

CHAPTER 4. ANALYSIS OF DATA

4. Overview

Data will be presented and discussed in the following order:

- 4.1 The Rich Picture of SJMC
- 4.2 The Rich Picture Discussed
- 4.3 Verifying of Propositions
 - 4.3.1 Self Actuation Diagnostic
 - 4.3.2 Actor System – Individual Diagnostic
 - 4.3.3 Actor System – Generic Diagnostic
 - 4.3.4 Dissipative Structure System Diagnostic
 - 4.3.5 The Cummings 6-level Diagnostic
- 4.4 Synthesis of Diagnostic Findings to build a Concept Model.
 - 4.4.1 Summary of Findings
- 4.5 The Conceptual Model of SJMC Quality System
- 4.6. Assessment of SJMC Quality System against the ISO 2000 Model
- 4.7. Synthesis of Findings

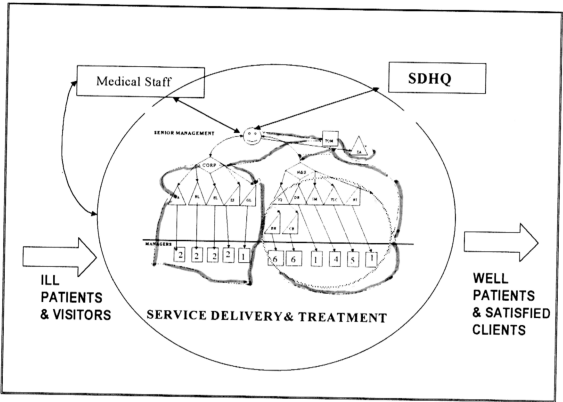
4.1. The Rich Picture of SJMC

The rich picture following is drawn to display the lines of connectivity between the management team of SJMC. The horizontal line bisects the senior management from middle management. However, the middle management are the operational arm and play a significant role in carrying out the decisions of the senior management team, and for the purposes of the rich picture they provide the link between the management team and the rest of the organisation.

The different shapes and lines of colour are explained in the legend following. It is pertinent to note that the lines of connectivity indicate existence of

a black box effect around the nursing and support services division. This will be further explained in the description below.

Exhibit 13: The Rich Picture Of SJMC



Legend:

SDHQ: Sime Darby Headquarters who are 100% owners of the facility and have ultimate say in decision-making. A regional director of Sime Darby Berhad is the Chief Executive of the Hospital, though he is not on site physically, on a daily basis.

Medical Staff: The consultant doctors and specialists who provide the expertise in patient treatment and care. They are not staff of the hospital and do not have shares but rent the premises

and bill patients (via SJMC),for their consultancy services. SJMC provides administrative and facility support and charges them a minimal rental for their clinic space. Pharmaceuticals, diagnostic tests and relate charges are determined and collected by SJMC. Doctors charges are collected by SJMC and paid out on a monthly basis to their respective accounts.

The medical staff have a peer committee and communicate with hospital management via a Medical Advisory Board of elected members.



This is the symbol for the genial Executive Director of SJMC, who is the operational head of the organisation. (The Chief Executive, CEO, is a senior director of Sime Darby). The Executive Director is a medical professional with a background of army service and a founder member of the hospital, being a senior management staff from the opening of the facility in 1985 until the current date. He was appointed Executive Director in December 1997, and is the first Malaysian to hold this position. In the following pages, this individual will be known as D-ED.



This symbolises the 2 Divisional Directors who head the main service divisions, i.e., Corporate Services, and Nursing & Support Services. A point to note is that due to inability to fill a vacancy for Director of Ancillary Services, the ancillary departments have been re-located under the existing 2 division heads. In the following discussion, these individuals will be known as C-FS (Corporate Services Director) and T-NS (Nursing & Support Services Director)



The triangle denotes the Administrators of the different functions that report under the Divisional Director. Each administrator is responsible for the running of a few departments that are headed by managers. The larger groupings have the support of assistant administrators. However, only 2 of the existing 5 assistant administrators sit on the senior management team as listed above.



This denotes the assistant administrator position. Two Assistant Administrators (Customer Support and Patient Administration) sit on the senior management team, (also known within SJMC as the Admin Group). The three other Assistant Administrators are part of the management team and provide support to Nursing Administration and Support Services.



The square box reporting to the Executive Director is the Total Quality Administrator, (identified as C--QA) who is overall in charge of quality standards in the hospital. She maintains formal and informal links with every department and division head via the quality system and documents control activities. The red lines indicate the connectivity pattern for TQM to the other divisions. Note however that the TQM connection to the Nursing & Support Division is controlled as the division operates much like a "black box" in that all decisions and actions to be implemented are filtered via the Divisional Director and the response is determined as a group, rather than in direct negotiation between departments and the TQM function.



The rectangular boxes denote the department managers who are operational unit heads. Whilst they are essential implementers of policy and action, they are not the target of assessment in this project. The number within the box indicates the number of managers reporting to the administrative head.



The arrows denote the INPUT (Ill Patients & Visitors) and the OUTPUT (Well Patients and Satisfied Clients) of the system



Straight black arrows indicate communication and working links that are formal and structured within the system flow. These are the main connections seen between the different levels, indicating a hierarchical power structure.



Double headed arrows show that the link is a two-way process with both actors having equal rights in the working relationship. These arrows delineate the relationship at the higher levels between D-ED and the CEO, and the TQM function and the CEO.



The red lines delineate the connectivity links between the TQM function and the other actors in the system. Note that these lines are loose and ambiguous, indicating a fluctuation of relationship and connectivity. Although a formal reporting system exists within the quality system, these lines are more representative of the daily interactions between the individuals concerned.



The teal coloured line indicates the somewhat closed system that is practised by the Nursing & Support Services Division.

This is largely due to the hierarchical power structure within the nursing profession and the characteristics of the main actors within the sub-system, i.e. the divisional structure.

The divisional structure is listed below with the administrative groupings categorised and departments identified. The identity of each administrative head is provided in brackets beside the function title.

Exhibit 14: Divisional Structure as at July 2001

CORPORATE SERVICES (C-FS)	NURSING & SUPPORT SERVICES (T-NS)
PATIENT SERVICES (G-PA)	NURSING SERVICES (Q-NA)
Front Office /Admissions	Nursing Wards
Patient Administration	Operating Theatre
Business Office	AMBULATORY CARE (T-CA)
Medical Records	Outpatient Services
DIAGNOSTIC ANCILLARY CARE (B-DA)	Haemodialysis
Diagnostics	Day-care /Endoscopy
Imaging	Pharmacy
Cancer Centre	SUPPORT SERVICES (M-SS)
Laboratory Services	Food & Beverage
Business Development	Dietetics
MEDICAL SERVICES (L-MC)	Biomedical Engineering
Medical Staff Services	Safety & Security
Corporate Marketing	Laundry
Executive Screening Profile	Grounds & Garden
FINANCIAL SERVICES (S-FS)	TRAINING & EDUCATION SERVICES (R-TE)
Financial Services	College of Nursing
Accounting /Payroll	Training & Development
Materials Management	CUSTOMER SUPPORT SERVICES (N-CS)
OUTREACH MANAGEMENT(A-OM)	Customer Support Service

Two administrative functions report directly to the Executive Director (D-ED) :

HUMAN RESOURCE SERVICES (A-HR)	TOTAL QUALITY MANAGEMENT (C-QA)
	Engineering (interim)

A different representation of this is provided in the company organisation chart in the appendix.

4.2 The Rich Picture Discussed

A close study of the rich picture will show the sociometric details to some degree, from the linking of the lines of connectivity. The details display the interplay of power and relationships between the top three individuals (D-ED, C-FS, and T-NS) as well as, the impact of having the two administrators, (C-QA and A-HR), reporting directly to the D-ED. There is clearly an interplay of power between the black box of the Nursing & Support Services Division under T-NS and the wide yet irregular scope of the Quality Administrator, C-QA. The fact that T-NS heads more than half of the physical staff force and is responsible for almost all of the operational functions makes her an integral player in the senior management team, and confirms her position of power.

However, C-QA as the Quality Administrator has a two-way link to the CEO and, apart from this, has a strong functional role to play in the Quality Management System. This coupled with the fact that by virtue of her expertise, she also has direct links to Group Headquarters, gives her an additional link to power bases.

Whilst acknowledging that the other 2 individuals in this circle of influence, D-ED and C-FS, it is clear that the key to the dynamics lies in the relationship between T-NS and C-QA. Whilst both individuals have long ties with the organisation and are healthcare professionals, they have distinctly different world views, i.e., their generic systems may be similar but their individual actor systems

are quite different. The impact of these differences will be seen in the following diagnostics.

4.3. The Research Propositions

The full data summary for the diagnostic measures is provided in the appendix. In the following discussion, we will review the mean scores discuss the propositions.

4.3.1 Self Actuation Diagnostics

The self actuation dimensions relate to the ability of the organisation to self regulate and be a viable system. The table below presents the mean scores for the dimensions studied:

Exhibit 15: Self Actuation System Diagnostics

SELF ACTUATION SYSTEM DIAGNOSTICS		
CHARACTERISTICS	EXPLANATION	RATING(1-5)
SELF-INFLUENCING	Circular causality and causal loops, circular patterns of causation	3
SELF-REGULATING	Maintenance of a particular variable to keep essential variables within limits, via negative feedback and specified limits.	5
SELF-ORGANISING	Self amplification of fluctuations generated in the system as a consequence of perturbations from the environment	3
SELF-SUSTAINING	Operations that are organisationally closed, when all possible states of activity generate or lead to activity within itself. Once an organisationally closed process is started, it is self-sustaining.	2
SELF-PRODUCING	Autopoietic systems that self produce both their components and their boundary	2
SELF-REFERENTIAL	Symbolic reference to self. These systems refer to themselves in terms of themselves, or their components, through image, expressed symbolically.	5
SELF-CONSCIOUS	Able to interact with descriptions of self	4
GROUP MEAN		3.4

The mean of 3.4 confirms that SJMC is not a fully viable system. To understand why this is so, we need to view each dimension more closely.

1. Self Influencing: SJMC, whilst it is an efficiently run hospital, still has to rely on the fact that it draws its activity from the inflow of patients. Although this may be influenced by the organisation's reputation, it is not purely through the hospital's initiative that patients continue to come to SJMC. Factors like the availability of specialists, specialised services, location and other related issues influence the public in their choice of a hospital. Hence, this dimension is scored 3 for the group.

2. Self-regulating: SJMC has had a Quality Management System in place since 1997, and as such, has built in effective self-regulatory systems both in management, as well as, operational areas. A regular 6-month internal quality audit and preparation for the yearly ISO audit as well as, a good customer feedback system (ref. to Appendix for samples), ensures that feedback is captured and used to provide input into quality improvement efforts. The efforts of the Quality Administrator, C-QA working with the department heads and the Training & Development Department, ensure that the necessary input and information are conveyed to staff in a consistent manner. This dimension is rated a full score of 5.

3. Self-organising: This dimension is rated a 3. Being an industry leader and proud of it, SJMC has slipped into a mode of complacency, where happenings in the external environment are viewed as secondary to the fact that it has a solid reputation as a good healthcare provider. As such, the new developments in the industry and among potential competitors are looked upon with interest – but with no major concern that they will directly impact SJMC for some time to come. Basically, the

stance seems to be to maintain the status quo, and not over extend the company's resources or energies preparing for external threats – when they could be better used internally.

4. Self-sustaining: As a private hospital, SJMC can never be organisationally closed, and self=sustaining. However, as a full service hospital with a 24-hour emergency service and operation theatres, SJMC does provide full hospital services to potential patients. This dimension is rated a 2.

5. Self-producing: The term autopoietic is used for this dimension, and here also, SJMC rates a 2. The hospital is unable to be fully self-producing as it relies on external input to effectively carry on its services.

6. Self-referential: As a group, the management team of the hospital often uses SJMC as its own benchmark – firmly convinced that no other private hospital in Malaysia has achieved its standing. In many instances, this may be true. This dimension is rated a 5.

7. Self-conscious: The management team is also very conscious of who they are and what they represent, and are comfortable relating to images of themselves as an organisational body. This dimension is rated a 4.

As a result of these 7 dimension rating, where the mean is 3.4 with a minimum score of 2 and a maximum score of 5, we can see that whilst SJMC may have some strong dimensions of actuation, the fact that it does have to rely on the inward flow of patients from the external environment will limit its ability to act as a totally viable, autopoietic system. Keeping this in mind therefore, the critical factor for SJMC would be the monitoring

of the external environment and its impact on patient census, as this is the key factor that will determine the viability of the organisation over time.

4.3.2 Actor System – Individual Diagnostic

The table below presents the mean scores of the individuals on the 3 dimensions for the individual actor system diagnostics.

Exhibit 16: Individual Actor System Diagnostic Scores

The viability of the Actor System dimension in the individual.					
NO.	ID CODE	SELF REFERENCING CLOSURE easier if you are a joiner	ALTRUISM VS EGOCENTRISM try to maintain identity against world	SELF REFLECTIVE EVOLUTION org. chge as evolution of identity in relation to world	INDIVIDUAL SCORE
1	D-ED	5	3	4	4
2	C-FS	3	5	4	4
3	T-NS	2	5	4	3.7
4	A-OM	3	4	5	4
5	C-QA	2	5	5	4
6	L-MD	4	3	4	3.7
7	M-SS	2	5	5	4
8	Q-NA	4	4	5	4.3
9	T-CA	3	4	4	3.7
10	B-DA	4	5	3	4
11	R-TE	3	4	4	3.7
12	A-HR	4	3	4	3.7
13	S-FS	3	5	5	4.3
14	N-CS	5	3	4	4
15	G-PA	3	4	4	3.7
	MEAN	3.3	4.1	4.3	3.9

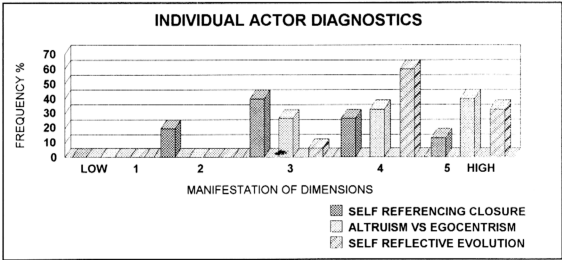
With a group mean of 3.9, this score is just below the required mean of 4. Hence proposition #2, is not confirmed, and it is indicated that in SJMC, the individual actors systems display significant gaps between

the individual actor identity and the group actor identity. This is also borne out by the fact that the lowest mean score for the group is in the first dimension of self-referencing closure where there is a definite spread of scores with a minimum score of 2 and a maximum score of 5 on a 5-point scale. The frequency table and graph below further verifies this showing the percentage responses spread over 4 of the 5 score options for the first dimension.

Exhibit 17: Frequency table of scores: Individual Actor System Diagnostic

FREQUENCY TABLE - % of respondents in each score level						
RATING	LOW	1	2	3	4	5 HIGH
DIMENSIONS						
SELF REFERENCING CLOSURE		0	20	40	26.7	13.3
ALTRUISM VS EGOCENTRISM		0	0	26.7	33.3	40
SELF REFLECTIVE EVOLUTION		0	0	6.7	60	33.3
TOTAL %						

Exhibit 18: Frequency Graph: Scores – Individual Actor System Diagnostic



The pattern of scores indicate that whilst there may be significant differences in the way they reference the world, the management team do

share similarities in the dimensions of egocentrism and self reflective evolution. This could be connected to the fact that as a group, the team is quite mature with a mean age of 46.6 years, the youngest being 36 and the eldest being 59 years of age. This will be further explored in the individual level diagnostic.

4.3.3 Actor System – Generic Diagnostics

Exhibit 19: Group Dimensions: Actor System Diagnostics

DIMENSIONS	GROUP MEAN
WHOLENESS works as whole in connection with cognitive purpose from metasystem	3.9
PROPOSITIONAL Characteristics of the profile are determined by Metasystemic propositions	4.4
NORMATIVE Characteristics are normatively agreed to define distinct classes of behaviour	3.9
EXTENSION Characteristics allow room to manoeuvre between systems, similarity or commensurability	3.1
QUALITIES Evaluation of qualities , pattern distinction between fixed and variable.	3.2
GENERIC IDENTITY Strong generic identity indicate norm coherence within the group.	4.3
GROUP MEAN	3.8

The group mean for the Generic Actor System Diagnostic is 3.8 , also indicating that this is an area for intervention, as the group is not viable as a closed system lacking the capacity to form boundaries and have closure. Viewing the score frequency table, the pattern of scoring indicates that the critical areas are the dimensions of Extension and

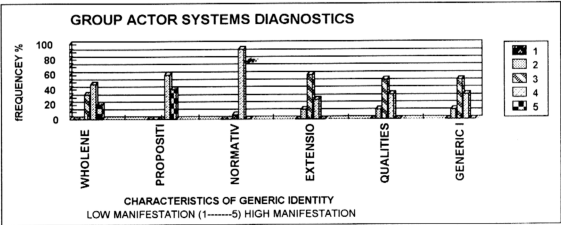
Qualities, which had mean scores of 3.1 and 3.2 respectively in a range where the minimum was 3.1 and the maximum, 4.4 with a mean of 3.8.

Exhibit 20: Group Actor System Diagnostics –Frequency of Scores

GENERIC	SCORE	1	2	3	4	5	TOTAL
	%						%
WHOLENESS							
works as whole in connection with cognitive purpose from metasystem		0	0	33.3	46.7	20	100
PROPOSITIONAL							
Characteristics of the profile are determined by metasystemic propositions		0	0	0	60	40	100
NORMATIVE							
Characteristics are normatively agreed to define distinct classes of behaviour		0	0	6.7	93.3	0	100
EXTENSION							
Characteristics allow room to maneuver between systems, similarity or commensurability		0	13.3	60	26.7	0	100
QUALITIES							
Evaluation of qualities , pattern distinction between fixed and variable.		0	13.3	53.3	33.3	0	99.9*
GENERIC IDENTITY							
Strong generic identity indicate norm coherence within the group.		0	0	0	66.7	33.3	100

* differences in decimal point are due to rounding off and are not significant.

Exhibit 21: Graph of Frequency of Scores- Group Actor Systems



The graph further shows that, in the first 3 dimensions or characteristics, i.e., wholeness, propositional and normative, there seems to be a trend to higher manifestation of qualities, whilst the remaining three characteristics show a trend to low manifestation. It is noted that the remaining 3 characteristics are related to the flexibility of the generic identity whereas the first 3 characteristics are related to norms and cohesive behaviours. It is the lower manifestation of the flexibility scores that have an effect on the overall mean of 3.8

4.3.4 Dissipative Structure System Diagnostics

The dissipative structure diagnostics focuses on the elements of the organisation that would determine its structure as a conservative or dissipative organisational structure. The mean ratings in the table below are the mean of the individual ratings of each of the management team for the elements listed. The full table is provided in the appendix.

As shown, the overall mean for dissipative structure diagnostics is 3.2 which that SJMC as a complex organisation does not have the characteristics of a dissipative organisation that is a viable system, having the capacity to adapt and change in states that are far from equilibrium.

The lowest mean score is 2.6 (for steadiness of the internal condition) and the highest is 3.8 (for self reference) in a range of 1-5 with a mean score of 3.2 for the group. A closer look at the individual scoring in the appendix indicates that there are 3 individuals who score above 4. The individual mean scores for the elements range from 2 to 4.1 with a mean of 3.1

Overall, the scores indicate a significant conservatism which is understandable given the status and position of the organisation in the

industry structure, as well as, the effects of its meta-system structure, i.e. its links with the larger body of Sime Darby Group which is itself a conservative organisation.

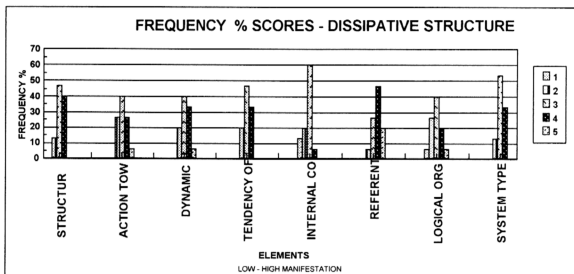
Exhibit 22: Dissipative Structure Diagnostics –Group Means

DISSIPATIVE STRUCTURE SYSTEMS DIAGNOSTICS				
NO.	ELEMENTS	CONSERVATIVE score 1 for conservative	MEAN RATING GROUP*	DISSIPATIVE score 5 for Dissipative
1	STRUCTURAL ORIENTATION	Structure preserving	3.3	Structure Changing
2	ACTION TOWARD DEVIATION	Counteracting	3.1	Amplification
3	DYNAMIC	Near zero energy/steady state in time	3.3	Far from zero, change with change in time
4	TENDENCY OF FORM	Morphostasis	3.1	Morphogenesis
5	INTERNAL CONDITION	Near to steady	2.6	Far from steady
6	REFERENT	Ref. to steady state	3.8	Self reference
7	LOGICAL ORGANISATION	Irreversible to steady	2.9	Cyclical irreversible
8	SYSTEM TYPE	open with poss growth	3.2	open, continuous, balanced energy exchanged
	OVERALL GROUP MEAN		3.2	

Exhibit 23: Dissipative Structures: Frequency Scores

FREQUENCY TABLE % SCORES FOR CONSERVATIVE DISSIPATIVE RATINGS							
NO.	ELEMENTS MANIFESTATION	1 LOW	2	3	4	5 HIGH	TOTAL*
1	STRUCTURAL ORIENTATION	0	13.3	46.7	40	0	100
2	ACTION TOWARDS . DEVIATION	0	26.7	40	26.7	6.7	100.1
3	DYNAMIC	0	20	40	33.3	6.7	100
4	TENDENCY OF FORM	0	20	46.7	33.3	0	100
5	INTERNAL CONDITION	13.3	20	60	6.7	0	100
6	REFERENT	0	6.7	26.7	46.7	20	100.1
7	LOGICAL ORGANISATION	6.7	26.7	40	20	6.7	100.1
8	SYSTEM TYPE	0	13.3	53.3	33.3	0	99.9
* DIFFERENCES IN TOTAL DUE TO ROUNDING OFF							

Exhibit 24: Dissipative Structures: Frequency Graph



The effect of such conservatism would be that SJMC would be slow to respond to changes in the environment, as well as, reluctant to implement new ways of working and relating internally as well as, externally.

As such the organisation will tend to move away from far-from-equilibrium states to find new ways of existing. Instead, it will use positive feedback to self regulate and alter itself internally in order to maintain the stability of the status quo. A good evidence of this is the way customer feedback is handled – where input from customers is handled reactively rather than proactively – such that problems are addressed as they appear rather than seen in a system approach.

Although there are certain individuals within the system who are rate higher in the dissipative dimension (C-QA, M-SS, S-FS), they are overwhelmed in effect by the others who are more conservative. C-QA especially who is the TQM Administrator is often frustrated in her attempts to integrate systems and operations in a holistic manner. Her main opposition comes from T-NS who sees such moves as undermining her

authority. T-NS would prefer to work in a black box context and does so in cases involving the Nursing team. However, as her span of control has widened, she is forced now to take a wider view. These tensions work on the team and occasionally strain relationships all round when opinions differ.

4.3.5 The Cummings Six-level Diagnostics

The full write up for the six-level diagnostics is found in the appendix. Here, we will review the mean scores for each of the levels and examine the propositions made.

Exhibit 25: Comparison of Means & Confirmation of Propositions

NO.	LEVEL	STATEMENT OF PROPOSITIONS			
	ORGANISATION	Prop # 5 SJMC will score 4 and above in the organisational level diagnostics of the Cummings model, demonstrating the capacity to maintain performance and productivity and hence, its position and viability as an organisation in the face of competition.			
		MEAN	4.1	PROPOSITION CONFIRMED	
1	General Environment	4.4	Critical Factors identified:	YES	NO
2	Industry Structure	4.2	Economic Situation, HR System, Structural	YES	NO
3	Strategic Orientation	3.7	System and Measurement Systems	NO	YES
	GROUP	Prop # 6 SJMC will score 4 and above in the group level diagnostics of the Cummings model, demonstrating the capacity to maintain its group team effectiveness, cohesiveness, strength and performance in the face of competition and organisational growth.			
4	Group Design	3.75	Critical factors are Goal Clarity, Group Functioning and Group Composition.	NO	YES
	INDIVIDUAL	Prop # 7 SJMC will score 4 and above in the individual level diagnostics of the Cummings model, demonstrating the capacity to maintain its individuals' position and commitment to the job functions within the organisation.			
5	Personal Characteristics	3.9	Mean: 3.96 Critical Factors identified:	NO	YES
6	Job Level	4.02	Abilities, Growth Needs, Education & Family Needs, Skill Variety and Feedback about results	YES	NO
	OVERALL MEAN	3.995 = 4		YES	

From the overall mean value of 3.995, it is seen that in actuality, SJMC is on the borderline, as the required mean for confirming the propositions of being an effective organisation is 4. Due to small sample size, and the fact that we have taken the decision to round off the final figures to the nearest whole number, the final accepted mean is 4.

It is significant that the means are above 4 in the Organisational and Individual Levels, whilst the lower score is in the Group Level. This has to do with the composition of the team as well as its internal working relationships and connectivity.

4.4. **Synthesis of Diagnostic Findings to build a Concept Model.**

The following is an attempt to synthesis the data collected to build a concept model.

4.4.1 **Summary of Findings**

The table below presents the main findings:

Exhibit 26: Main Findings

NO.	DIAGNOSTIC MEASURES	OVERALL MEAN	PROPOSITIONS RE-STATED	CRITICAL SUCCESS FACTORS (scores > 4)
1	Self Actuation Systems	3.4	SJMC does not demonstrate a the capacity to be a viable, self-regulating system	Self-influencing, self-organising, self-sustaining, self-producing. The organisation exhibits significant conservative elements and may not be able to cope with high levels of change initiated externally.
2	Individual Actor Systems	3.9	There are significant gaps between the individual and generic identity of the actors.	Self-referencing closure Individuals have a tendency to refer outwards.
3	Group Actor Systems	3.8	SJMC demonstrates a lower than expected capacity to form boundaries and have closure as a viable system.	Wholeness, norms, extension and qualities There is uneven development of group qualities indicating variances within the group.
4	Dissipative Structures	3.2	SJMC emerges as a conservative system with resistance to change from external forces..	The whole continuum of dissipative elements* This organisation is a conservative structure.
5	Cummings Organisational Level	4.1	SJMC exhibits good organisational structures that will result in a maintenance of performance and productivity.	Economic Situation, HR System, Structural System and Measurement Systems
6	Cummings Group Level	3.75	There are critical areas for group intervention due to lowered capacity to maintain core group characteristics.	Goal Clarity, Group Functioning and Group Composition.
7	Cummings Individual Level	3.96	At the individual level, there are indicators that individuals in the team do maintain their position and commitment to the job function.	Abilities, Growth Needs, Education & Family Needs, Skill Variety and Feedback about results
	OVERALL MEAN	3.73		

The findings show that the organisation is basically conservative with some elements of balance. Due to its strong infra-structural elements and the individual skill levels of the persons involved, the organisation will maintain its


status quo unless it is effectively challenged by an external source. This possibility could only arise if there is a sudden rise in effective competition or a change in the industry environment. To ascertain this would require an environmental scan of the major competitors and their on-going efforts at development and gaining market share. However, this exercise is yet to be done, and indeed, within SJMC, there does not seem to be a sense of urgency to do this – as the management team feels comfortable as the leading private healthcare centre today.

The problem area within the organisation is the tension between the different individuals, mainly the T-NS and C-QA who have both strong personalities and differing viewpoints. The fact that the other individuals involved are not willing to rock the boat too much results in an ebb and flow of power and decision-making that often results in wasted energy and time. In a sense, the team chooses to self-regulate in this way, opting for stability via positive feedback. Issues that have yet to be agreed on definitively show up in the critical areas identified, i.e., a measurement system, an effective feedback cycle, process links between different areas of service, and a management to staff communication link that is transparent and empowering. These elements are often the basis of disagreements in view-points (paradigms), and positions in management reviews and audit processes.

The fact that the organisation is seen to be doing well is evidence that it has been able to maintain its borderline position as an actor system. Insiders assess that some of this good image is the result of earlier work from the founders who installed the systems and operating style in the earlier days. SJMC was modelled on the American model of private healthcare where the medical staff is distinct from management, and a professional management system is in place to monitor performance of medical consultants as well as hospital staff. However, since its founding in 1985, the hospital has grown threefold with 2 new buildings and a current staff force of over 1000 people.

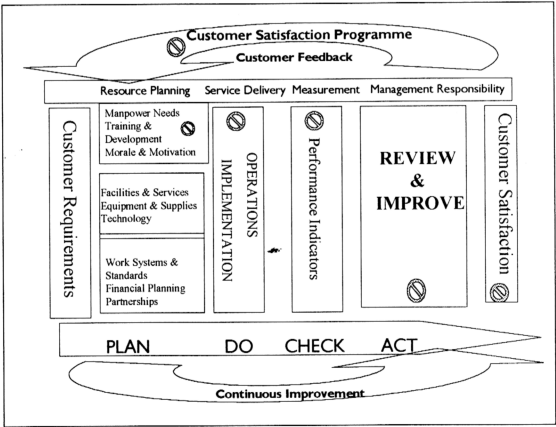
This, coupled with the daily census of 1000 outpatients and an average of 200 inpatients has stretched the systems and capacity of the staff to handle the daily routine, as well as, develop system improvements.

4.5 The Conceptual Model of SJMC Quality System

SJMC is currently ISO certified to ISO 9002. The conceptual model of the SJMC Quality System used in this section is taken from the SJMC Quality Manual that presents this as the working model for SJMC. For the purposes of this discussion, the areas affected by the critical success factors identified above are indicated by the symbol: 

The areas thus indicated will be further assessed against the ISO 2000 requirements in the next section.

Exhibit 27: Conceptual Model of Quality System at SJMC (SJMC Quality Manual, 2000)²⁶



As the critical success factors are related to leadership and working patterns, it is noted that various areas may be affected in different degrees.

The relatively weak HR systems will have impact on staff development and motivation. This will in turn affect service delivery during operations implementation. Due to the differing perceptions and priorities at management level, performance indicators and measurements are an issue that is continually being debated within the management review exercises and other management discussions. The lack of consensus and clarity in these areas affect the implementation of improvement efforts and the type of response patterns to customer feedback.

A more detailed listing of strengths and weaknesses is provided in the following page, using the ISO 2000 guidelines.

4.6. Assessment of SJMC Quality System against the ISO 2000 Model²³

The following assessment is done based on the information gathered from the diagnostics, and may not comply with the requirements of an ISO audit process. The additional information gained from the diagnostics on the internal working relationships has made it possible to look beyond the requirements of documentary evidence (see Appendix), to the actual internal workings of the system, and the influences that act on decision-making processes.

The system requirements are rated on a 3-point continuum of non-compliant, partially compliant and compliant.

- Non-compliance would indicate a lack in the system of such a requirement.
- Partial compliance would indicate that whilst the system does address the points raised, there are issues that affect full compliance.
- Full compliance would indicate both documentary evidence as well as management team consensus on implementation of such requirements.

When documentary evidence is available, the rating may still be deemed partially compliant, if, according to diagnostic evidence, there is no practical consensus and there are tensions in the system that affect true compliance.

Exhibit 28a: Assessment of SJMC Quality System – part 1

ISO 9001:2000 REQUIREMENTS: Assessment for SJMC Quality System					
NO.	REQUIREMENTS	AS EXISTS IN SJMC : YES = Y, NA= NOT APPLICABLE			REMARKS (Management Consensus & Action)
		NOT COMPLIANT	PARTIALLY COMPLIANT	COMPLIANT	
1	SCOPE			-	These requirements pertain to the description of the system
1.1	General			-	
1.2	Application			-	
2	NORMATIVE REFERENCE			-	
3	TERMS AND DEFINITIONS			-	
4	QUALITY MANAGEMENT SYSTEM			-	
4.1	General Requirements			Y	In principle all are in agreement
4.2	Documentation Requirements			Y	These are undisputedly the responsibility of the TQM Administrator
4.2.1	General			Y	
4.2.2	Quality Manual			Y	
4.2.3	Control of Documents			Y	
4.2.4	Control of Records			Y	
5	MANAGEMENT RESPONSIBILITY				
5.1	Management Commitment			Y	Delegated to the TQM Administrator
5.2	Customer Focus		Y		Weaknesses exist in the Customer Feedback System.
5.3	Quality Policy			Y	Policy is in place and communicated.
5.4	Planning				
5.4.1	Quality Objectives		Y		This is not consistent throughout the org.
5.4.2	Quality Management System Planning		Y		Different viewpoints co-exist in tension.
5.5	Responsibility, authority and communication			Y	Implemented
5.5.1	Responsibility and authority			Y	TQM Administrator is the Quality Mgt Representative (QMR).
5.5.2	Management Representative				Efforts are being made to improve this with an house newsletter, regular dept. meetings etc.
5.5.3	Internal Communication		Y		
5.6	Management Review				
5.6.1	General			Y	Regular review is scheduled by the QMR
5.6.2	Review Input		Y		Although issues are raised, there is sometimes satisfactory conclusion due to opposing views
5.6.3	Review Output		Y		as above. Compromise instead of Consensus
6	RESOURCE MANAGEMENT				
6.1	Provision of resources			Y	There is consensus here.
6.2	Human Resources				
6.2.1	General		Y		Recent staff movements have affected skill levels.
6.2.2	Competence, awareness and training			Y	This has been put in place and is maintained.
6.3	Infrastructure			Y	Implemented
6.4	Work Environment			Y	Implemented

Exhibit 28b: Assessment of SJMC Quality System – part 2

NO.	REQUIREMENTS	AS EXISTS IN SJMC			REMARKS (Management Consensus & Action)
		NOT COMPLIANT	PARTIALLY COMPLIANT	YES = Y, NA- NOT APPLICABLE	
7	PRODUCT/ SERVICE REALIZATION				
7.1	Planning of product/ service realization		Y		There are different views of how this should be approached and how far it is implementable..
7.2	Customer-related processes				
7.2.1	Determination of requirements related to the product		Y		This is difficult to quantify in healthcare as requirements are specified by doctors and service providers as well as the customers.
7.2.2	Review of requirement related to the product		Y		as above.
7.2.3	Customer Communication		Y		This area needs further improvements yet to be agreed.
7.3	Design and development				
7.3.1	Design and development planning		Y		This whole area of design and development is not fully addressed in the current system as it is determined to be not applicable or difficult to quantify in healthcare provision. Regulatory items are monitored, as well as, those that are clearly defined and agreed.
7.3.2	Design and development inputs.		Y		
7.3.3	Design and development outputs		Y		
7.3.4	Design and development review		Y		
7.3.5	Design and development verification		Y		
7.3.6	Design and development validation		Y		
7.3.7	Control of design and development changes		Y		
7.4	Purchasing				
7.4.1	Purchasing process			Y	This process is in control.
7.4.2	Purchasing information			Y	as above
7.4.3	Verification of purchased product			Y	as above
7.5	Product and service provision				
7.5.1	Control of product and service provision			Y	This is well monitored as part of clinical and supportive care services.
7.5.2	Validation of processes for production and service provision			Y	as above
7.5.3	Identification and traceability			Y	as above
7.5.4	Customer property			Y	as above
7.5.5	Preservation of the product			Y	as above
7.6	Control of monitoring and measuring devices.			Y	Implemented
8	Measurement, Analysis and Improvement				
8.1	General		Y		Use of statistical techniques of measure is lack but is being reviewed for future use.
8.2	Monitoring and measurement				
8.2.1	Customer Satisfaction			Y	Implemented and a system is in place
8.2.2	Internal audit			Y	On-going.
8.2.3	Monitoring and measurement of processes		Y		Monitoring of the meta-system is not fully in place.
8.2.4	Monitoring and measurement of product		Y		
8.3	Control of non-conforming product/ service		Y		Needs improvement
8.4	Analysis of data		Y		This needs further improvements.
8.5	Improvement				
8.5.1	Continual Improvement			Y	Implemented
8.5.2	Corrective Action			Y	Implemented
8.5.3	Preventive Action			Y	Implemented

4.7 Synthesis of Findings

Exhibit 29 below presents the relationship between the critical success factors identified and their impact on the organisation's quality system. This in turn will lead to identification of issues to be addressed by the intervention strategies to be recommended in Chapter 5.

Exhibit 29: Relationship between Critical Success Factors and Quality Issues to be addressed.

NO.	CRITICAL SUCCESS FACTORS (scores > 4)	IMPACT ON QUALITY SYSTEM (nos. ref. to exhibit 26 a & b)	ISSUES TO BE ADDRESSED
1	Self-influencing, self-organising, self-sustaining, self-producing. The organisation exhibits significant conservative elements and may not be able to cope with high levels of change initiated externally.	Requirements for handling feedback and review systems are affected by these views. 5.2, 5.4.1, 5.4.2, 5.6.2, 5.6.3	Customer Feedback System Management Review Process Strategic Planning
2	Self-referencing closure Individuals have a tendency to refer outwards.	This will affect perceptions and views of reality. 5.6.2, 5.6.3	Management Team
3	Wholeness, norms, extension and qualities There is uneven development of group qualities indicating variances within the group.	This affects working relationships within the management team. 5.6.2, 5.6.3	Management Team
4	The whole continuum of dissipative elements* This organisation is a conservative structure.	The organisation, as represented by the management team, is risk averse and reluctant to make changes in the existing system 7.1, 7.2.1-7.2.3, 7.3.1-7.3.7	Management Team
5	Economic Situation, HR System, Structural System and Measurement Systems	Affects resources development and monitoring of improvements to the system. 5.6.2, 5.6.3 6.2.1, 8.1, 8.2, 8.2.3, 8.2.4, 8.3, 8.4	Strategic Business Planning, HR Systems Review, Organisational Structure Review and Measurement Systems.
6	Goal Clarity, Group Functioning and Group Composition.	Affects internal working relationship within the administrative group. 5.5.3, 5.6.2, 5.6.3	Management Team
7	Abilities, Growth Needs, Education & Family Needs, Skill Variety and Feedback about results	Affects personal and working relationships within the management team. 5.5.3 5.6.2, 5.6.3	Management Team