lack of an Assessment phase in five consultations corroborates Sarangi's (2010b) assertion that the phases in naturally-occurring consultations are not rigid and may be



varied and dispersed depending on specifics of the consultation. The chronic nature of diabetes, continuity of care and the use of the PDA might explain why some doctors initiated the Treatment phase without first assessing the patient's health (4.3.1). This was further investigated in Chapter 5, on PDA use, and will be discussed in the following section (8.2.4).

Moreover, while the Treatment phase was the main focus in all the consultations, further mapping showed variations in the content and sequence of the sub-phases, based on whether patients had read the PDA and their perspectives towards insulin, with the main themes of patient knowledge and choice managed differently. Consultations were prolonged and recursive if patients had not read the PDA and/or responded negatively towards insulin (Section 4.3.1). Interactional mapping showed the distribution of participation in the Treatment phase, indicating that doctor-led question-answer sequences were a key interactional feature.

To sum up, Chapter 4 provided an overview of the content and form of the talk in the consultations, while also identifying PDA use and treatment negotiations as focal themes for further analysis in the following chapters. The identification of the Assessment and Treatment phases corroborate the findings of previous studies in chronic care (Angell & Bolden 2016; Díaz, 2000; Koenig et al., 2014). Moreover, by describing how consultations for routine visits for type 2 diabetes are organised in terms of structure, interaction and theme, the findings in this chapter add to the limited data on how talk is structured in consultations outside acute care contexts and in the Malaysian context.

### **8.2.2 Use of the PDA on Starting Insulin to Facilitate SDM**

Chapter 5 focused on the institutional context of treatment decision making, investigating how doctors use the PDA to facilitate SDM. Discourse Analysis incorporating Conversation Analysis was utilised to examine the discursive, rhetorical

and interactional practices of doctors and patients, in consideration of the SDM framework (Charles et al., 1999; Elwyn et al. 2012). The analysis exemplified the practices of doctors and patients in using the PDA, in relation to Charles et al.'s (1999) three analytical stages of SDM, from initial PDA talk, which prompts *deliberation on treatment* (5.1) through *information exchange* (5.2) and the conclusion of *treatment decision making* (5.3). Overall, while the analysis showed how these stages occur reiteratively in real practice (Montori et al., 2006), the PDA was used more to manage knowledge rather than choice. Moreover, the analysis revealed that doctors' practices which appear to be consistent with Elwyn et al.'s model (2013) for example, checking knowledge, discussing harms and benefits, providing patient decision support and eliciting preferences, may constrain patient knowledge and choice, depending on the details of the talk and their interactional context.

An overview of PDA use in Figure 5.1 depicted how patient responses to initial PDA talk led to different trajectories of SDM. Two patterns of PDA use were identified, corresponding to the different trajectories of SDM. First, doctors used the PDA as an *epistemic device*, asking knowledge-focused questions about it to determine whether to proceed to "information exchange" or "deliberation on treatment" (Charles et al., 1999). Second, if patients' responses indicated that they were not "informed", the PDA was then used as an *epistemic source*, to support "information exchange" leading towards the decision. If patients had read the PDA, doctors did not go through it, instead initiating "deliberation on treatment" by eliciting patient perspectives.

Closer analysis of initial sequences showed that although doctors elicited patient participation, they largely used yes/no questions, constraining patients' responses and leaving doctors to rely on single word/short responses to ascertain patient knowledge. Since doctors did not go through the PDA when patients said they had read it, they risked

engaging in decision making with patients who were uninformed. Patient participation was elicited through perspective display invitations (Maynard, 1989) about the PDA, which led to patients' disclosures of perspectives towards insulin, which indicates that they oriented to PDA talk as implicative of the treatment recommendation. This explains the structural patterns discussed in Chapter 4, where treatment decision making was initiated without the treatment recommendation turns which are described as the first part of the three-part decision making structure observed in CA studies in acute care context (Koenig, et al., 2014; Stivers, 2005)

During information exchange with the PDA, doctors used the PDA selectively, skipping content, particularly the later sections on option listing, patient values and the treatment decision. This had implications for SDM, firstly in that information provision was biased towards insulin (Engelhardt et al. 2016). Secondly, the doctors' talk while going through the option-listing section gave the patient an opportunity to express a choice, which is more compatible with SDM (Toerien, et al., 2013) compared to the more commonly observed yes/no questions used by the doctors to elicit or confirm patients' acceptance or refusal of insulin. However, doctors also displayed patient-centred practices during information exchange, for example, by using initial and closing enquiries (Zayts & Kang, 2010). Their gradual approach to closure through yes/no questions such as formulations of patient perspectives, treatment plans and upshots also worked to facilitate SDM by indicating the approach to closure. This provided patients the opportunity to seek information, as P11 (Excerpt 5.14) and P5 (Excerpt 5.18) and to ensure the interactional accomplishment of "sharedness" by requiring the patient's confirmation to complete decision making.

Chapter 5 provided a detailed description of PDA use, linking turn-level practices to the accomplishment of treatment decision making over the trajectory of the Treatment

phase, showing that the use of the PDA was primarily concerned with patient knowledge, rather than choice. Moreover, the analysis demonstrated that the interactional practices of doctors could facilitate or constrain informed and shared decision making, and supports previous studies that indicate time is a constraint both in PDA use and in the implementation of SDM (Bekker, et al., 2003; Brown et al., 2014; Gravel, et al., 2006; Légaré, et al., 2008). Moreover, the findings add to research that has identified variations in doctors' PDA use, including dominating the talk and not consistently using the PDA as prescribed (Abadie, et al., 2009. Wyatt, et al., 2014). The analysis contributes interactional evidence on PDA use, which is scarce in the literature. Moreover, the findings may help inform the design and implementation of PDAs on insulin in Malaysia, for example, by showing the doctors' biased presentation of information, which could be linked to the emphasis on insulin in the PDA content, and their varying descriptions of the PDA while talking about it to patients.

In addition, the findings contribute a novel context to discursive research on patient-centred decision making, which shows how real-life decision making practices can contradict “ideals” of SDM (e.g. Collins et al. 2005; Landmark, et al., 2015; Landmark, et al., 2017; Parry et al., 2017; Toerien et al., 2013). Moreover, the study adds to existing evidence that CA's three-part “proposal (negotiation) acceptance” structure may not sufficiently reflect the complexities of treatment decision making across clinical contexts, particularly in relation to the implementation of patient-centred approaches (e.g. Landmark et al., 2014; Weidner, 2012; Toerien et al 2013).

### **8.2.3 Negotiation of Treatment Decisions on Starting Insulin Therapy**

Chapter 6 discussed the negotiation of treatment decisions about insulin, focusing on consultations in which patients resisted insulin in the initial turns of treatment decision making. These consultations ended with either the patient accepting insulin (Pattern B)

or the doctor accepting the patient's alternate treatment choice (Pattern C). The discursive, rhetorical and interactional practices of doctors and patients in initiating, negotiating and concluding treatment decision making were explicated, contrasting between doctor-led and patient-led talk.

First, initial sequences were analysed (Section 6.1), showing how doctors initiated talk on treatment indirectly, through PDA questions, or more directly, by referring to the previously made recommendation and then eliciting the patients' response with a perspective display invitation (Maynard, 1991). Whether participating actively or minimally, patients' responses conveyed their resistance to insulin through outright refusals, active resistance (including accounts against insulin and disclosure of fears) and passive resistance (including withholding participation and silence). Since the doctors' initiation of talk on treatment was implicative of the recommendation to start insulin, patient resistance prevented closure of treatment decision making, thereby leading to negotiation (Stivers, 2005).

Next, the practices of doctors and patients in supporting their conflicting stances towards insulin were investigated (Section 6.2), beginning with the key interactional feature of doctor-led question answer sequences. Doctors' questions were mainly affective questions, to elicit patients' concerns about insulin, and epistemic questions, to ascertain that patients were making an informed choice. However, patients generally did not disclose concerns instead denying fear, asserting preferences, or withholding participation through silence or postponing the decision. They responded to doctors' epistemic questions with epistemic claims and epistemic display, foregrounding their knowledge and casting their choice as informed. When doctors presented evidence which contradicted patients' preferences and then elicited patients' perspectives, patients resisted the rhetorical challenge by asserting their choice or deferring their response.

Patient-led negotiation was observed in two consultations conducted by the same private general practitioner (sub-section 6.2.2). These resembled a rhetorical duel (Roberts and Sarangi, 2005), with the doctor responding to health and life-world accounts initiated consecutively by the patient. For example, when the patients made positive self-assessments of their health, thereby negating the need for insulin, the doctor responded with medical justifications for insulin which emphasised complication risk. Similarly, the doctor mitigated patients' life-world accounts about the inconvenience of insulin with information delivery and assurances. Various discursive and rhetorical devices were used to present and support the accounts, including reported speech, evidentiality, extreme-case formulations, if-then structures and future references. In addition, patients mitigated their accounts with hedgers and qualifiers.

Analysis of closing sequences showed how knowledge and choice were managed in Pattern B and C consultations. Like Pattern A consultations, Pattern B consultations featured a gradual approach to closure, which facilitated informed and shared decision making. However, the excerpts showed a grudging/conditional acceptance, which is a feature of a "pressured decision" (Quirk et al., 2012). In Pattern C closures, participants oriented to the potential face-threat resulting from the prolonged negotiation, for example, in the doctor's attempts to validate P11's choice after she has withdrawn from participating, and in P4's use of hedgers to assert his treatment choice. In both Pattern B and C consultations, doctors explicitly referred to epistemic and deontic matters with the less participative patients, while in patient-initiated closure, patients implicitly exerted their deontic rights by proposing conditional acceptance of insulin or alternate treatment preferences. Nevertheless, all the consultations ended with the doctor seeking patient confirmation of the decision or future arrangement.

Overall, Chapter 6 demonstrated how the doctors and patients managed knowledge and choice in negotiating their conflicting perspectives on insulin. While the doctors and patients utilised various resources to support their stance, they simultaneously oriented towards each other. On an interactional level, both parties required acceptance or confirmation from the other in order to conclude decision making, thereby achieving shared footing, however minimally.

The analysis in this chapter contributes interactional data from the Malaysian setting and that of chronic care, to literature on treatment decision making in doctor-patient talk, identifying certain similarities, such as patients' active resistance through minimal responses and silence (Stivers, 2005a, 2005b) and the reluctant acceptance in Pattern B consultations (Quirk et al., 2012), as well as differences, which may be linked to the clinical context, for example, in the doctors' and patients' assertion of epistemic and deontic rights in negotiating the decision, and the initiation of treatment decision making through turns which invoke past conversations about insulin. The latter adds evidence which indicates that the three-part decision making structure may not sufficiently account for treatment decision making in various clinical contexts (Landmark et al., 2015; Weidner 2012). Moreover, this chapter contributes examples of talk in Malaysian English and Malay, where distinctive features, particularly the use of particles "lah", "kan" and "eh" appear to carry pragmatic functions in the accomplishment of treatment decisions.

The analysis in Chapter 6 underlines the importance of considering the interactional trajectory, as well as illness trajectory, when investigating patient-centred decision making. Practices which may appear to contradict patient-centred principles may reflect the clinical context, in which insulin is the medically advised option, or reflect previous conversations which the patient has had with the doctor.

#### 8.2.4 Doctors' and Patients' Accounts of Treatment Decision Making

Chapter 7 reported the findings of research interviews with three doctors and four patients, through the use of Accounts Analysis to analyse how doctors and patients constructed accounts of their treatment decision making experiences. The analysis tied micro-level discursive and rhetorical practices to broader discourses surrounding the treatment of chronic illness, namely moral discourses of personal responsibility and ethical concepts of patient-centredness and patient autonomy. Participants used discursive devices, such as character and event work, reported speech and extreme case formulations, and rhetorical devices, including contrast, to add authenticity to their accounts. Control emerged as a key theme, with five meanings of control invoked explicitly and implicitly by participants: *biomedical sugar control*, *controlling the disease*, *controlling the self*, *controlling the patient* and *controlling the decision on insulin*.

In their retrospective accounts, doctors referred to “control” in its biomedical sense, contextualising their accounts against the patient’s glycaemic score, for example, “*He was well-controlled*” or “*Her diabetes was bad, control*”. By doing so, the doctors’ efforts to influence the decision by “convincing” or “persuading” patients to accept insulin were justified. Moreover, doctors explicitly invoked the patient’s ultimate control over the decision (*It’s her decision; It’s up to her*), delineating the boundaries between their professional responsibility and the patient’s own responsibility to manage their health. Doctors used contrast to describe their decision making practices, aligning their practices with ethical discourses of patient autonomy and patient-centredness, for example, contrasting their practice against the illegitimate exertion of control over the decision (e.g., “*You can’t work without [SDM]. No point you pushing...adding medicines when you know the patient is not taking*”).



Patients used the word “control” in its verb form, in statements such as “*I can control my sugar*” or “*I can’t control*”, which implied personal responsibility for controlling their blood sugar. Like the doctors, the patients invoked their ultimate control over the treatment decision and over their disease. However, those who accepted insulin conveyed loss of control over the decision to start insulin, using phrases such as “*I gave in to the doctor*” and “*Saya ikut doctor/I followed the doctor*”. Yet when speaking generally, they invoked a sense of control over their health, using contrast to depict the balance between adhering to medical advice and maintaining a sense of control (e.g. *You got to take care of your body...but not to handover hundred percent to the doctor*).

The patients who refused insulin legitimised their decision not to follow medical advice by creating competing versions of sugar control, minimising their sugar levels and casting high sugar levels as atypical and easily resolved and foregrounding their ability to control the disease (e.g. “*I manage my food and diet*”). This implied that their refusal of insulin was logical. They also constructed characterisations of patients who use insulin as lacking control, deploying moral ideas about self-control and responsibility, and implicitly casting their decision as a responsible choice.

This chapter contributes to existing literature which investigates doctors and patients’ perspectives of managing type 2 diabetes and chronic illness, describing their meaning making practices and orientations to broader moral and ethical discourses. The Malaysian context of the study, enabled investigation into orientations to control and autonomy in a non-western society, in which patient-centred care is relatively novel and which may not align to the liberal philosophies which underpin these ethical principles (Fan, 1997; Schicktanz et al., 2010; Tsai, 2001; Naemitrach & Manderson, 2006). The doctors accounts differed to those in previous studies in that they did not orient to any ethical tensions between pursuing better clinical outcomes for patients and respecting their right

to autonomy (Lutfey, 2005; McMullen, 2012; Shortus et al., 2013). However, the similarities between the present study and previous research indicate that there are certain common themes in the experience of treating and living with type 2 diabetes.

### **8.2.5 Summary**

This section has summarised the findings presented in this thesis. Across the four analytical chapters, some common themes were observed, namely the tensions between doctors' and patients' perspectives on insulin, the influence of ethical and moral discourses and temporal and chronological aspects.

Most significantly, the tensions between the doctors' and patients' perspectives as they negotiate between the clinical justifications for starting insulin and the individual patient's perspectives are salient in both data types. Chapter 6 showed doctors and patients utilising various resources to forward their preferred treatment option during treatment negotiation, while still arriving at a shared decision. Similarly, Chapter 7 described how doctors and patients justified their actions and perspectives in such negotiations as consistent with notions of professional and personal responsibility. In both consultations and interviews, sugar control and complication risk are focal themes in the doctors' talk as they provide justifications for the recommendation to start insulin. In contrast, patients who refuse insulin foreground positive aspects of their health to support assertions that they can control their sugar without insulin. Nevertheless, in both interviews and accounts, there is an underlying orientation towards the perspective of the other, for example, in achieving interactional agreement in the consultations, as well as in orienting to their joint management of insulin in the accounts.

The findings also reflect the larger contexts of treatment decision making in terms of ethical and moral discourses that have implications on participants' practices. In the professional context, the patient-centred approach that informs doctors' practices

manifests not only in the use of the PDA in consultations (Chapter 5), but also in the doctors' implicit and explicit actions towards achieving an informed and shared decision (Chapter 6). In their accounts, doctors deploy patient-centred concepts to describe their practices in treatment decision making (Chapter 7). Moreover, patients orient to moral notions of responsibility, both in demonstrating their knowledge about and control over their condition (Chapter 6), and more explicitly in their accounts, which construct their actions as responsible (Chapter 7).

The chronic nature of type 2 diabetes manifests itself throughout the data, from the variations in consultation structure (Chapter 4) and PDA use (Chapter 5) to the structure of treatment decision making (Chapter 6), which differs from those in acute primary care. Temporal details in the accounts (Chapter 7) depict decision making about insulin as a prolonged process which occurs over many visits. The consultations and interviews also depict patients at different points of the illness trajectory, with some patients accepting insulin readily or reluctantly and others choosing to continue attempting to control their sugar with diet, exercise and/or oral medication.

Overall, the findings show the complex negotiations and meaning making practices of doctors and patients when constructing the social practice of treatment decision making on insulin, within the chronological context of managing type 2 diabetes in the Malaysian context. The novel contributions of the study will be discussed alongside its implications in Section 8.4

### **8.3 Limitations**

This study was designed to provide insight into the social practice of treatment decision making on insulin by providing “thick description” through the use of doctor-patient consultations as well as interviews with doctors and patients. The small sample size of consultations and interviews enabled a detailed analysis of the discourse, with a

focus on utilising the richness of the data for a closer perspective into treatment decision making on insulin. Therefore, producing generalisable findings on patterns of discursive or interactional practices was not an aim of the study. Moreover, there were some limitations of the data and the analytical method, discussed below.

The consultations were purposively sampled to be diverse in healthcare setting and patient's demographic profile to enable a broader investigation of PDA use. However, this may have influenced the talk in the consultations, considering that such variables have been associated with differences in how doctors and patients interact with each other. Continuity of care and patient education level have been identified as a barrier/facilitator to SDM (Joseph-Williams, Elwyn & Edwards, 2014; Legare & Witteman, 2013), with potential associations identified between patient factors, such as education levels and clinical outcomes, and doctor and patient behaviour in consultations (Aelbretch et al., 2014; Aikens, Bingham & Piette, 2005; Del Calane, et al. 2012). Therefore, it is possible that continuity of care may have led to differences in structure and practices across the consultation, as a result of health-care setting. Also, the limited patient participation observed in the consultations could be linked to the high proportion of patients who did not have tertiary education (8/11).

In addition, sociocultural factors, for example, cultural perspectives on doctor-patient roles, or sociocultural differences between doctors and patients, may have implications on the interactions. However, given the data size and variations in sociodemographic background of doctors and patients, I was not able to extend the analysis to consider how the cultural aspects of the Malaysian context manifested in the consultations. My analysis was limited to what was visible in the interactions, and therefore, may have overlooked the many sociocultural factors which could have influenced the findings.

Another limitation of the data is the selection of different patients and doctors for both consultations and interviews, preventing links being drawn between specific consultations and participants' accounts. However, the interviews did not aim to gain a representation of what occurred during the consultations, but to examine participants' construction of accounts of treatment decision making. Also, utilising different participants in the interviews enabled the inclusion of more participants and facilitated the triangulation of findings.

It must also be acknowledged that Theme-Oriented Discourse Analysis (Roberts & Sarangi, 2005, Sarangi 2010a, 2010b) has not been as widely used as other discourse analytic approaches. As with any interpretive approach, analysis could have been approached in multiple ways. However, approaches and themes for investigation were selected with careful consideration to the research context, in consideration of professional concerns. Moreover, effort was made to ensure validity and reliability, as it relates to discourse analytic studies (see Chapter 3). The application of Activity Analysis and Accounts Analysis in various professional contexts has also demonstrated the potential of the approach to produce findings which may be useful for professional practice (Gilstad, 2015; Halvorsen, 2015; Storey, 2012).

#### **8.4 Implications**

This study contributes evidence about how treatment decision making on insulin for type 2 diabetes is constructed by doctors and patients, in a research context which offers uniqueness in terms of sociodemographics and culture, as well as in the use of the PDA in the consultations. The implications of the study will be described according to three areas: treatment decision making in doctor-patient talk (8.4.1), patient-centred decision making, namely SDM and PDA use (8.4.2) and treatment decision making on insulin in Malaysia (8.4.3).

#### **8.4.1 Treatment Decision Making in Doctor-Patient Talk**

The study makes an empirical contribution to discourse analytic research on doctor-patient talk, from a context outside the Western world which is not widely represented in studies on talk and interaction in the medical setting. This adds data in Malay and Malaysian English to the comparatively limited number of discourse analytic studies in languages other than English.

In addition, the study provides additional support for the suggestion that the traditional three-part “proposal/recommendation-(negotiation)-acceptance” structure may not account for the complexities of treatment decision making outside acute care contexts (e.g. Landmark et al., 2014; Weidner, 2012). The initiation of treatment decision making without a recommendation is linked to the chronic care context and use of the PDA, which adds a novel element to existing research and shows how the introduction of decision support tools into the consultation can alter the structure and trajectory of talk. Further investigations into PDA use and treatment decision making in chronic care could help identify patterns of interaction to inform practice.

Specific to the Malaysian context, the findings show how the use of certain particles, for example “lah” “ah” and “kan”, serve different pragmatic functions relevant to the accomplishment of a treatment decision. Further interactional research identifying links between phonological and interactional features of these particles in relation to their pragmatic function in treatment decision making could provide context-specific insights to local HCPs.

From a methodological perspective, this study adds to a body of discourse analytic studies which show how these methods can contribute to knowledge about patient-centred decision making by making visible minute interactional practices and their implications for patient participation. Moreover, the findings derived from applying Activity Analysis

to the consultations demonstrate that matters beyond turn-taking, including content, participation and the interactional trajectory, are important considerations in analysing discourse in professional settings Sarangi's (2010a).

#### **8.4.2 Implementing SDM and PDAs**

By adding to the limited data showing how PDAs are implemented in doctor-patient talk, the study orients to suggestions that the path to improving PDA use begins with examining how they are used in doctor-patient consultations (Hargraves & Montori, 2014). The interactional evidence on PDA use during treatment decision making, for example, showing the kinds of practices that can constrain or facilitate SDM may provide some insight into implementing PDAs, particularly in the context of decisions about insulin for type 2 diabetes.

Moreover, the study adds to discourse analytic studies that investigate patient-centred decision making in various clinical contexts, and demonstrate that in practice, decision making involves highly nuanced interactional practices (e.g. Koenig et al., 2014; Land et al., 2017; Landmark et al., 2014; Toerien et al., 2013; Weidner, 2012). These insights may inform training and practice concerned with implementing SDM and other patient-centred approaches.

#### **8.4.3 Treatment Decision Making on Insulin in Malaysia**

The discursive approach provides culturally-specific interactional evidence about how Malaysian doctors and patients make decisions on insulin using a PDA, in addition to explicating their meaning making practices of their treatment decision making experiences. This adds a different perspective to the existing research on decisions about insulin in Malaysia, which is largely from the clinical and psychosocial perspectives (e.g., Hassan et al., 2013; P. Y. Lee et al., 2016; Y. K. Lee, Low, et al., 2013; Tong, Lee, Ng,

& Lee, 2017). Moreover, the analysis could provide insights that may prove useful in applying patient-centred decision making in managing type 2 diabetes in Malaysia.

Focusing specifically on the PDA “*Making Choices: Should I start insulin?*”, it is possible that the PDA content could be a factor in the bias towards insulin in the doctors’ talk. Future development of PDAs could emphasise the various glycaemic control options in a more balanced manner, which may lead to more balanced presentation of options. Also, doctors’ varying descriptions of the PDA when introducing it to patients implied different gradients of choice, for example, when the PDA is described as “something about insulin”, leaving out the patient’s choice in whether they will start insulin. Moreover, while doctors’ talk in implementing the PDA reflected some features of Elywn et al.’s (2012) SDM model, there was a marked absence of “choice” focused talk. These findings could inform future efforts in training HCPs to use PDAs.

The voice of the Malaysian patient with type 2 diabetes warrants a special mention. Although even the most reticent patients conveyed their perspectives towards insulin during treatment negotiations, only “talkative” patients shared illness experiences, concerns and fears without elicitation. This implies that many patients may not be disclosing concerns or experiences, which could limit their doctors’ understanding of the patient and how best to communicate with them. In eliciting and constructing patients’ perspectives, the doctors showed awareness of potential fears of injecting. Comparatively, orientations to control were less easily elicited or expressed. Yet phrases like “*my own way of controlling*”, “*I can control*”, in the consultations and “*want to control it myself*” and “*it’s my body*”, in the interviews, allude to patients’ efforts to maintain a sense of control while living with type 2 diabetes. As the accounts implied that patients may associate insulin with a loss of control, Malaysian doctors may want to consider this aspect of patient resistance when engaging in talk about starting insulin.



To translate the findings from this study into application in the professional context, the key points of analysis should be shared with clinical practitioners, not only through publication in academic journals, but through seminars and workshops. For example, short workshops could be conducted for doctors at the primary care clinic in the hospital where some of the consultations were recorded. These workshops could include the sharing of data excerpts and key findings, with the hope that a discourse analytic perspective may give doctors some new insights into their interactions. For example, contrasting between the patient responses to open versus closed questions on the PDA or highlighting how knowledge-checking may be improved could lead to more effective implementation of decision tools in consultations. Moreover, sharing the various patient perspectives displayed in consultations and research interviews may give doctors a deeper understanding of how treatment decision making on insulin is experienced by patients. Beyond interactional practices, other factors to be highlighted include the timing of when PDAs are given prior to being discussed in consultations, adapting PDA use to patients' sociodemographic profiles, and patients concerns, other than fear of injecting, which may pose a barrier to starting insulin,

The findings from this study may also be utilised to create material for patient education efforts, as a means of prompting discussions with patients or to show examples of other patients talking to their doctors about insulin. For example, data extracts can be used by the diabetes nurse educator in individual or group sessions with patients, which may prompt patients to disclose concerns or ask questions.

### **8.5 Suggestions for future research**

In view of the limitations discussed in Section 8.3, several directions are suggested for future research. First, further studies investigating the performance of treatment decision making could involve larger datasets, controlling for homogeneity in patient factors and

PDA use. This would enable the identification of patterns in PDA use and treatment decision making in the Malaysian context.

Further studies could also apply a longitudinal approach since this is a chronic condition. Consultation data could be collected at multiple points throughout a patients' illness trajectory, for example, from when insulin is first recommended or when the PDA is first used, and including subsequent consultations to the point a decision is made. This would enable the analysis of doctor-patient talk over the illness trajectory and provide a longitudinal perspective into PDA use and treatment decision making. Similarly, research interviews could be conducted with patients and doctors at different stages to examine whether the accounting practices change over time. Utilising interviews and consultation from the same groups of doctors and patients could also provide other insights. Moreover, future studies may focus on certain sociodemographic groups, to investigate whether, and how, treatment decision making on insulin differs according to patient factors such as education level or cultural background.

As patient-centred approaches have become accepted in Malaysian medical practice, it is also necessary for more studies to investigate what patient-centredness "looks like" in the local context. More research on doctor-patient talk in various clinical contexts will provide locally-relevant data, enabling the identification of cultural or linguistic barriers to implementing patient-centred care. This will be the first step towards more effective and culturally-relevant implementation of patient-centred care in Malaysia.

## **8.6 Conclusion**

This thesis orients to a real-world problem of significance in Malaysia, that is the need to improve the management of type 2 diabetes given its impact on people and society. The low adoption of insulin, which can protect patients from serious complications,

indicates that more information is needed about how doctors and patients make decisions about starting insulin.

By providing discursive evidence from inside and outside the consultation room, this study adds a different perspective to existing studies on treatment decision making about starting insulin in Malaysia. This could provide Malaysian HCPs with context-specific insights into implementing patient-centred models from Western contexts into practice. Moreover, by showing how the PDA is used in talk, the study provides interactional evidence which may contribute insights about implementing PDAs to facilitate patient-centred decision making.

Overall, the findings of this study add to research which shows how real-life talk differs to idealised models such as SDM and patient-centred care. For patients with type 2 diabetes, arriving at the disease stage where insulin must be considered carries various implications for their health, daily lives and sense of self. Therefore, there may always be a measure of tension in doctor-patient talk about starting insulin, in which the accomplishment of treatment decisions carries nuances of a compromised choice. Insights from examining the details of talk may inform practice in navigating these potentially challenging encounters.

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## LIST OF PUBLICATIONS AND PAPERS PRESENTED

### Publications

1. Syed, A., Mohd Don, Z., Ng, C. J., Lee, Y. K., Khoo, E. M., Lee, P. Y., Abdullah, K. L. & Zainal, A. (2017) Using a patient decision aid for insulin initiation in patients with type 2 diabetes: A qualitative analysis of doctor–patient conversations in primary care consultations in Malaysia, *BMJ Open* 2017;7:e014260. doi: 10.1136/bmjopen-2016-014260
2. Mohd Don Z & Syed A. (2017) Patient decision aids in doctor-patient consultations: Treatment decision making on starting insulin. *Sains Humanika* 9: 4-2. pp 93-103.

### Conference Papers/Poster

1. Syed, A. & Mohd Don, Z. (2015). *Negotiating Treatment Recommendations Using a Patient Decision Aid on Insulin Therapy*. Paper presented at Conversation Analysis & Clinical Encounters, 3-5 July 2015, Loughborough University, Loughborough.
2. Syed, A. & Mohd Don, Z. (2014). *But is the Needle Very Long?": The Fear of Needles in Consultations on Insulin Therapy*. Poster presented at Society of Medical Decision Making Asia Pacific, 6-8 January 2014. Singapore.
3. Syed, A. & Mohd Don, Z. (2013). *Pressure and Resistance in Doctor-Patient Consultations in the Context of Decision Making*. Paper presented at the 3rd International Conference Applied Linguistics and Professional Practice (ALAPP 2013), 12-14 December 2013, Kuala Lumpur.