

**UNIVERSITY OF KWAZULU-NATAL**

**The evaluation of strategic levers as a means to get effectiveness and efficiencies within the  
JMH Group of Private Hospitals**

**By**

**Lenersen (Lenny) Mudaly**

**A dissertation submitted in partial fulfilment of the requirements for the degree of  
Master of Commerce and Leadership**

**College of Management Studies**

**Graduate School of Business and Leadership**

**Supervisor: Dr A Kader**

**2015**



**Supervisors Permission to Submit Thesis/ Dissertation for Examination**

|                                                                                                                                                 |               |    |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----|--|
| Name: Lenersen Mudaly                                                                                                                           | No: 213569765 |    |  |
| Title:<br><b>The evaluation of strategic levers as a means to get effectiveness and efficiencies within the JMH Group of Private Hospitals</b>  |               |    |  |
| Qualification: MBA                                                                                                                              | School: GSB&L |    |  |
|                                                                                                                                                 | Yes           | No |  |
| To the best of my knowledge, the thesis/dissertation is primarily the student's own work and the student has acknowledged all reference sources |               |    |  |
| The English language is of a suitable standard for examination without going for professional editing.                                          |               |    |  |
| Turnitin Report                                                                                                                                 | 10%           |    |  |
| Comment if % is over 10%: N/A                                                                                                                   |               |    |  |
| I agree to the submission of this thesis/dissertation for examination                                                                           |               |    |  |
| Supervisors Name: Dr Abdulla Kader                                                                                                              |               |    |  |
| Supervisors Signature:                                                                                                                          |               |    |  |
| Date:                                                                                                                                           | 17 June 2015  |    |  |
| Co- Supervisors Name: N/A                                                                                                                       |               |    |  |
| Co- Supervisors Signature: N/A                                                                                                                  |               |    |  |
| Date: N/A                                                                                                                                       |               |    |  |

## Declaration

I, Lenersen Mudaly declare that:

- (i) This research reported in this dissertation, except where otherwise indicated, is my original work.
- (ii) This dissertation has not been submitted for any degree or examination at any other university.
- (iii) This dissertation does not contain other persons' data, pictures, graphs or other information, unless specifically acknowledged as being sourced from other persons.
- (iv) This dissertation does not contain other persons' writing, unless specifically acknowledged as being sourced from other researchers.

Where other written sources have been quoted, then:

- a. their words have been re-written but the general information attributed to them has been referenced;
  - b. Where their exact words have been used, their writing has been placed inside quotation marks, and referenced.
- (v) Where I have reproduced a publication or which I am an author, co-author or editor, I have indicated in detail which part of the publication was actually written by myself alone and have fully referenced such publications.
  - (vi) This dissertation does not contain text, graphics or tables copied and pasted from the internet, unless specifically acknowledged, and the source being detailed in the dissertation and in the references section.

-----  
L Mudaly

-----  
Date

## Acknowledgements

My sincerest and gracious thanks are extended to all those individuals that assisted me in the completion of my dissertation and MBA journey:

- From the outset the first word of thanks goes to my academic supervisor, Dr Abdulla Kader (Abdul). Your advice and direction was of immense value both personally and academically. Your mentorship and guidance led to a special friendship for which I will be eternally grateful and will sustain for years to come. Your patience and calmness was a key factor enabling many of us to complete this achievement. You ensured we “ceased the white space”
- To the statistician, thank you for producing the results for the statistics in time.
- To my colleagues and management team at JMH, thank you for supporting this research and entrusting me with confidentiality.
- To the directors and the group general manager (Mr Vishnu Rampartab), of JMH, your support and financial aid enabled me to reach this goal, my appreciation to you are limitless.
- To Group 8, the envy of many, my thankfulness and gratitude could never end. The support was unwavering and our friendships created a platform for this achievement.

Most importantly, this research has been the culmination of two years and half years of slogging and hard work, coupled with plenty of absence from my family. I wish to express my love and gratitude to my wife, Lorraine and children, Taysha and Thalia for their love and unwavering support during this journey. You guys made it relatively easy and I am truly indebted.

Finally there has always been an element of divine intervention throughout this journey and I wish to thank God, for the direction and endurance to finish this journey.

## **Abstract**

Healthcare businesses and service providers are being pressurised to modify and restructure their business models to offer a prodigious high quality service deliver while con currently reducing the costs of the service delivered. In order for these companies to be competitive in this highly complex industry, change and innovation tactics is the status quo.

The focus of this research was to examine the key strategic levers within a private hospital group as a means to improve efficiencies and effectiveness. The frame work from imminent change and innovation lead us to infer to the four primary strategic levers identified, namely cost containment, leadership, process management and reimbursement strategies. Recognising the importance of a holistic understanding to define sustainable business practices for the private healthcare hospital industry, this research includes all dimensions of the four strategic levers mentioned above.

The study intends to investigate the impact that these strategic levers have on the business and all stakeholders involved. A quantitative approach was selected and the results of the quantitative questionnaire (n= 65) was analysed with corresponding inferences to ensure a more complete conception of the data using the SPSS program.

It has been noted from the surveys that these four strategic levers have a significant impact on the institutions performance. The major finding emanated from the study which is of a great concern is the cost drivers affect the JMH business strategy in healthcare indicating that salaries and skilled resources are major cost drivers whilst the ageing population increases utilization which in turn increases healthcare expenditure. The leadership arena is alarming with a high response indicating that a qualification is crucial in leading however the barrier is that 25% of the middle management do not possess a relevant qualification. Process management are in line with internal standards however emphasis was given to a “lean mythology”, that could be beneficial. The under lying derivative from funder reimbursement strategies lead us to argue that the autonomy lied with the funders. Consequently the study shows that there is a need for strategic innovation, aligned with formal measurement and process systems to improve business presence.

## **Table of Content**

| <b>Description</b>                | <b>Page</b> |
|-----------------------------------|-------------|
| Title page                        | ii          |
| Supervisors Permission Letter     | iii         |
| Declaration                       | iv          |
| Acknowledgements                  | v           |
| Abstract                          | vi          |
| Table of Contents                 | vii         |
| List of Figures                   | xi          |
| List of Tables                    | xii         |
| <b>CHAPTER ONE</b>                |             |
| 1.1 Introduction                  | 1           |
| 1.2 Research motivation           | 2           |
| 1.3 Research focus                | 2           |
| 1.4 Problem statement             | 3           |
| 1.5 Research questions            | 3           |
| 1.6 Research objectives           | 4           |
| 1.7 Research methodology          | 4           |
| 1.8 Assumptions of the study      | 4           |
| 1.9 Limitations of this research  | 4           |
| 1.10 Outline of the study         | 5           |
| 1.11 Conclusion                   | 6           |
| <b>CHAPTER TWO</b>                |             |
| 2.1 Introduction                  | 7           |
| 2.2 Strategy                      | 7           |
| 2.3 Strategic levers and enablers | 8           |

|         |                                                        |    |
|---------|--------------------------------------------------------|----|
| 2.4     | Cost containment as a strategic lever                  | 11 |
| 2.4.1   | Cost drivers                                           | 12 |
| 2.4.1.1 | The ageing population as a cost driver                 | 12 |
| 2.4.1.2 | Lack of competition as a cost driver                   | 13 |
| 2.4.1.3 | Medical technology and drugs as a cost driver funders  | 13 |
| 2.4.1.4 | Doctor and nursing shortages as a cost driver          | 15 |
| 2.5     | Leadership in healthcare as a strategic lever          | 16 |
| 2.5.1   | Leadership definition                                  | 16 |
| 2.5.2   | Management definition                                  | 16 |
| 2.5.3   | Leadership and management the key differential aspect  | 17 |
| 2.5.4   | The origins of leadership theories                     | 17 |
| 2.5.5   | Leadership traits in healthcare                        | 17 |
| 2.5.6   | The healthcare credentials debate                      | 18 |
| 2.5.7   | The evolution of leadership in healthcare              | 19 |
| 2.5.8   | Leading in a complex industry                          | 20 |
| 2.5.9   | Leadership styles                                      | 20 |
| 2.5.10  | Leadership models                                      | 22 |
| 2.6     | Business process management (BPM) as a strategic lever | 23 |
| 2.6.1   | Definition of BPM                                      | 24 |
| 2.6.2   | The importance of BPM in health care                   | 24 |
| 2.6.3   | What is Lean?                                          | 25 |
| 2.6.3.1 | Origins of Lean                                        | 25 |
| 2.6.3.2 | Lean concepts applied in healthcare                    | 26 |
| 2.6.3.3 | Lean: From manufacturing to healthcare                 | 26 |
| 2.6.4   | Performance measurement systems (PMS)                  | 27 |
| 2.5.4.1 | The importance of PMS                                  | 27 |
| 2.6.4.2 | Formal measurement systems                             | 28 |
| 2.6.4.3 | Background of performance management                   | 28 |
| 2.6.4.4 | The balanced scorecard                                 | 28 |
| 2.6.4.5 | The flow model                                         | 30 |
| 2.7     | Managed care as a strategic lever                      | 31 |

|       |                                                                               |    |
|-------|-------------------------------------------------------------------------------|----|
| 2.7.1 | Origins of managed care                                                       | 31 |
| 2.7.2 | Forms of managed care organisations                                           | 31 |
| 2.7.3 | Methods of managed care reimbursements                                        | 32 |
| 2.7.4 | Introduction into the South African managed care market                       | 33 |
| 2.7.5 | The current state of private health care in South Africa                      | 34 |
| 2.7.6 | Providers of private health services (hospitals and clinic) with South Africa | 34 |
| 2.7.7 | Medical schemes/funders                                                       | 36 |
| 2.8   | Conclusion                                                                    | 37 |

### **CHAPTER THREE**

|       |                                                  |    |
|-------|--------------------------------------------------|----|
| 3.1   | Introduction                                     | 38 |
| 3.2   | Research approach and design                     | 38 |
| 3.3   | Research setting                                 | 39 |
| 3.4   | Research method                                  | 39 |
| 3.4.1 | Population                                       | 39 |
| 3.4.2 | Sampling plan and design                         | 40 |
| 3.4.3 | The sampling frame for the questionnaire         | 41 |
| 3.4.4 | Data collection                                  | 42 |
| 3.4.5 | The method and approach of data collection       | 42 |
| 3.4.6 | Characteristics of the instrument                | 43 |
| 3.4.7 | Pre-testing of the questionnaire and pilot study | 44 |
| 3.4.8 | Data collection process                          | 45 |
| 3.4.9 | Data analysis                                    | 46 |
| 3.5   | Validity and reliability                         | 46 |
| 3.6   | Ethical considerations                           | 47 |
| 3.6.1 | Protecting the rights of the respondents         | 47 |
| 3.6.2 | Rights of the institution                        | 48 |
| 3.6.3 | Scientific integrity                             | 48 |
| 3.7   | Conclusion                                       | 49 |



## CHAPTER FOUR

|           |                                                                                                       |    |
|-----------|-------------------------------------------------------------------------------------------------------|----|
| 4.1       | Introduction                                                                                          | 50 |
| 4.2       | Analysis of questionnaire                                                                             | 50 |
| 4.2.1     | Presentation of results: section A                                                                    | 50 |
| 4.2.1.1   | Analysis and interpretation of section A                                                              | 53 |
| 4.2.2     | Presentation and analysis of section B                                                                | 54 |
| 4.2.2.1   | Cost containment as a strategic tool to gain competitive advantage                                    | 56 |
| 4.2.2.1.1 | Summary of cost containment                                                                           | 59 |
| 4.2.3     | Leadership trait of management in relation to performance                                             | 60 |
| 4.2.3.1   | Summary of leadership trait                                                                           | 63 |
| 4.2.3.2   | Organizational factor can influence process management                                                | 64 |
| 4.2.3.3   | Summary of organizational factor can influence process management on hospital performance             | 67 |
| 4.2.3.4   | Contractual agreement between hospital and medical funder's effectiveness on business strategy        | 68 |
| 4.2.3.5   | Summary of contractual agreement between hospital and medical funder's effective on business strategy | 71 |
| 4.2.4     | Presentation and Analysis of Section C                                                                | 72 |
| 4.2.5     | Statistical tests                                                                                     | 74 |
| 4.2.5.1   | Kolmogorov-Smirnov test                                                                               | 74 |
| 4.2.5.2   | Spearman's rho correlations test                                                                      | 75 |
| 4.3       | Conclusion                                                                                            | 76 |

## CHAPTER FIVE

|       |                                            |    |
|-------|--------------------------------------------|----|
| 5.1   | Introduction                               | 77 |
| 5.2   | Literature review findings                 | 77 |
| 5.3   | Conclusions drawn from the data extraction | 79 |
| 5.4   | Recommendations                            | 81 |
| 5.4.1 | Recommendations on cost containment        | 81 |

|            |                                          |        |
|------------|------------------------------------------|--------|
| 5.5        | The JMH educational program              | 81     |
| 5.5.1      | Recommendations on leadership            | 82     |
| 5.5.1.1    | JMH leadership formal mentoring program  | 82     |
| 5.6        | Recommendations on process management    | 83     |
| 5.6.1      | JMH LEAN strategy                        | 83     |
| 5.6.2      | JMH balanced score card                  | 84     |
| 5.7        | Recommendations on funder reimbursements | 84     |
| 5.7.1      | JMH risk sharing reimbursement tariff    | 84     |
| 5.8        | Recommendations for future research      | 85     |
| 5.9        | Conclusion                               | 86     |
|            | <br>Bibliography                         | <br>87 |
| Annexure 1 | Introductory letter                      | 95     |
| Annexure 2 | Consent letter                           | 96     |
| Annexure 3 | Ethical clearance                        | 97     |
| Annexure 4 | Questionnaire                            | 98     |

## **List of Figures**

|            |                                                                   |    |
|------------|-------------------------------------------------------------------|----|
| Figure 2.1 | Adaption of the Wayman (2014), key performance levers in business | 9  |
| Figure 2.2 | Hypothesized model on resonant leadership                         | 21 |
| Figure 2.3 | The level 5 leadership model by Jim Collins                       | 22 |
| Figure 2.4 | The BSC by Kaplan and Norton                                      | 29 |
| Figure 2.5 | The flow model                                                    | 30 |
| Figure 2.6 | Distribution of funds in the South African healthcare sector      | 34 |
| Figure 2.7 | Shows the distribution of these facilities across the 9 provinces | 35 |
| Figure 4.1 | Title of respondent                                               | 52 |
| Figure 4.2 | Years of service with JMH                                         | 52 |
| Figure 4.3 | Formal education levels of the respondents                        | 53 |
| Figure 4.4 | Rating the impact of experience and qualifications                | 72 |
| Figure 4.5 | Rating the impact that a change in cost containment strategies    | 72 |
| Figure 4.6 | Rating the impact by introducing a LEAN approach in hospitals     | 73 |
| Figure 4.7 | Rating the impact that medical aid limits have on the business    | 74 |

## **List of Tables**

|            |                                                                                                                          |    |
|------------|--------------------------------------------------------------------------------------------------------------------------|----|
| Table 2.1  | Number of private hospital beds in South Africa                                                                          | 36 |
| Table 2.2  | Administrator market                                                                                                     | 37 |
| Table 3.1  | Population at JMH                                                                                                        | 40 |
| Table 3.2  | Questionnaire distribution                                                                                               | 42 |
| Table 3.3  | Objectives around questioning                                                                                            | 44 |
| Table 4.1  | Participants' socio-demographic information                                                                              | 51 |
| Table 4.2  | Mean and standard deviation of questions in section B                                                                    | 55 |
| Table 4.3  | There is growing concern that cost drivers affect the JMH business                                                       | 56 |
| Table 4.4  | Salaries and skilled resources is major cost driver in healthcare                                                        | 57 |
| Table 4.5  | Studies indicate that the ageing population and lifestyle diseases are contributing to more/increase hospital admissions | 57 |
| Table 4.6  | New medical technology expenses are always increasing in healthcare                                                      | 58 |
| Table 4.7  | Cost containment methods can be used as an effective tool                                                                | 59 |
| Table 4.8  | I as a leader am present and visible to employees regularly                                                              | 60 |
| Table 4.9  | In JMH managers and leaders provide employees with a vision                                                              | 61 |
| Table 4.10 | As a leader/manager, I provide regular on job training and mentoring                                                     | 61 |
| Table 4.11 | Our senior leadership adopts a two way approach                                                                          | 62 |
| Table 4.12 | A formal qualification for a manager / leader is needed                                                                  | 63 |
| Table 4.13 | The current work processes in JMH, make our company efficient                                                            | 64 |
| Table 4.14 | All employee appraisals or performance evaluation are done on real-time                                                  | 65 |
| Table 4.15 | A lean approach that is used in the manufacturing industry                                                               | 65 |
| Table 4.16 | Best operating procedures or performance management systems                                                              | 66 |
| Table 4.17 | Work standards are developed in house in most areas of our business                                                      | 67 |
| Table 4.18 | Majority of the patients have lower end medical aid plans                                                                | 68 |
| Table 4.19 | Payment models and plans from medical aids have a critical effect on JMHs business decisions and strategies              | 69 |
| Table 4.20 | Medical aids dis-courage the use of new medical technology                                                               | 69 |
| Table 4.21 | Treatment services to the patients are often altered                                                                     | 70 |

|             |                                                 |    |
|-------------|-------------------------------------------------|----|
| Table 4.22  | Patients are at the mercy of their medical aids | 71 |
| Table 4.23: | Tests of normality                              | 75 |
| Table 4.24: | Spearman's rho correlations test ( $r$ , $p$ )  | 75 |

# **CHAPTER ONE**

## **INTRODUCTION**

### **1.1 Introduction**

During the course of the past decade, the world's assessment of South Africa has changed and become somewhat hopeful and pronounced. The country now has several rapidly growing economies, with healthcare featuring in the upper spheres of this territory. The training and resources developed in healthcare is noted to attract vast foreign interest. The private healthcare sector is estimated to be responsible for 50 per cent of the national expense for health in the country. This private healthcare sector is fundamentally important on two fronts, its economic importance and its assistance to government in providing quality health services to the citizens which is a constitutional mandate.

According to Econex (2013, pg 4), in the private hospital sector, the three bigger hospital groups listed on the national stock exchange jointly held a stock market capitalisation of “R 83.688 billion, created R 1.651 billion in taxation and trained more than 2,000 new nurses in 2012”.

Within this private hospital sector the pressure on strategic management is at an all-time high. With the focus on pricing structures and governments inclination to implement a national healthcare insurance, strategic insight for these companies become crucial. One such hospital group is Joint Medical Holdings (JMH), predominately based in KwaZulu Natal. To ascertain a blue print for success in the healthcare sector JMH has to evaluate its current strategic levers to gain insight for future initiatives that will steer the institution into the next decade or so. The evaluation of efficiencies will give rise to new strategies and innovative business directives.

This chapter will provide the motivation and the focus area of the study. It will further include the primary research questions and objectives, with insight on the methodology and conclude with the study limitations.

## **1.2 Research motivation**

The nature of the private hospital sector is complex. Constantly changing medical aid plans, difficulties in retaining key personal, shortage of skilled management, quick turnaround of business processes and diminishing barriers to entry make this sector a management conundrum. The role of executive management becomes eminent as change becomes the status quo. The aim of the research was to have a concise understanding of the key strategic levers that exist in Joint Medical Holding (JMH) group of hospitals within the South African Private Healthcare Sector. This study will further examine the influence that these strategic levers have on business operations that ultimately effect quality of care outcomes. The outcome of this research will be fundamentally beneficial to all stake holders of JMH. The implementation of certain recommendations could advance effectiveness and efficiencies across many departments of this organisation.

## **1.3 Research focus**

This research centred on the management of JMH, its current cost containment strategies, its leadership at senior, functional and operational level, the business processes and the current reimbursement practices between JMH and the medical funders. The management landscape within JMH is a dynamic and constantly faced with a sea of legislative and economic transformations. Higher patient admissions correlate higher revenues and these factors are based on quality patient outcomes. With evaluation of the four key strategic levers acumens into departmental practices such as strategy formulation, risk management, human resources management, marketing practices, information technology, customer services and innovation were derived.

The complete group of hospitals were involved in this study, i.e. “City, Isipingo, Durdoc and Ascot Park Hospitals”. All hospitals have the similar departmental structures i.e., Administration, Nursing, Executive Management, Maintenance and Communications. Across all hospitals the managers of their respective departments were the key respondents selected to partake in this study.

## 1.4 Problem statement

Health services and private health care is rapidly evolving. The exposure to the natural complexity of the entire system is visible becoming a robust area of business. The Institute of Medicine (2010), noted in their report that the unrelenting and demanding concerns such as “rising costs, limited resources, system inefficiencies and increasing complexity of leadership”, are generic concerns common to all sectors of health services.

This presents multiple challenges to the directors JMH, to employ well educated senior leaders, retain critical nursing personal, implement cost reduction strategies in this highly competitive market and adopt lean methods as an effective business enabler.

An understanding of the key strategic levers in JMH, has been attempted with a recent survey that was undertaken, showing interesting characteristics of these evaluations by the management of JMH, with emphasis being placed on cost containment, leadership, business processes and reimbursement plans. The study crystalized these choices and beliefs of the management of JMH and allowed the researcher to provide valuable information and an understanding of the choices that management made in reference to strategic levers within JMH. By understanding these patterns and behaviours the researcher gained insight into this vibrant population. Data extracted from this study could aid the company in this evaluation of strategic levers investigation and provide management with methods to become sustainable and competitive while elevating customer satisfaction and patient care outcomes.

## 1.5 Research questions

1. Can hospitals in the private sector use *cost containment* as a strategic tool to gain competitive advantage?
2. Identifying differences in *leadership* traits of management and their relationship to hospital performance?
3. Gauging what organizational factors can influence *process management* and its effect on hospital performance?
4. How do the contractual agreements between hospital and medical aid funder's (*Reimbursements*) effect business strategies?



## **1.6 Research objectives**

The objectives of this research were derived from the problem statement and the research questions mentioned above.

1. Determine the key cost drivers that exist in these private hospitals and understand the significance of these cost containment as a strategic lever
2. Evaluate the impact of leadership as a strategic lever of business performance?
3. Determine whether process management (e.g. lean management) has an impact on hospital performance?
4. An evaluation of the Managed Care Organizations (MCOs) and their reimbursement strategies that impacts business strategy
5. Recommendations

## **1.7 Research methodology**

The ground work for the study was performed at the JMH hospitals across Kwa Zulu Natal. The current management team across all departments at each of the four hospitals were questioned to assess current leadership involvement, cost containment, business processes and reimbursements strategies currently in existence at the company.

The questionnaire segmented into three sections, Section A was the demographic data of the respondent. Section B elicited responses that were based on the Likert Scales. Section C compromised of the ranking on the nominal and ordinal levels of measurement.

## **1.8 Assumptions of the study**

The findings of the study would serve as a point of reference for increasing competitiveness of private hospitals in South Africa (SA).

## **1.9 Limitations of this research**

The research has a limited scope as it only covers the hospitals that are based in Durban and Surrounding Areas that fall within the JMH group of hospitals.

## **1.10 Outline of the study**

The dissertation is organized into the following chapters:

Chapter one: Introduction

Chapter one introduces the research topic by outlining the contents of the study. The background provides an indication of the previous and existing competitive nature of private hospitals. The research problem highlights the main challenges faced by JMH. The aim and significance of the research provides an understanding the purpose of the research and what it intends to provide.

Chapter two: Literature Review

This chapter provides a comprehensive analysis of the literature. The literature gathered and presented forms the basis of the conceptual framework. It includes definition of key concepts as well as the business strategies that are being utilized to gain a competitive advantage over rivals. Certain models under specific strategic levers are viewed in relation to its impact of competition with the healthcare industry.

Chapter three: Research Methodology

This chapter confirms the research methods used in the study. It makes specification to data collection techniques, research design, methodology, data collection instruments and data analysis. Specific techniques and collection instruments have been chosen and the reasons explained for such.

Chapter four: Presentation, Analysis and Discussion of Results

The questionnaire will be used to collect data. The findings are analysed and presented via graphs and tables. The results are examined and discussed and compared to the literature review simultaneously.

Chapter Five: Conclusions and Recommendations

This chapter summarizes and concludes the results. Recommendations are made to provide an impetus to expedite progression for the board of directors.

## **1.11 Conclusion**

Chapter one provided the introductory insight for this research project. Finer details were presented under the relevant sub sections/headings. The subsequent or succeeding chapter emphasizes the literature formulated and appraised that will form the conceptual framework for this project.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

The literature under review is an academic reflection that is evaluated for this thesis and describes key factors and variables of strategic alignment within the South African Private Healthcare Sector. As described in chapter one, the focus of this study centres around JMH and specially the private hospital environment.

The status quo in Health Care is “constant change”. A narrative summation of the view by the Institute of Medicine (2010), remonstrates that areas of concern are within this industry are rapid increasing costs and critical resource shortages, process inefficiencies, leadership complexities and the expanding transformation of reimbursements.

To implement efficient change adaption tactics, healthcare organizations need strategic innovation alignment. These strategic levers and enablers can form an integral “blueprint” that executives could use to create and exert strategic control to enhance efficiencies and effectiveness. These elements are logically connected to form the framework of this academic review.

#### **2.2. Strategy**

As broad generic definition, Rumelt (2011) encapsulates strategy as a method of resolving problems. He further declares that good strategy has a founding structure he termed “kernel”. The kernel is a three part sequence to problem solving:

- Part 1: “A diagnosis that defines or explains the nature of the challenge”
- Part 2: “A guiding policy for dealing with the challenge”
- Part 3: “Coherent actions designed to carry out the guiding policy”.

Sondhi, (1999) provides another view on strategy which largely incorporates the decomposing of organisational strategy into the core components known as the acronym VMOST. This concept makes direct reference the company's vision, mission, goals, strategies, objectives and tactics.

- Vision – is the business's purpose of existence and the value it transcends while doing business. The vision is a creation of inspiration to enable stakeholders to use the company.
- Mission – is the business's purposes measurement matrix that is addressed in terms measures to be reached to realise the vision.
- Objectives – is a specified target or goals set that transcends into reaching the mission.
- Strategy – is the holistic blue print needed meet your objectives laid out.
- Tactics – is a particular sets of actions needed to accomplish your strategy.

Bleistein *et al* (2006), elaborates on this concept and reiterates that the VMOST elements enable an increased understanding of how these five elements work in tandem to convey and provide support for a business's strategy. Successful results are dependent the ability of the business to align these five elements. A view from the top requires clear vision to foster the mission. This then allows for worthy objective setting that would lead to a concise crafting of a strategy plan using innovative tactics to reach our goals.

### **2.3 Strategic levers and enablers**

According to Bursa (2012, pg 4), strategic levers could be defined as the “ability to tie strategic corporate goals and initiatives to specific operational activities and tactics”.

Matter (2009) formulates that the benefits of using these levers and enablers are widespread; it significantly elevates business visibility and cross functional collaboration within the organization.

In relation to the private healthcare industry, the pressing issue currently is how to capture the growth potential opportunities and the firm's ability to connect in this market to factors of patient behaviour and demands. Understanding the paradox of the of the industry's key strategic levers and enablers is the cornerstone to gain insight and competitive advantage.

The ensuing model is an adaptation from the Oliver Wyman 2014 survey on Key Performance Levers in your Business, to suit the healthcare hospitalisation industry.

**Figure 2.1: Adaption of the Wyman (2014), key performance levers in your business**

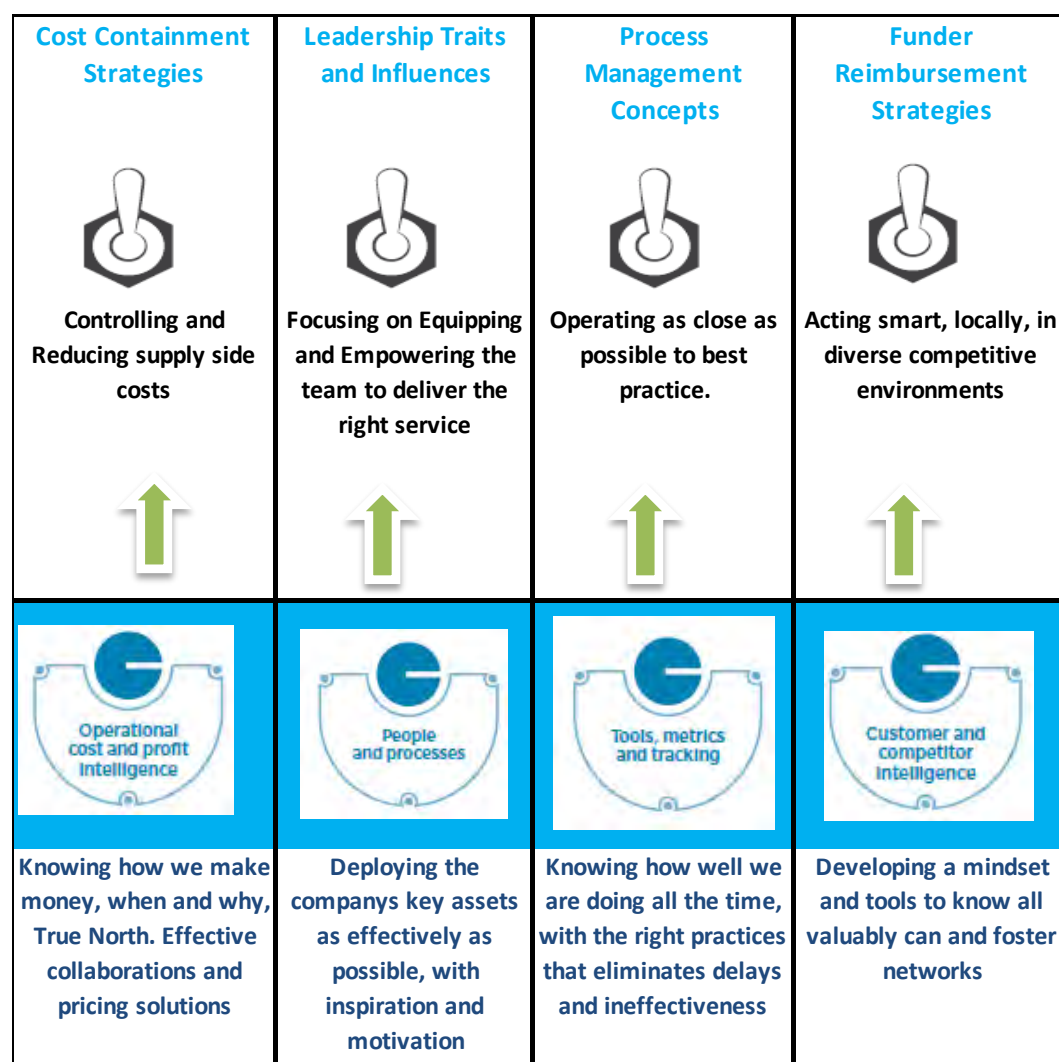


Figure 2.1 above encapsulates the summary of Wyman (2014) which is adapted to incorporate the strategic levers identified for the study in Chapter 1.

The four strategic levers identified as a means to evaluate efficiencies are assigned to the objective of that specific lever and explained below:

- Cost Containment Strategies – with the objective of controlling and reducing supply side costs. This lever is the key variable to objective 1, which will allow the study to determine the key costs incurred in the business and enable containment of these costs to become a strategy for JMH.
- Leadership Traits and Influences - focusing on equipping and empowering the team to deliver the right service. This lever is central to objective 2, which would aid the study to explore the impact of leadership as a strategic lever.
- Process Management Concepts - operating as close as possible to best practice. This lever is fundamental to the third objective of the study, which could identify whether process management has a significant influence on business performance.
- Funder Reimbursement Strategies – acting smart, locally, in diverse competitive environments. This is the final lever in the study, that's aligned to objective 4. It explores the impact or influence that MCOs have on the business.

Strategic enablers are then directed at these levers to provide the support to reach the organisation's goals. These enablers provide an action framework for the management to gauge the outcomes (Wyman 2014). These enablers are aligned back to the source of the strategy as discussed below:

- Operation cost and profit intelligence, aligned to Cost Control
- People and processes, aligned to Leadership
- Tools, matrix and tracking, aligned to Process Management
- Customer and competitor intelligence, aligned to Funder Reimbursement Strategies

In summary, Wyman (2014), argues that this model has two important focus points that were endorsed by acclaimed CEOs that the survey was facilitated to:

- To create customer eccentric awareness within that translates to external customer focus for sustained superior positioning for the firm. This awareness must seamlessly impact or influence all facets of the firms operations with the aim of creating strategic control.

- To unearth the correct set of levers for the firm and use a scientific methodology to challenge the factors that still fortify behaviour.

## **2.4 Cost containment as a strategic lever**

Cost Containment could be defined as policies implemented by companies to access if there are variations between actual costs and budgeted costs with appropriate measures to rectify discrepancies. Cost containment is crucial for organisations in context of this paper, hospitals, to stay inside budget and to adjust to the instability of profit or cost conditions (Investor Words 2013).

An alternate view by Goyen *et al* (2008), argues that cost containment ultimately fails as a strategy in most organisations. This is due to the evolution of new technology which is needed to treat sick people. The same pharmacological and technical innovations, which have saved so many individual lives seem to be responsible for making our healthcare systems financially sick.

The proficiency of hospitals to contain costs within South Africa is greater now than ever. According to Islam (2014), because of the aging population and the country's disease profile that exists within, cost containment throughout the industry and more specifically at private hospitals will be much more complicated. Relative to this there is increasing evidence that advancing technology, scarce resources and the lack of free markets in the private healthcare industry will create complex and rigid pressures for private hospitals.

In a study performed by Kibicho *et al* (2012), it was discovered that drug expenditures increased by 18.8% per annum from 2000 to 2002. This drastic increase was on the back of a demand for newer and more expensive drugs. During the same period the economic decline affected state budgets due to the decrease in state aided taxes. As a result stakeholders implemented successful cost containment strategies in order to sustain and deliver healthcare to the majority of the beneficiaries.

Tang *et al* (2012), mentions that with the evolution of healthcare consistently improving, countries in the low to middle income bracket that have universal health coverage face many challenges.



The demand for healthcare may be escalating more swiftly than the economic growth seen in these countries and this factor enforces the controlling of cost escalation to gain greater measures of affordability.

According to Business Day (2014), the situation in the South African medical insurance market requires regulation. With this stance the Counsel for Medical Schemes are in favour of introducing a capped limit for executive remuneration at the Medical Aids. They believe that it is the member's funds and irresponsible remuneration packages paid to the management are not sustainable. Examples cited include the Medihelp Medical Aids payment of R6.07m to its principal officer in 2013. There seemed to be less consideration for the fund that has only 200,00 beneficiaries and considered to be a relative smaller fund but the payment was three times as much than the average (Business Day 2014).

The following extract reviews the cost drivers that have a massive influence on the fundamental cost containment strategy.

#### **2.4.1 Cost drivers**

There have been many explanations for the increases in healthcare expenditure and these have been cited in the health economics literature around the planet. Bodenheimer (cited in Marivate 2010) asserts that the principal leading explanations on cost drivers within the healthcare segment are as follows:

1. Ageing population
2. Lack of competition in healthcare
3. Shortages of Doctors and Nursing personnel
4. Medical technology and drugs

##### **2.4.1.1 The ageing population as a cost driver**

The ever ageing population contributes towards rising healthcare expenditure. A comprehensive study by Reinhardt (2003, pg 21), "showed that this trend explains as much as 6% to 7% of health expenditure growth".

The under lying chronic conditions, such as diabetes, lung and heart diseases, or hyper tension, are a few examples of diagnostic events that cost significant amounts of money to be treated and as much as 75 per cent of healthcare expenditures in the U.S. are related to chronic conditions (Kaiser 2012). It is also understood that chronic conditions also exist more frequently in older people, thus this could burden any healthcare system. Just as the Kaiser (2012) report discusses obesity. Wagner (2009), agrees that obesity has doubled in adults and tripled in children in the last 20 years. It is commonly accepted that obesity increases the risk of a person needing healthcare services, thus further increasing the demand for healthcare in the U.S.

#### **2.4.1.2 Lack of competition as a cost driver**

According to Bodenheimer (cited in Marivate 2010), “a lack of competition in the healthcare sector is a result of the lack of a free market”. In the private healthcare sector, patients do not purchase doctors and hospital services in an unrestricted market mainly because of two reasons. Patients do not have data of comparable costs of medical services because of the diversity of health conditions that result in a broad differential costs. The second reason is medical insurance as a product.

Patients may not have the power to choose as a result of the insurance companies contracts and designated service provider agreements with the bigger groups. In South African context the example such as Netcare, Medi-Clinic, and Life healthcare being the bigger groups are prone to be associated with reimbursement strategies between the hospitals and the insurance companies / funders (Marivate 2010).

#### **2.4.1.3 Medical technology and drugs as a cost driver**

Goyen *et al* (2008, pg 4), confers that the term medical technology, “refers to procedures, equipment and processes by which medical care is delivered. Hence medical technology innovations can relate to new medical and surgical procedures (e.g., angioplasty, joint replacement), the discovery of new drugs (e.g., biological agents), the implementation of healthcare IT systems (e.g., electronic medical records and transmission of information, telemedicine) and the development of new medical devices as (e.g., PET/CT systems, MRI/PET systems)”.

Slade & Anderson (2001), argue that there is consensus among health economists, that a big proportion of the increase in health expenses is incurred on new medical technologies. In totality the proportions on advancing technology spend equates to half of the healthcare expenditure with the balance of the other cost drivers making up the balance of expenditure in healthcare services (Civan& Köksal, 2010).

The impact of new medical technology on healthcare? Rettig (cited by Goyen et al, 2008), describes the process by which new and advancing medical technology affects healthcare costs could be seen new development of new treatments for previously untreatable inoperable conditions, including long-term therapy for treatment of such diseases as diabetes, end-stage renal disease, and AIDS .

Szczerba & Huesch (2012), argue that this could be seen as the “treatment expansion effect”. They inform that “the diagnosis rates for depression doubled after Prozac-like drugs became available and cataract surgery was performed much more frequently as the procedure technology improved patient outcomes”. This is just one example of the treatment expansion effect on new medical technologies.

Civan & Köksal (2010) argued that successful creations of new drugs and treatment results in a wider exposure and utilisation of these new interventions. Although it would be crucial to reach more people in need of these services this could elevate the health-care spend. However there could be a flip side to this when these new interventions require limited usage because of its effectiveness and this limited service could reduce healthcare spend.

Within the private healthcare hospitals, physicians and other specialists receive direct income from medical aid funders for the number of procedures performed or patients attended to. This leads to the demands by these specialists that hospitals invest in facilities to support those technologies (De Hert2009). This situation places the hospitals in an uncertain predicament of retaining the services of the specialist, since in South Africa, private hospitals are not allowed by regulators to employ doctors. This could be seen as a mitigating strategy to minimise the risk losing a good doctor to a competitor, by not investing in new technologies that the doctor requests.

Healthcare insurance providers have two differing viewpoints to this matter which is consistent with Shactman *et al.*'s view (cited in Thorpe et al 2012), postulates advancements in technology can cure diseases and will prevent follow-up treatments, thereby reducing the use of the healthcare system in the future. In addition, technology can also be used to help prevent and mitigate larger health issues later in life, saving money in the long run.

The other viewpoint of narrates that technological advancements in healthcare does just the opposite and increase the utilization of hospitals and their equipment, because patients want to have the best and newest equipment for treatment and their care. The challenge for any management is to find the right balance between the health of the country's citizens and the financial implications of a healthcare system achieving this goal (Shactman *et al* cited in Thorpe et al 2012).

#### **2.4.1.4 Doctor and nursing shortages as a cost driver**

The lack of doctors and nurses in the health care world is a "global crisis" and South Africa is no exception to this crisis, with the output of producing less than 50% of the doctors needed in the country annually.

This translates into only 1200 doctors graduating annually in the republic and is a major contributing factor to the global shortage of 4.3million doctors and nurses (Child 2014).

According to Joe Maila, from the Department of Health in South Africa, this a worrying concern. Sub-Saharan Africa is the region with the fewest doctors and the highest disease burden. "Something needs to be done in South Africa and soon," said Fedhealth Medical Aid principal officer Peter Jordan, (Child 2014). According to Jordan, the poor treatment of doctors and unrelated lower salary payments during community service encouraged them to seek work overseas (Child, 2014).

Rondganger (2013), postulates that "KwaZulu-Natal is facing a chronic shortage of doctors, with 49 per cent of public health jobs not filled, a survey by the SA Institute of Race Relations has revealed".

According to the survey, Kwa Zulu Natal is faced with a twenty six per cent shortage in the vacancy rate for nurses while the rest of the country bears the consequences of a fifty six per cent of unfilled doctor posts which translates into (14 351) and forty six per cent (44 780) of unfilled nursing posts. Affordability of salaries and poor conditions of work are the major factors to this crisis.

## **2.5 Leadership in healthcare as a strategic lever**

To gain a meaningful insight into the influence of leadership on hospital performance, the following subchapter provides a review on factors affecting leadership and hospital performance. Specific fundamental concepts and definitions are discussed; the difference between leadership and management is highlighted. Emphasis on leadership traits and theories are also discoursed.

### **2.5.1 Leadership definition**

Bass & Bass (2008, pg38) defined leadership as “The art of motivating a group of people to act towards achieving a common goal.” Undeniably leadership as a causal effect in all aspects of our day to day interaction, from the early stages of kindergartens to the later stages of business activities, social associations, health care organizations and any other grouping of people (Northouse & Northouse 2009). As a result we all are exposed to the experiences of leadership throughout our life.

### **2.5.2 Management definition**

Management and Leadership do not have the same implied meaning. Management is about the organization of the group of people and task oriented, while leadership is about motivating a group of people (Allman cited in Schmitt 2012). Gibson (2008), debates the view on management leading to the conclusion that management is functional, it does lead to a position or person but rather describes tasks are necessary to create value and to assure that the company meets its objectives. Management is also sometimes referred as to be the administration of an organization that keeps careful records and sees that things are done according to the rules (Gibson 2008).

### **2.5.3 Leadership and management the key differential aspect**

Kotter (cited in Schmitt 2012), explains the difference between leadership and management can be illustrated in the “Model of different objectives of leadership and management.” Where leadership creates the vision and the strategic blue print required by an organization, management in contrast, creates the plans and execution of strategy.

An alternate view explaining the differences between leadership and management points out that leadership is about what to do and why, whereas management focuses on the way of how to do it, or in Doppler and Lauterburg’s words(cited in Schmitt 2012), “A leader does the right things - A manager does the things right.” However, undoubtedly, a leader also has to be a good manager to turn a vision into reality (Bass 2008). For an organization, it is critically important to understand how both a visionary leadership style and a conventional management style work together.

### **2.5.4 The origins of leadership theories**

Leadership theories that are the foundation that the current day leaders are trained on date back to the industrial era. These theories concentrated on maximizing production and minimising variances (Bass, 2008)

With the extensive amount of literature on leadership compiled, a wider array of conceptual models and trait theories has evolved (Weberg, 2012).

This evolution includes functioning ability, behaviour, power, vision, values, charisma, intelligence, gender, and situational interaction, to name just a few (Bass , 2008)

### **2.5.5 Leadership traits in healthcare**

There has been research completed in the facet of leadership traits in healthcare which used the hospitals as a field of study. Schmitt 2012 argues that limited research has focused on leadership traits and hospital performance because most of the research has focused on broader leadership aspects which include employee motivation.

In an interesting study by Grandolf & Hirsch (2007), this culminated with their assessment on some of healthcare’s most influential and esteemed leaders.

A summary of their findings leads to the summation that these highly successful leaders share similar characteristics that are the focal to their success as a leader.

Brief snapshots of these characteristics include:

- *Business Orientation*, a proportion of these successful leaders, admits that healthcare leadership is an inherent need in them and it's a big commodity business. In certain instances these individuals had limited educational exposure in the field.
- *Dream and a Goal*, this characteristic fuels the belief that leaders are visionaries with talented communication skills and possess the means to measure their own progress.
- *Positive attitudes*, this central feature were identified in all these individuals. The study further notated that "People with negative attitudes frequently see themselves as victims who are not in control of what happens to them", whilst positive leaders snatched control over their state of affairs.
- *Energy*, this was observed to be another important leadership characteristic, within this industry longer hours of are needed to fulfil goals or meet deadlines.
- *Personality*, capsulated the view that it is another generic component yet essential component of leadership and is significant in any industry. This component is critical for relationship establishing and maintaining, which are the critical success factors in the commercial world.
- *Willingness to market*. "Marketing leaders who understand the enormous power and influence of effective marketing and aren't afraid to tap into that power are the ones who generally reap most of the rewards" (Grandolf & Hirsch 2007)

### **2.5.6 The healthcare credentials debate**

Schultz *et al.* (cited in Schmitt 2012), discuss the question of the credentials for the chief executive officer (CEO) of a hospital. Would the ideal candidate be a manager with an education in business, a Master of Business Administration for example or a medical doctor with a clinical and medical background. Schutlz *et al.*'s study (cited in Schmitt 2012), compares CEOs with either background based on strategy to improve quality care and financial outcomes.

This study concludes that no significant differences between CEOs with different backgrounds (business versus medicine) exist and therefore an applicant's educational background should not compromise or handicap the applicant in the selection process.

Nurse (2011) investigated the CEO leadership traits (transformational and transactional) affecting hospitals' financial performance. Their study used a quantitative multivariate correlation research method, to analyse CEOs at non-profit hospitals in Canada and the U.S. Nurse (2011) findings implies that leadership traits do in fact influence financial performance of hospitals in both countries. They conclude that transactional leadership traits affected financial performance in Canada whereas a combination of transformational and transactional leadership traits influenced the U.S. hospitals.

### **2.5.7 The evolution of leadership in healthcare**

According to Bass (2008), the traditional leadership role came to light in the industrial revolution era. This contextual landscape still exists in the domain of healthcare; however these traditional ways of functioning are inadequate in the volatile industry of healthcare with complex challenges (Uhl-Bien & Marion 2008).

Plowman & Duchon(2008), agree that the traditional leadership theories and models seem to be out dated in the complex healthcare domain. Bass (2008) shares the similar view, historically leadership theory has focused on specific traits of the leaders, the situational demands and context, the leaders' personality and relationships between the leader and the followers.

Another view on traditional leadership describes a role rather than a set of behaviours, and it places power in the position rather than in relationships (Plowman & Duchon 2008)

Weberg (2012), argues that the landscape of traditional leadership has changed. It is vital that change affects the "social and economic operation" of health care. Innovate thinking is the fuel to ignite that change. Innovation drastically changes the central design of how an organization functions both socially and economically.



### **2.5.8 Leading in a complex industry**

The healthcare sector warrants a different style of leadership, this style must be built on adaptive capabilities with founding knowledge of the external environment and relating those situations with internal business practices to create innovative problem solving methods (Weberg 2012).

Complexity leadership provides a business environment where by leadership characteristics promote interaction from within, improve networking paths and aggressively neutralises complacency, being agile and embracing change (Uhl-Bien et al., 2008). One such example could be a pharmacy manager working concurrently with the team to process data from the stock reports that lead to the conclusion and understanding of the nature of the existing variances. This interactive approach contradicts the notion of “control change and actions from outside”, a notion that is consistent with traditional leadership.

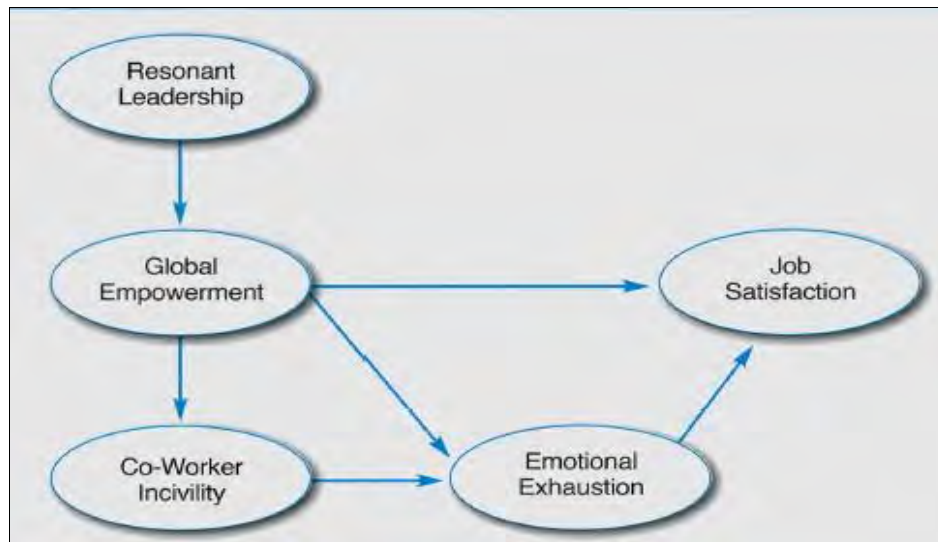
Uhl-Bien & Marion (2008), believes that “using the informal system to change the formal system”, is an innovative model for understanding both positive and negative communication spheres. The informal network is always progressing and consistently challenges the status quo of the formal culture. In simple terms this method implies that a leader must influence conditions around the actions instead of directly effecting the action by using the organisational culture.

### **2.5.9 Leadership styles**

Laschinger (2014) and colleagues believe that leadership styles founded on relational concepts, methods and approaches, generally correlates to positive work environments. It is these companies that endorse employee engagement achieve increased productivity and highly levels of work satisfaction.

One such rational style is resonant leadership. In 2005 Boyatzis & McKee claimed that resonant leadership is another focal style built of the basis of rationalising behaviour. Although this style was introduced recently, it is extricated from previous theories of leadership by its underpinning on emotional intelligence (Laschinger et al 2014).

**Figure 2.2: Hypothesized model on resonant leadership**



Source: Laschinger *et al.* 2014

Goleman et al (2002) explains that the framework for resonant leadership which is heavily weighted on emotional intelligence is built on four pillars:

- emotional self-awareness
- self-management
- socio-political awareness
- effective management of relationships

These authors concede that resonant leaders can cultivate emotional intelligence competencies and apply application based on this situation presenting. Resonant leadership styles include interactive coaching and democratic mentorship approaches that stimulate total empowerment. This empowerment could then reduce work place conflict and advances co-worker relationships. Empowerment can currently eradicate emotional exhaustion that progresses job satisfaction either directly or indirectly. This approach is in contrast to dissonant styles which are focused on instructing, pace setting and commanding.

A systematic review by Laschinger et al 2014, discovered that “leadership styles that were conceptually consistent with the notion of resonant leadership were positively correlated with several components of nursing professional practice environments, including effective nursing leadership, use of nursing models of care, and nurse-physician collaboration”.

### 2.5.10 Leadership models

Modern day literature is stocked with numerous models and theories of leadership. So much so that a search in Google for this topic, resulted in 16.1 million sites in 0.36 seconds (Kumar *et al* 2014). This makes it critically important to select a model that contains the “main foundation structures” of leadership. One such model is the contemporary and relatively important to any functional organisation is the “level 5 leadership model”. The founder of this model Jim Collins, built this model on a survey of leadership that existed within many companies. The five levels are direct and unsophisticated which can be easily applied to understand leadership competencies in healthcare. The main attribute of this model is that it is hierarchical based with the one level including components of the other levels prescribed.

**Figure 2.3: The level 5 leadership model by Jim Collins**



Source: Harvard Business Review 2001

The term “Level 5 leadership”, was introduced when Collins (2001), categorised "great" companies. These companies he believed that were led to “greatness” from being primarily good.

The model consists of 5 levels of hierarchical leadership that are explained below:

1. Level 1 – A “Highly Capable Individual” that whose contributions are valuable and productive. This contribution is a derivative of their “talent, knowledge, skills, and good work habits”.
2. Level 2 – A “Contributing Team Member” that brings their individual capabilities to ensure the achievement of group objectives or goals and these leaders highly effective in team work.
3. Level 3 – A “Competent Manager” that can direct and organize “people and resources toward the effective and efficient pursuit of set targets”
4. Level 4 – An “Effective Leader” that crystallises “commitment in the pursuit of a clear and compelling vision whilst stimulating higher performance standards”.
5. Level 5 – The “Executive” that creates and builds “enduring greatness through a paradoxical blend of personal humility and professional will”

In summary at the 5<sup>th</sup> level, the duality “of paradoxical of professional will and personal humility” that are gain from the four levels below are emerged. This model has an absorption ability to bring all the components, elements, traits, styles and behaviours of a leader together. It would then provide a fair narrative as to which level the leader is at and where the leader would need to be.

## **2.6 Business process management (BPM) as a strategic lever**

In the words of Husby (2012 pg 18), “the idea of aligning everyone towards a shared business objective is attractive to any organization, there is usually little appreciation for the discipline, time, and commitment required to coordinate such an initiative in a way that leads to the expected actions and outcomes”.

When a company has the concept of Business Process Management (BPM), at the centre of the business paradigm as the case of healthcare, improvements to the quality of service to patients and all stakeholders are imminent.

The culture of a process-centric company ensures that the responses to the macro environment factors are superior. The reduction of human intervention errors increases and this creates an efficient quality delivery system. In the surroundings of healthcare this culture improves patient care.

Healthcare organizations fall into this same category of under-appreciating or under estimating what it takes to succeed at this sort of initiative toward alignment, but they are drawn to the significant potential benefits”. As a result many institutions fail once the requirements for success are drawn up or they may conclude that it “doesn’t work here.”

This sub section presents an empirically validated review BPM with a view to a relatively modern concept of business process re-engineering. We include an encompassing reflection on evaluating and measuring BPM with formal previously researched performance measurement matrixes.

### **2.6.1 Definition of BPM**

A plethora of definitions exist that are interconnected with the notion of process. In the words of Armistead et al (1999), “Processes are considered a generic factor in all organisations”. It is a method for doing things. McCormack & Johnson (2001) provide a more detailed view, they confer that processes can be viewed as “strategic assets”, and companies must adopt a strong business process orientation philosophy.

In an academic context BPM in could be defined as a systematic loom to make a company’s work flow more effective.

### **2.6.2 The importance of BPM in health care**

Health care organizations are prone to adverse events as the nature of this business warrants this. The companies best practice methods must have the ability to maintain high-reliability standards; effective compliance policies that meet industry regulations could negate the risk of adverse events. BPM gives a company’s best practice processes advancement and progressive improvement. This uplifting could eliminate inefficiencies and reduce costs while reducing wasted activities (Kemsley 2015). With BPM, patient care quality which is a nursing core duty and administrative implementations for efficiency are not on a collision path.

One such new concept of BPM in the healthcare sector is the “Lean Approach”, the relationship between BPR and “LEAN THINKING”, continues to capture research attention.

### **2.6.3 What is Lean?**

Cookson *et al*(2011) concurs that “Lean Thinking” is a philosophy and a management culture which can be used as a driver for process improvement that relies on waste reduction and seamless flow within a system. According to Cookson *et al* (2011), this was highlighted by Taiichi Ohno at Toyota in Japan in the 1950s as the Toyota Production System aimed to “reduce muda (non-value-adding work), muri (overburden) and mura (unevenness of flow)”.

Womack and Jones (cited in Cookson *et al* 2011), have detected five key features of Lean, namely “as understanding value, developing the value stream, improving flow, encouraging pull and pursuing perfection”.

In the words of Farsi *et al* (2014), “Lean thinking is using less to do more”. Lean is not usually associated with health care although there have been successful examples. Lean thinking is purely a management strategy and not a manufacturing tactic or a cost-reduction program. Strategy in regards to its involvement in all levels of the business.

Cookson *et al* (2011) believe that lean principle can be successfully introduced to healthcare simply because of the imminent need of creating value for patients and other stakeholders

#### **2.6.3.1 Origins of Lean**

In the 1452 at the Venetian Arsenal in Italy, the first concept of LEAN was created. It involved the ship construction industry, whereby standardised processes were applied to produce a boat of standard design through standard assembly stations within a day (Lean Enterprise Institute 2010). Further on in their book, Womack et al. (cited in Schmitt 2012), reveals that a study showed that Japanese companies, especially the Toyota Corporation, and were prospering because they invented, applied, and continuously improved “lean production methods”.

### **2.6.3.2 Lean concepts applied in healthcare**

'Lean' is currently the most popular strategy for improving healthcare delivery systems, with a significant proportion of the healthcare service providers in the US embracing a variation of lean thinking into their strategy for continuous improvement (Robinson *et al*, 2012)

Implemented in the healthcare setting, lean is commonly used to minimize patient delays in the emergency department, reduce the number of return visits, eliminate medication and medical errors, and prevent inappropriate procedures. The lean approach in healthcare is adapted from the Toyota Production System, and focuses on improving process efficiency through the elimination of waste, or muda, which is defined as any activity that consumes resources but generates no redeeming value for the patient (Singleton *et al*, 2011)

Farsi *et al*(2014), suggests that added pressure of meeting budget targets is the main reason that many of hospitals are leading towards the adoption of Lean practices were significant benefits are associated with successful implementations.

Singleton *et al*(2011), indicate that the “Virginia Mason Medical Centre in Seattle-USA, The Royal Bolton Hospital in the UK and The Flinders Medical Centre in Australia” are successful examples of the Lean concept. At Flinders Medical Centre, processes resulted in 15-20% additional work being complete with the same resources after implementing.

### **2.6.3.3 Lean: From manufacturing to healthcare**

As highlighted in the previous sub section Lean thinking applied in healthcare has delivered considerable benefits. However according to Radnor *et al*(2009), the adoption of a Lean philosophy could create many challenges that hospitals may experience.

During a comprehensive study by Radnor *et al* (2009), they identified five readiness factors critical for implementation which are:

- “Linking Lean with the overall strategy of the hospital”.
- “Understanding the different customer groups that a ward, department or a hospital has and what is valued by each of these customer groups”.
- “Taking an end-to-end process view when undertaking improvement projects”.

- “Matching demand and capacity levels across the hospital”.
- “Having trained staff, providing opportunity for them to be engaged in improvement activities/Lean projects and recognizing/rewarding their efforts”.

Farsi *et al*(2014), concludes that “Lean Thinking”, has proved to be an invaluable asset in the cost containment area of healthcare operations globally . Their pilot project “to demonstrate how the principles of Lean Thinking can be applied to Oman’s healthcare sector” can result in more efficient healthcare but most importantly it improves patient care for the residents of Oman.

#### **2.6.4 Performance measurement systems (PMS)**

Mäkilä (2014), describes performance measurement as “as the process of quantifying the efficiency and effectiveness of action. In the same way performance measures or indicators are metrics used to quantify the efficiency and/or effectiveness of an action”.

##### **2.5.4.1 The importance of PMS**

Lebas (cited in Mäkilä 2014), explained that there many reasons that any organisation would want to measure performance. He derived five questions that will assist business in performance measurement.

1. *Where have we been?*
2. *Where are we now?*
3. *Where do we want to go?*
4. *How are we going to get there?*
5. *How will we know we got there?*

A synopsis on these questions indicate that performance measures give arise data on past performances. This in turn assists in grasping present situation within an organisation. This then advances the strategic blue print and goal setting. The last step would be to gain feedback on the performance that will assist with the re -creating of this in the cycle.

Redman and Wilkinson (2009) depict that PMS can be adopted as a framework to link the objectives of the organisation to form a basis for employee goals and targets. They confirm that these performance evaluations are becoming integrated to enhance the total business need.



#### **2.6.4.2 Formal measurement systems**

Performance measurement systems have become an invaluable tool in the management sphere of health care. Enablers such as the Balanced Scorecard (BSC) and the Flow Model have become a crucial component in performance measurement (Kollberg 2007). In this sub section these two performance measurement charters are predominately discussed. The Balanced Scorecard (BSC) is a creation by Kaplan and Norton (1992) and the Flow Model is a system developed in Sweden (Kollberg 2007).

Kollberg (2007), argues that factors such as globalisation, results oriented companies, individual accountability, and customer eccentric demands render having and implementing performance management systems in healthcare a necessity.

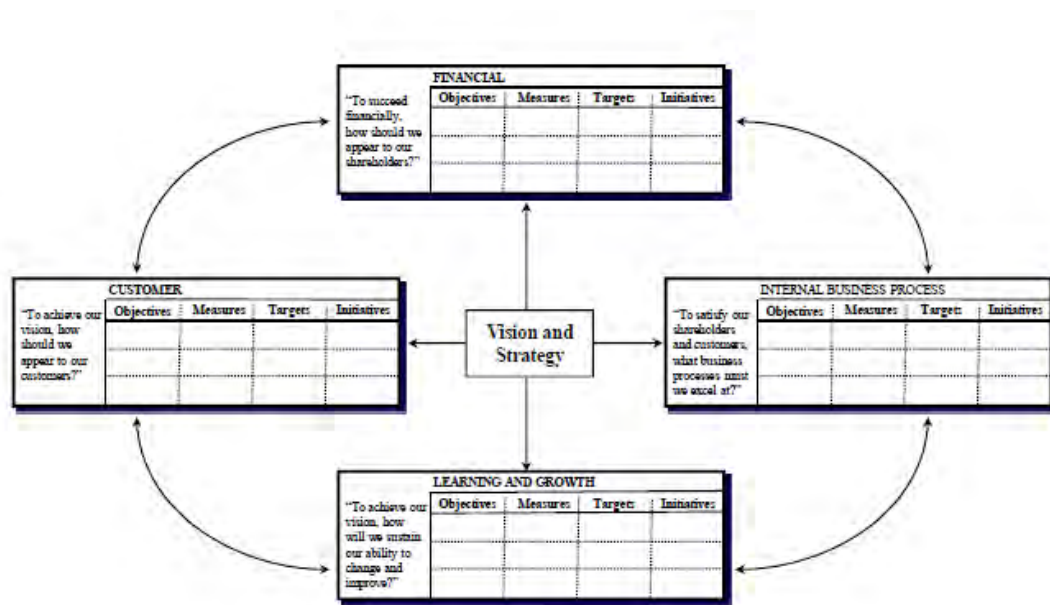
#### **2.6.4.3 Background of performance management**

Recently performance measurement systems research has intensified. Many authors advocate that the important feature of a well-designed performance measurement system should be derived from the business strategy (Kaplan and Norton, 1992). Previous literature of this study indicate that these performance measurement or management systems were developed a while back in the 1980s and early 1990s. Empirical studies of quality management literature reveal that a performance measurement is of significant importance in continuous improvement of any business.

#### **2.6.4.4 The balanced scorecard**

The BSC, according to Kaplan and Norton (1992), is intended to maintain and meet the company's overall "vision and strategies". Their model of the BSC consists of four framework canvas covering "the financial, the customer, the internal business process, and the learning and growth perspective". Their summation is that, these pillars or domains of business represent how the company is viewed by all stakeholders. Key performance indicators are formulated in each domain which gets evaluated.

**Figure 2.4: The BSC by Kaplan and Norton**



Source: (Kaplan and Norton, 1992)

A summation of this model aims to highlight the four pillar of the BSC:

1. Finance: Key Indicators would report on areas under finance such as return on investment, cash flow monitoring, return on capital employed and the financial results at reporting periods.
2. Internal Business Processes: Key Indicators would report number of activities per function, duplicate activities across functions, right process in the right department, areas of concerns "bottlenecks" and BPM
3. Learning & Growth: Key Indicators would report on the correct level of expertise for the job, staff turnover, job satisfaction, future training opportunities for employees.
4. Customer: Key Indicators would report on service to customer, quality of service to customer, customer satisfaction responses, market share of customers and customer retention frequency.

According Kaplan and Norton (1992), institutions implementing the BSC, must incorporate the entire force of the company, this is the key success factor that will result in the realisation of the strategic plan or vision.

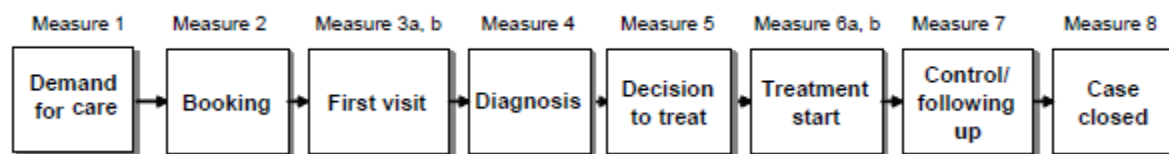
In concluding summary of this model, the creator's commentary implies that the BSC should result in:

- Improved processes
- Motivated/educated employees
- Enhanced information systems
- Monitored progress
- Greater customer satisfaction
- Increased financial usage

#### 2.6.4.5 The flow model

According to Kollberg (2007), the FLOW model is a process orientated measurement system in order to neutralise “lead-times, delays and waiting times”. This framework has eight measurement charters, that is centred around the in and out times of the patient value care chain.

**Figure 2.5: The flow model**



*Source: Kollberg 2007*

The model starts with a demand for care which is created by a referral to the clinical unit. The second measure in the process is the administrative intervention of appointment scheduling. The time difference between leaving measure 1 and leaving measure 2 is actual time spent on the booking. Similarly the following measures are timed by the previous measure in the chain.

This objective of the measurement system is to reduce patient delays and waiting times by making comparisons between units. This model can be viewed as PMS predominantly focusing on process measurements. It measures patient lead-times, which could be significant in improving patient care outcomes.

## **2.7 Managed care as a strategic lever**

According to Glied (2008), the term “managed care” incorporates an assortment of contractual agreements and arrangements. This encompasses a process of healthcare provider selection, reimbursement methods and case managing utilisation of services. This is developed around the short term insurance market, where the insured members pay a premium, for coverage of a set of benefits which included hospitalisation.

Marivate (2010), contends that managed care plans adopt cost sharing to control the use of services within their restricted network of providers. This is further empirical evidence and economic theory suggested that cost sharing could reduce the use of services in the managed care domain.

### **2.7.1 Origins of managed care**

The South African Medical Schemes Act defines managed health care as a clinical and financial risk assessment and management of healthcare, Republic of South Africa Acts (cited in Marivate 2010). Fundamentally this definition gives impetus to the cost containment of health care services that is auctioned by clinically management and criteria dependant.

According to Sekhri (cited in McAuliffet *al* 2014), informs that managed care can be traced back to health management organizations from the early 19<sup>th</sup> century. Over the recent years states in the US have adopted a managed care model to address budget constraints. As of 2010, 47 states had implemented some form of managed care that covered 71% of their Medicaid enrollees (National Association of States United for Aging and Disability, 2014).

### **2.7.2 Forms of managed care organisations**

Mas & Seinfeld (2008), advise that there are different types of managed care organisations such as Health Maintenance Organisations (HMOs) being the most limited, Independent Practice Associations (IPAs), Point of Service (POS) and Preferred Provider Organisations (PPOs).

In the HMOs, insurance and healthcare services are fully integrated, doctors are paid a salary, and members are allowed to visit the network providers (Mas & Seinfeld, 2008).

In the IPA, the members are limited to a panel of doctors who are independently contracted to the HMO that to provide care (Mas & Seinfeld, 2008).

The POS is a hybrid of traditional insurance and HMO, the member may use a doctor that belongs to the HMO to not attract any additional out of pocket fees and equally if the doctor covered outside the network patients he gets a lower fee (Mas & Seinfeld, 2008).

PPOs or Designated Service Providers (DSPs), as it is commonly termed in the private sector. The DSPs members pay a discounted fee provided they utilize services within this network. The MCOs then contract between different service provider organisation's to reduce healthcare expenses (Mas & Seinfeld, 2008).

These forms of managed care organisations are quiet active in the South African private healthcare market. Most of the South African private hospitals and hospital fall within the PPO / DSP grouping of managed care and the bigger groups' hospital groups are contracted with most managed care organisations (Marivate 2010). One such example is the Discovery Health Network, for their Discovery Key Care (lower plan) to be viable, Discovery awards DSPs contracts to hospitals that are effective in cost containment of their scheme.

### **2.7.3 Methods of managed care reimbursements**

Managed care plans use a vast reimbursement system to pay health service providers, such as Fee for Service (FFS), Per diems, Fixed Fees (FF) more popular and backed up by Diagnosis Related Groupings (DRGs) and capitation (Glieb& Janus 2008).

With FFS, the provider invoices for all utilisation parameters (accommodation, drugs, surgical, theatre time and other costs associated) when servicing a patient. According Marivate (2010), FFS does is not an attractive incentive mechanism to reduce cost for managed care. Because each parameter is chargeable and could lead to hospitals maximizing their revenue by maximizing the service they provide.

Per diem is a negotiated per day charge for a day in the hospital, regardless of any actual charges or costs incurred by the hospital. This means that the funder will only pay a per day charge or per night charge for a services rendered.

The length of stay is vetted through case management between the funder and the hospital. The results in the hospital being forced to manage costs in order to be profitable (Marivate 2010).

Fixed Fee is a method of reimbursement in which hospitals are paid a fixed fee for a surgical procedure. These are driven by CPT procedure codes. There are carve outs that ensure risks are built into the model in order to act as safety measures. With this method, hospitals carry more risk than the funders and must be efficient (Marivate 2010).

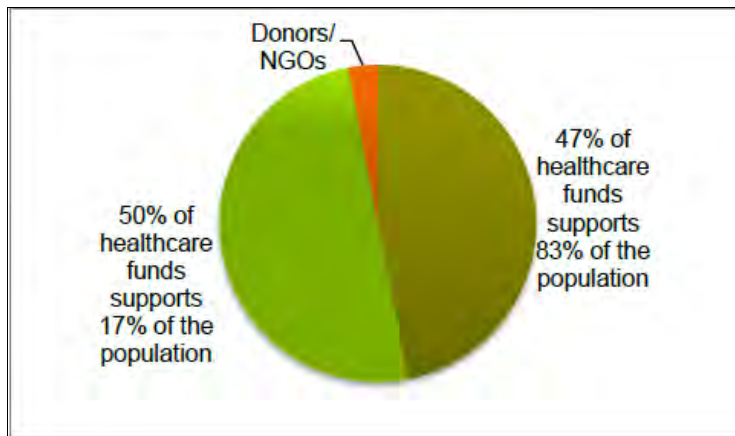
In principle a managed care model grants support for healthcare providers to take an active role in controlling their own care, through care coordination and choice in a connected network of providers (McAuliff *et al* 2014). This could be the corner stone in reducing healthcare costs.

#### **2.7.4 Introduction into the South African managed care market**

There has been significant amount of literature on the current state of health expenditure in South Africa and more specifically the distribution in spend between the private healthcare sector and the public healthcare sector. According a report by (Econex 2013), it is estimated that the private healthcare sector currently provides primary healthcare services to an estimated 28% – 38% of the population. This suggests that this healthcare sector is crucially important on two fronts, for the South African Government in the capacity of an enabler to aid the delivery of healthcare and for the economy as a whole.

According to the Centre for Development and Enterprise (CDE) 2011, South Africa spends 8.3 per cent of gross domestic product, (GDP) between all the different health sectors. This figure is substantially high compared to the recommendation by the World Health Organisation (WHO), which recommends that countries spend at least 5 per cent of GDP on health and average expenditure for middle income countries is 5.8 per cent. Regardless of the even split of healthcare expenditure by the private and public sectors, in the private sector, an estimated 17% of the population have medical aid / insurance.

**Figure 2.6 - Distribution of funds in the South African healthcare sector**



Source: Econex 2013

The perceived state of South African healthcare, illustrated in Figure 2.5 is indicative of a largely unequal distribution of resources.

### **2.7.5 The current state of private health care in South Africa**

During the course of the last few years coupled with the demise of the public healthcare sector as resulted in a sizeable, well-recognised private healthcare sector in South Africa. The development of this sector into providing world-class services by this sector, is strongly based on the diversity of its stakeholders.

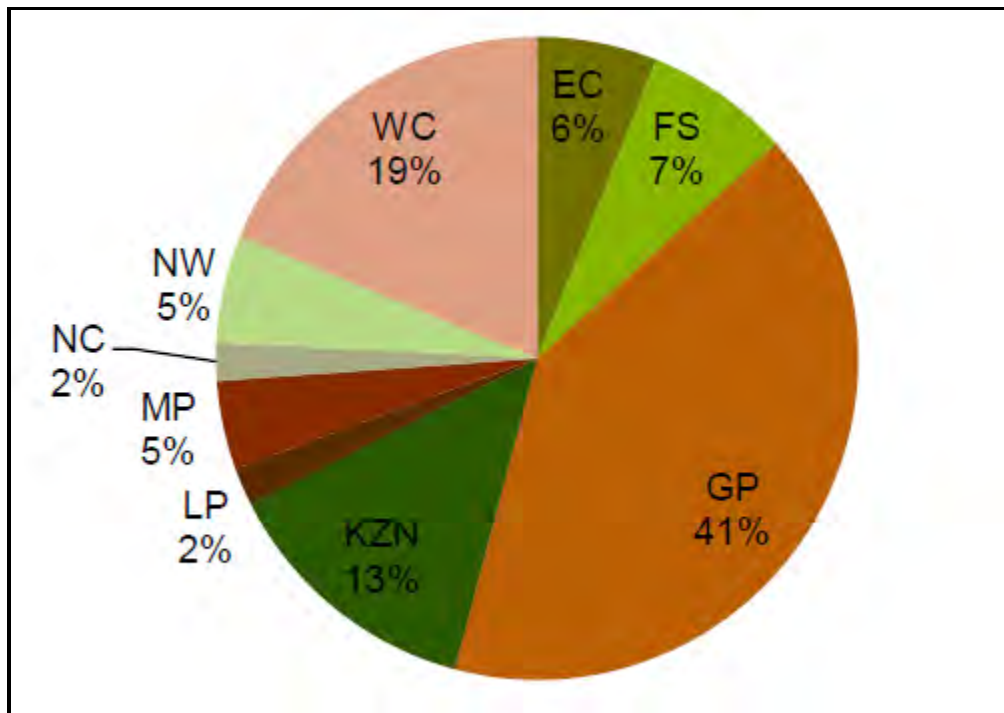
The demise of the public health sector is well known with the republic and the current Minister of Health is often quoted saying that the lack of quality services in the public sector is one of South Africa's major health reform challenges (Motsoaledi 2013)

Significantly the public sector demise creates, the large demand for private healthcare is indicated by the fact that medical scheme membership covers 8.7 million South Africans (total beneficiaries) presently (CMS, 2013)

### **2.7.6 Providers of private health services (hospitals and clinic) with South Africa**

At the beginning of 2013 there were 314 day clinics and private hospitals in South Africa of which more than 40% were in Gauteng.

**Figure 2.7: Shows the distribution of these facilities across the 9 provinces**



Source, HASA database, All private hospitals, February 2013, cited in (Econex, 2013)

This distribution is further shown with the distribution of hospital and clinic beds per province: 15,424 of the total 34,572 private beds are located in Gauteng. According to the data shown in Figure 2.6 that depicts the holding companies of Netcare (8,926 beds), Life Healthcare (7,944 beds) and Mediclinic (7,299 beds) are the 3 largest hospital groups. Together, these 3 listed hospital groups comprise 70% of the market.



**Table 2.1: Number of private hospital beds in South Africa, by holdings group, 2013**

| Holdings group                   | EC           | FS           | GP            | KZN          | LP         | MP           | NC         | NW           | WC           | Grand Total   |
|----------------------------------|--------------|--------------|---------------|--------------|------------|--------------|------------|--------------|--------------|---------------|
| Anglogold Ashanti Health         |              |              |               |              |            | 134          |            |              |              | 134           |
| Anglogold Ashanti Health Service |              |              | 194           |              |            |              |            | 275          |              | 469           |
| Clinix Health Group              |              |              | 1,239         |              |            |              |            | 93           |              | 1,332         |
| Gold Fields                      |              | 131          | 52            |              |            |              |            |              |              | 183           |
| Harmony Gold Mining              |              | 695          | 87            |              |            |              |            |              |              | 782           |
| Independent <sup>65</sup>        | 157          | 388          | 2,482         | 1,256        | 64         | 209          | 92         | 669          | 553          | 5,870         |
| Joint Medical Holdings           |              |              |               | 479          |            |              |            |              |              | 479           |
| Lenmed Health                    |              |              | 264           | 238          |            |              |            |              |              | 502           |
| Life Healthcare                  | 1310         | 282          | 3,496         | 1,343        |            | 409          |            | 349          | 755          | 7,944         |
| Life Path Health                 |              |              |               |              |            |              |            |              | 141          | 141           |
| Lonmin Platinum                  |              |              |               |              |            |              |            | 56           |              | 56            |
| Mediclinic                       |              | 712          | 2,102         | 421          | 355        | 629          | 327        | 207          | 2,546        | 7,299         |
| Melomed                          |              |              |               |              |            |              |            |              | 455          | 455           |
| Netcare Limited                  | 460          | 294          | 5,508         | 1,730        |            |              |            | 163          | 771          | 8,926         |
| <b>Grand Total</b>               | <b>1,927</b> | <b>2,502</b> | <b>15,424</b> | <b>5,467</b> | <b>419</b> | <b>1,381</b> | <b>419</b> | <b>1,812</b> | <b>5,221</b> | <b>34,572</b> |

Source: HASA, cited by Econex 2013

### 2.7.7 Medical schemes/funders

According to the Counsel for Medical Aid Schemes (CMS) 2012/13 annual report, there were 25 open schemes and 67 restricted schemes at the end of 2012. In total all medical aid scheme beneficiaries totalled 8,679,473 people, quantified into 3,815,431 principal members and 4,864,042 dependants. This indicates that approximately 17% of the South African population has medical aid coverage.

Some medical schemes are self-administered, but most schemes outsource their administration services to large companies that specialise in providing these services. This includes the day-to-day processing of claims, handling call centre queries and complaints, dealing with membership and payment issues, etc.

There are around 30 administrators in South Africa, with 3 large companies who provide services to more than 3 quarters of medical scheme beneficiaries: Discovery Health, Medscheme and MMI (Metropolitan and Momentum).

**Table 2.2: Administrator market, 2012 (Gives an indication of the ratio between schemes and their administrators with the number of Beneficiaries)**

| Administrator                  | Number of schemes | Number of beneficiaries (average) |
|--------------------------------|-------------------|-----------------------------------|
| Discovery Health               | 13                | 2,662,578                         |
| Medscheme                      | 18                | 2,769,086                         |
| Metropolitan                   | 13                | 2,672,956                         |
| Momentum                       | 9                 | 386,391                           |
| Self-administered              | 15                | 879,865                           |
| Other                          | 26                | 986,826                           |
| <b>Total number registered</b> | <b>94</b>         | <b>10,357,702</b>                 |

Source: Data from the Counsel of Medical Aid Schemes, 2012/13 cited by (Econex, 2013)

## 2.8 Conclusion

The literature review underlined certain key parameters within the healthcare sector that may present itself in business as a strategic lever. Given the magnitude of the private healthcare sector described in the previous section, it is often claimed that this sector has a profoundly positive effect on the economy. The current study is meant to shed light on the importance of strategic levers such as Cost Containment, Leadership, Process Management and Reimbursement Methods with a private hospital. Investigating these strategic levers to enhance business efficiency and effectiveness in private healthcare could assist the decision makers in understanding the importance for the sector's incorporation into future healthcare plans. With the landmark move toward the South African NHI, one can appreciate that the success of the sector from both a healthcare and an economic perspective.

The methodology presented in this review will be discussed in the next chapter.

## **CHAPTER THREE**

### **THE RESEARCH METHODOLOGY**

#### **3.1 Introduction**

The rationale behind this chapter is to discuss, the research method engaged in obtaining the results of the study. This includes a dialogue on the basic research design, the sampling and the data collection as well as the statistical techniques used to analyze the results.

The research design favoured in this study acknowledges that, the topic of Healthcare in the South Africa is a compelling issue at present. In light of the Government looking into the Healthcare Expenditure, the uncertainty of the Government lead National Health Insurance and the failure to address public health concerns; the most valuable question business leaders are debating is whether “strategic levers can create Efficiencies and Effectiveness in healthcare?” The gradation with which the research question has manifested requires an exploratory study designed to garner a comprehensive understanding of how strategic levers can be evaluated for an effective healthcare organization.

This quantitative study will focus on determining the key strategic levers of a private hospital operating within the domains of the South African Healthcare System. The objective of this chapter is to examine, the research method utilized in attaining the results of this study. This will include a discussion on the elementary research design, the sampling and the data collection as well as the statistical techniques used to analyze the results.

#### **3.2. Research approach and design**

This study will adopt a quantitative approach and descriptive in form. Zikmund (2003) concurs that the principle of quantitative research is to establish the influence or degree of some occurrence in the configuration of numbers. Research in business could be categorized within three major domains depending on the needs of the business or research purposes; these are exploratory, descriptive and causal research (Zikmund 2003).

Zikmund (2003), argues that descriptive research is embarked on to describe features of a population or phenomenon or as a prescribed, independent, methodical process to describe and examine relationships, emphasis on cause and effect interactions among variables

Research design shepherds the researcher in arranging and implementing a study in a way that is most likely to succeed in attaining the intended goal (Burns & Grove 1993). This quantitative, non-experimental study investigated and evaluated the key strategic levers at a private hospital group. Zikmund (2003) explains quantitative research as a process that involves the systematic collection of numerical information and analysing the information by using statistical procedures.

Quantitative research is further depicted as; inter alia, deductive reasoning, objectivity, the use of a structured instrument, and statistical data analysis procedures (Glesne & Peshkin 1992). Consistent with this method this study will evaluate the efficiencies and effectiveness of strategic levers on business operations. Recommendations will then be formulated regarding how the business could enhance on these levers.

### **3.3. Research setting**

The research study will be conducted in a healthcare setting, at a Joint Medical Holdings, a group of private hospitals in Durban, Kwa Zulu Natal.

Joint Medical Holdings (JMH), has four hospitals under its banner. City Hospital, Durdoc Hospital and Ascot Park Hospital form the central Durban region while Isipingo Hospital is located in the south of Durban. The choice appeared to be relevant because of the researcher's location. The researcher regarded this setting as appropriate because no transport costs will be incurred and it will be easy to obtain the cooperation of the middle managers and their assistance in data collection.

### **3.4. Research method**

#### **3.4.1 Population**

Polit and Hungler (1995), postulates that the term "population" refers to the cumulative or totality of all objects, subjects or members that conform to a set of specifications.

The management population selected for this study will include all managers from lower to higher levels of management employed at these at the four hospitals. The category of management will not be restricted and will consist of the decision making individuals that reside in different areas of operations. The total size of the population will be 95 managers.

Table 3.1 provides an overview of the number of managers at the different hospitals.

**Table 3.1: Population at JMH**

| <i>No</i> | <i>Location /Site</i> | <i>Number of Managers</i> |
|-----------|-----------------------|---------------------------|
| 1         | City Hospital         | 50                        |
| 2         | Durdoc Hospital       | 12                        |
| 3         | Ascot Park Hospital   | 8                         |
| 4         | Isipingo Hospital     | 25                        |

### **3.4.2 Sampling plan and design**

A sampling plan compromises of selecting the type of sampling method to be utilized as well as defining the population and the sampling frame. Samples will be drawn from the population, as it often impossible to test the entire population due to constraints of time and money. ‘A sample is a portion or subset of a larger group called a population’ (Glesne & Peshkin 1992).

To ensure that the sample is as representative of the population as possible and that the result can be generalized; a good sampling plan is needed. Salkind (2000) argues that, if the selection of the sample is viewed closely attached to as a representative of the population, then any commentary made regarding that sample should also be true for the population. For this study the entire population of management of (JMH) will be incorporated.

In terms of sample designs, there are two fundamental types of sampling designs, probability and non-probability sampling.

In probability sampling, the prospect of any one member of the population being selected is known (Salkind, 2000). In non-probability sampling the prospect of selecting any one member of the population is not known and some may not even have a chance.

With probability sampling, Salkind (2000), indicates that simple random sampling is often impractical due to the difficulty or impossibility of obtaining a population list (sampling frame) among other things.

Although non-probability samples limit the research's generalizability they are often chosen across certain industries because the research costs involved in probability sampling might be too great or a complete list of the members of the whole population might not be possible to obtain (Salkind 2000).

Salkind (2000), concurs that typical techniques for non-probability samples are purposive sampling, quota sampling, convenience sampling or snowball sampling.

For this study a convenience sampling approach will be chosen because of the size of the population. This could also constitute a probability sampling technique were all the JMH managers are selected. Convenience in a practical sense will lead to the entire population being selected. The selection of the subjects will be based on the presence or absence of the respondent at the time of data collection and their willingness to participate in the study (Salkind 2000).

The respondents will be full-time managers employed in the said private hospital group. The purpose was to "evaluate strategic levers for efficiencies and effectiveness", at their business including their direct business unit. Their views would indicate which aspects would need to be improved, after which recommendations could be described to address this problem.

### **3.4.3 The sampling frame for the questionnaire**

The questionnaire will be administered to persons whom the researcher will make arrangements with and who are able and or willing to complete the survey. The researcher has a reasonable respondent base and besides being convenient for the researcher to access, is that it is logical to accommodate these managers, sought in this study. Primary data will be collated through a questionnaire. A total of 95 questionnaires will be distributed across the business.

**Table 3.2: Questionnaire distribution**

| <i>Business Unit / Division</i>         | <i>Questionnaires sent out</i> |
|-----------------------------------------|--------------------------------|
| <i>Nursing Units</i>                    | 60                             |
| <i>Administration</i>                   | 13                             |
| <i>Executive Management</i>             | 15                             |
| <i>Maintenance &amp; Communications</i> | 7                              |
| <i>TOTALS</i>                           | 95                             |

#### **3.4.4 Data collection**

Data collection is a specific, methodical method of retrieving information relevant to the research purpose, or of addressing research objectives, and research questions or hypotheses (Burns & Grove 1993).

#### **3.4.5 The method and approach of data collection**

In this study a structured data collection approach will be utilized to collect the data. In order to have a seamless transition for the quantification of responses and the statistical analysis thereof, this approach was adopted.

A self-report method, using a structured questionnaire, will be applied. A questionnaire was selected because it will be easy to administer. The researcher will distribute this questionnaire to all managers employed at the said company. This will be relatively inexpensive because no postage costs were involved. The respondents will be expected to complete the questionnaires in their spare time via an online “question pro program”.

There will be a great sense of anonymity because each respondent will be given his or her own questionnaire link and the responses will not be linked to any particular person. Respondents will be more likely to provide honest answers because each person could complete the questionnaire in private. This will be of particular importance because of the sensitive nature of the said topic and the chosen population.

### **3.4.6 Characteristics of the instrument**

After completion of an in-depth literature study, a questionnaire was designed, on the basis of the research objectives. A questionnaire is a printed self-report form designed to extract information that can be obtained through the responses of the respondents (Burns & Grove 1993).

The questions were a derivative of the literature review and were in conjunction with the conceptual framework. The questionnaire was divided into three parts. Part 1 was the demographic data of the respondent. Part 2 elicited responses that were based on the Likert Scales. Part 3 comprised of the ranking on the nominal and ordinal levels of measurement.

A Likert Scale consists of a series of opinion statements about a particular issue, event or person. Respondents indicated the extent to which they agree or disagree with each statement (Zikmund 2003). In this study respondents will have to indicate their level of agreement with each item by responding with the, “Strongly Agree”, “Agree”, “Neutral”, “Disagree”, “Strongly Disagree”, options.

Respondents will need to respond to the closed-ended items by demonstrating their responses with an “X”. Using the conceptual framework adapted from Zikmund (2003), the questionnaire was structured as follows:

Part 1: Demographic data of the respondent (Background information). This was designed to obtain background information on the current position, years of service, highest qualifications, and location of the respondent.

Part 2: Likert Scaling, this section aimed to investigate the extent to which the respondents were of the opinion that various reasons related to the characteristics of the key strategic levers, The focus was on the healthcare cost containment and key cost drivers, leadership, process management and reimbursement contracts with the funders.



Part 3: Ranking the strategic levers on the scale of high impact to no impact with a scaling of 1 to 5 respectively.

**Table 3.3: Objectives around questioning**

| Objectives                                                                                                                                             | Questions    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| 1. Determine the key cost drivers that exist in these private hospitals and understand the significance of these cost containment as a strategic lever | 1,5,9,13,17  |
| 2. Evaluate the impact of leadership as a strategic lever of business performance?                                                                     | 2,6,10,14,18 |
| 3. Determine whether process management (e.g. lean management) has an impact on hospital performance?                                                  | 3,7,11,15,19 |
| 4. An evaluation of the Managed Care Organizations (MCOs) and their reimbursement strategies that impacts business strategy                            | 4,8,12,16,20 |

### **3.4.7 Pre-testing of the questionnaire and pilot study**

The questionnaire was pre-tested before the data collection for this study will begin. Pre-testing is done to determine the feasibility of using a particular instrument in a major study. It will provide an insight into this process, especially if it is used for the first time, as in the case presented in this study. It will create a platform to amend flaws and time constraints (Polit & Hungler 1995).

For this pre-testing study, the researcher decided to utilize 10 trainee managers who will not participate in the main study. The researcher distributed the questionnaire, to 10 trainee managers or department assistants, in different hospitals to judge its face validity.

The respondents completed the questionnaire and evaluated the questions according to specified criteria. They were endowed with an evaluation instrument, which comprised of a semantic differential scale and criteria for a well-developed questionnaire. The criteria covered the principles of clarity, appearance, layout, legibility, relevance, anonymity and privacy. A space for comments was included in the evaluation checklist. The participants evaluated and rated the instrument in terms of appearance, layout, legibility, and anonymity and completion time.

With regards to findings, the clarity of the items some questions in Part 2 were found to be unclear and the assessors recommended that they be reformulated. This section was corrected, with the aim of improving its clarity. The research method was applied on a limited scale. Ten questionnaires were distributed and a good response rate was obtained. The questionnaires were sent to the statistician for analysis, who was satisfied with the results.

#### **3.4.8 Data collection process**

Data will be collected in April 2015. Prior to data collection period, the researcher held a meeting with the respondents at each hospital. The aim of this meeting was to inform them about the nature and importance of the research study, with this being the first research study for JMH. The questionnaire and the data collection procedure were discussed with all the respondents and ethical considerations were discussed and attended to.

To ensure that respondents gave their honest answers without fear of reprisals from their senior management, the participants were specifically assured that anonymity and confidentiality would be maintained. The link to the online questionnaire will be as emailed to all the respondents.

The respondents will be able to complete the questionnaires at a time convenient for them. They were provided with the researcher's contact numbers and were invited to contact the researcher to clarify any misunderstanding regarding the completion of the questionnaires. A due date for retrieval of the completed questionnaires was agreed upon with the respondents agreeing to complete these questionnaires via the online program.

### **3.4.9 Data analysis**

Quantitative data analysis will be performed by a statistician. Descriptive statistical methods will be employed. Statistical tests that will be performed could include the frequencies of responses, factor analysis and the Chi-square test of association.

Factor analysis is done to test the interrelationships between a large number of variables and to group together clusters of variables that are most closely linked (Burns & Grove 1993). It will be applied to identify a relatively small number of factors that can be used to represent the relationship among sets of many interrelated variables (Burns & Grove 1993). The purpose will be to reduce the multiple reasons for a single category, to enable the researcher to present the research in an organized and understandable form.

The Chi-square ( $\chi^2$ ) test, a non-parametric statistical test, will be done to determine whether there were significant differences between the observed frequencies of responses from the different job categories of managers (Burns & Grove 1993). The Chi-square test will be used to determine whether reasons cited by these categories of respondents could be associated with, for instance, their age and their qualification.

### **3.5 Validity and reliability**

Validity is the extent to which an instrument measures what it is intended to measure (Polit & Hungler 1995). According to Burns and Grove (1993), the validity of an instrument is the determination of the extent to which the instrument actually reflects the construct being examined.

Content validity is an assessment of how well the instrument represents all the different mechanisms of the variables to be measured (Polit & Hungler 1995). According to Polit & Hungler (1995), content validity is an estimation of the competence with which a specific domain of content is sampled. It refers to the completeness with which items cover the important areas of the domain which the researcher is attempting to represent. Content validity was for this study was judged by the assistant managers in the pre-testing phase.

They determined whether the items represented adequately reflect the aspects associated the evaluation of this study. The questionnaire was also tested for reliability, and specifically for internal consistency.

Reliability of a data-collection instrument refers to the degree to which a data collection instrument can be depended upon to achieve consistent results if used repeatedly over time on the same person, or if used by two different investigators (Polit & Hungler 1995).

The Chronbach Alpha scores are indicated in relevant sections of chapter four. The reliability of the instrument is the degree of consistency or dependability with which an instrument measures the attribute it is designed to measure (Polit & Hungler 1995:347).

### 3.5.1 External validity

External validity refers to the generalizability of the research findings to other settings (Polit & Hungler 1995). In this research study, external validity will be enhanced because the entire population will be involved in data collection.

## **3.6 Ethical considerations**

It is critical that a researcher protects the rights of the respondents of a research study and those of the institution in which the study is conducted. A researcher should also ensure that the scientific integrity of the study is maintained.

### **3.6.1 Protecting the rights of the respondents**

Prior to obtaining informed consent from the respondents, the researcher explained the nature and purpose of the study. The procedure to be followed when completing the questionnaires was explained verbally and in writing. The respondents were assured that no harm would occur to them for revealing their reasons for participation in this study. They were assured that the recommendations of the study might contribute towards a better working environment. The respondents were not obliged to participate in the study, as one of the principles of the ethical conduct in the research was that participation in studies should be voluntary (Burns & Grove1993).

Respondents were informed that participation in the research study was voluntary and that failure to comply would not result in any penalties. They were assured that they could withdraw even after consenting to cooperate in the research.

The respondents were furnished with contact information, so that they could contact the researcher or the supervisor of the researcher in the event of further questions, comments or complaints.

According to Burns & Grove (1993), confidentiality and anonymity will be of utmost importance in any study and in the case of this study, as internal participants might be reluctant to respond to the items because they might feel that the questionnaire was designed to examine their behaviour.

The researcher anticipated that the respondents could fear reprisals and therefore the researcher ensured that the principles of anonymity and confidentiality would be applied strictly. The respondents were informed that the raw data would be entered into the computer using codes. They were assured that neither their, nor the hospital's name would appear in the research report. The respondents were assured that confidentiality would be maintained throughout the study. The researcher assured them that the completed questionnaires would be locked up in a secure place and that only the researcher would have access to them.

### **3.6.2 Rights of the institution**

Permission to conduct the research study was obtained from the General Manager of Joint Medical Holdings. The researcher agreed to disseminate the research results to the authorities.

### **3.6.3 Scientific integrity**

Scientific integrity refers to the degree to which a study is methodologically and conceptually sound, a major criterion for research utilisation (Burns & Grove 1993; Polit & Hungler 1999). In this study, the research method and conceptual definitions will be approved by the supervisor and the co-supervisor.

Scientific integrity will be maintained by the acknowledgement of all sources in the literature review. Data will be collected after the supervisors approved the instrument, and the instrument was tested for its validity and reliability.

During data analysis appropriate tests will be used and there will be no manipulation of statistics or distortion of findings to support the researcher's opinions. A statistician will be used to assist with data analysis. The researcher will ensure that the findings will be supported by data collected.

### **3.7 Conclusion**

In this chapter the research method employed in attaining the results of the study have been discussed. This included a discussion on the basic research design, the sampling and the data collection as well as the statistical techniques that will be used to analyse the results.

Quantitative descriptive research was conducted to determine which factors contribute to efficiencies and effectiveness for the business. A self-report method, employing a structured questionnaire was used to collect data. A sample of ninety five respondents will be used for this study. The collected data will be subjected to analysis by employing factor analysis, descriptive statistics and by calculating the Chi-square.

The researcher applied specific measures to enhance the external validity of the study and to ensure that ethical principles were being adhered to. The research findings are presented in chapter four.

## **CHAPTER FOUR**

### **PRESENTATION, ANALYSIS AND DISCUSSION OF RESULTS**

#### **4.1 Introduction**

This chapter brings to light the results of this empirical study and discusses it in line with the theoretical framework developed in chapter two. In the study, a p value  $<0.05$  was considered as statistically significant. Descriptive statistics in the form of frequency (count) & percentage were computed. Percentages are graphically presented using graphs. Cronbach's alpha was computed for the likert-scale questions.

The responses of the survey were analysed using the statistical tool, SPSS version 21.0 (SPSS Inc., Chicago, Illinois, USA), within the survey software, QuestionPro. The results of the survey are presented in the form of graphs and tables. The discussion is divided into the sections in which the survey was conducted: biographical, assessment of cost containment, current leadership abilities, performance and process management capabilities and funder reimbursement influences.

#### **4.2 Analysis of questionnaire**

##### **4.2.1 Presentation of results: section A (demographic data)**

Participants' socio-demographic information are summarized in table 4.1.

**Table 4.1: Participants' socio-demographic information**

| <b>Variables</b>                                  | <b>Frequency</b> | <b>Percentage</b> |
|---------------------------------------------------|------------------|-------------------|
| <b>Your current position in Healthcare</b>        |                  |                   |
| Middle Manager                                    | 26               | 40.00%            |
| Senior Manager                                    | 5                | 7.69%             |
| Group Manager                                     | 4                | 6.15%             |
| Hospital Manager                                  | 2                | 3.08%             |
| Other                                             | <b>28</b>        | <b>43.08%</b>     |
| <b>Practice or Business Unit</b>                  |                  |                   |
| Isipingo Hospital                                 | 23               | 37.10%            |
| City Hospital                                     | <b>27</b>        | <b>43.55%</b>     |
| Ascot and Durdoc Hospitals                        | 10               | 16.13%            |
| GMNA and Citimed                                  | 2                | 3.23%             |
| <b>Your Current Formal Business Qualification</b> |                  |                   |
| Nil                                               | 16               | 25.00%            |
| Diploma                                           | <b>28</b>        | <b>43.75%</b>     |
| Degree                                            | 9                | 14.06%            |
| Masters or Doctorate                              | 3                | 4.69%             |
| Other                                             | 8                | 12.50%            |
| <b>Your Current Period of Employment</b>          |                  |                   |
| 0 to 5 Years                                      | 16               | 26.67%            |
| 6 to 10 Years                                     | <b>25</b>        | <b>41.67%</b>     |
| 11 to 15 Years                                    | 9                | 15.00%            |
| 16 & more Years                                   | 10               | 16.67%            |



**Figure 4.1: Title of respondent**

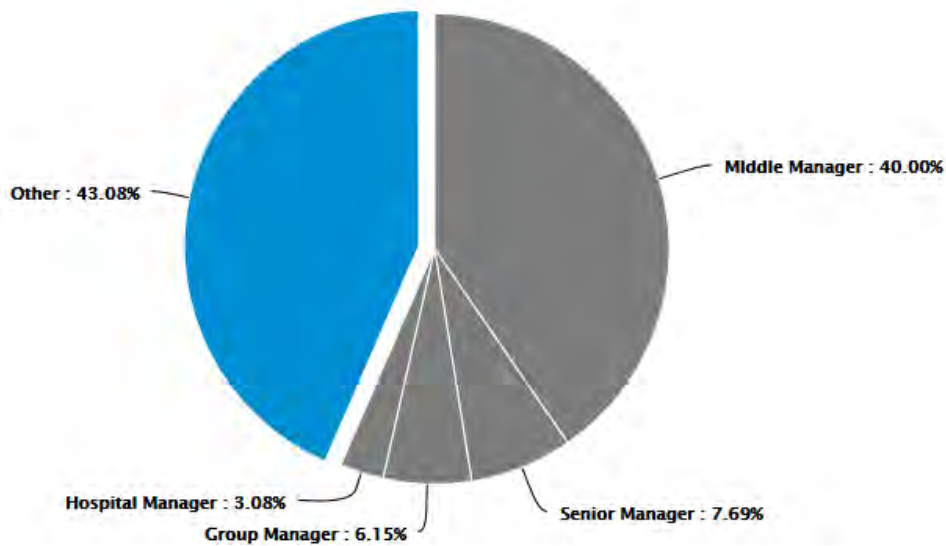


Figure 4.1 reveals that 40% of the 65 respondents who completed the questionnaire were the middle managers and 43.08% were other managers. Senior management comprised of 7.69% while executive manager (Hospital managers and Group Managers) made up the balance of 9.23% of the respondents.

**Figure 4.2: Years of service with JMH**

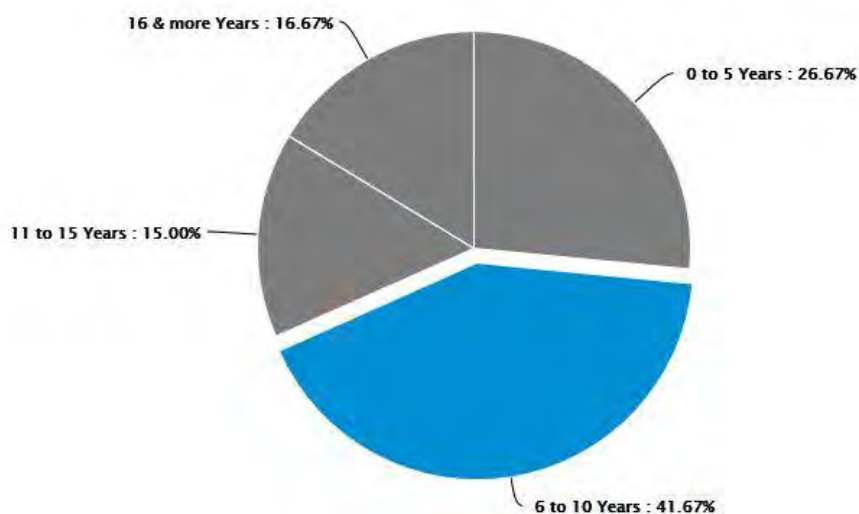


Figure 4.2 reveals that 41.67% of the 65 respondents who completed the questionnaire were employed at JMH for between 6 to 10 years while 26.67% of the respondents being in the company's employ for less than 5 years.

**Figure 4.3: Formal education levels of the respondents**

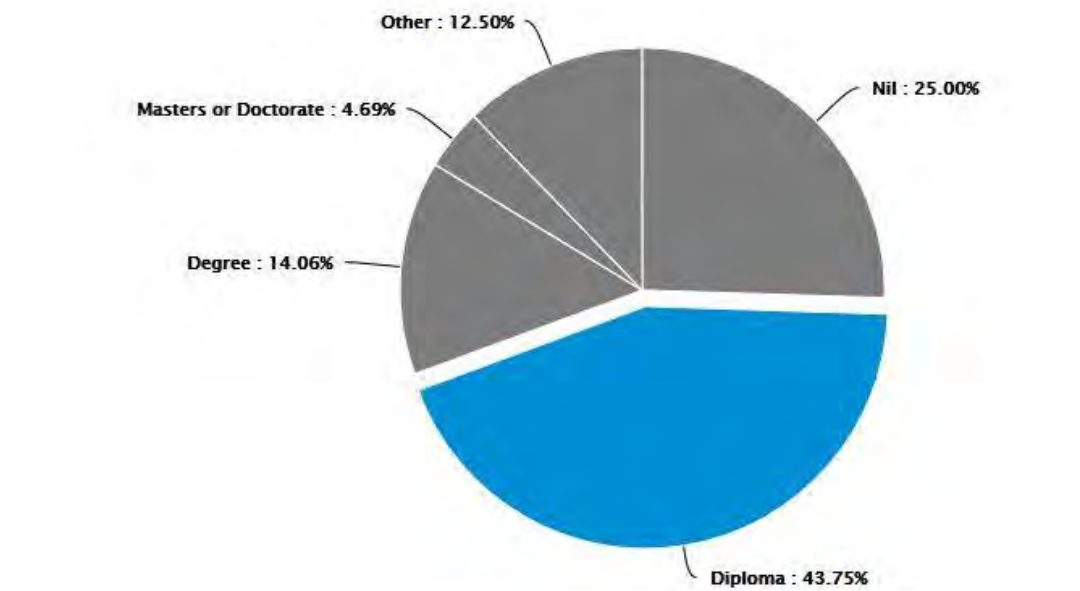


Figure 4.3 indicates that 43.75% of the 65 respondents have a Diploma in terms of further education and 25% have no education. In summary a combination of these two demographics reveals that a diploma is the highest qualification amount 68.75% of the management team (respondents) that have completed this survey.

#### **4.2.1.1 Analysis and interpretation of section A**

It was found that more than a third (40%) of the respondents was working as middle managers in their institutions. With regards to their academic qualifications, very few had postgraduate qualifications (17%). More than two-thirds (68%) were working ten years or less.

#### 4.2.2 Presentation and analysis of section B

In Section B, a five point likert-style rating scale was used to assess the extent to which the respondents agreed or disagreed with the items in the questionnaire. The scale is illustrated below:

| Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|----------------|-------|---------|----------|-------------------|
| 1              | 2     | 3       | 4        | 5                 |

Table 4.2 (the following page) reflects the mean and standard deviation of questions in Section B. The first and second column shows the relationship of the objectives of the study to the question layout. The mean values above 2 reflect that some respondents selected either neutral, disagree or strongly disagree. Scores of 2 or below reflect that majority of respondents selected either agree or strongly agree. Standard deviation closer to 0 reflect that majority of respondents had responses close to the mean.

**Table 4.2: Mean and standard deviation of questions in section B**

| <b>Descriptive Statistics</b> |                    |          |                |                |             |                       |
|-------------------------------|--------------------|----------|----------------|----------------|-------------|-----------------------|
| <b>Objective</b>              | <b>Question No</b> | <b>N</b> | <b>Minimum</b> | <b>Maximum</b> | <b>Mean</b> | <b>Std. Deviation</b> |
| 1                             | 1                  | 69       | 1              | 5              | 1.86        | 0.68                  |
| 2                             | 2                  | 69       | 1              | 5              | 1.53        | 0.67                  |
| 3                             | 3                  | 69       | 1              | 5              | 2.66        | 1.06                  |
| 4                             | 4                  | 69       | 1              | 5              | 2.48        | 1.11                  |
| 1                             | 5                  | 69       | 1              | 5              | 1.56        | 0.74                  |
| 2                             | 6                  | 69       | 1              | 5              | 2.42        | 1.05                  |
| 3                             | 7                  | 69       | 1              | 5              | 2.82        | 1.09                  |
| 4                             | 8                  | 69       | 1              | 5              | 1.8         | 0.65                  |
| 1                             | 9                  | 69       | 1              | 5              | 1.63        | 0.58                  |
| 2                             | 10                 | 69       | 1              | 5              | 1.91        | 0.86                  |
| 3                             | 11                 | 69       | 1              | 5              | 1.98        | 0.61                  |
| 4                             | 12                 | 69       | 1              | 5              | 2.59        | 1.12                  |
| 1                             | 13                 | 69       | 1              | 5              | 1.94        | 0.69                  |
| 2                             | 14                 | 69       | 1              | 5              | 2.68        | 1.15                  |
| 3                             | 15                 | 69       | 1              | 5              | 2.37        | 0.98                  |
| 4                             | 16                 | 69       | 1              | 5              | 2.27        | 0.95                  |
| 1                             | 17                 | 69       | 1              | 5              | 1.84        | 0.68                  |
| 2                             | 18                 | 69       | 1              | 5              | 1.75        | 0.78                  |
| 3                             | 19                 | 69       | 1              | 5              | 2.45        | 0.97                  |
| 4                             | 20                 | 69       | 1              | 5              | 1.98        | 0.74                  |

#### 4.2.2.1 Cost containment as a strategic tool to gain competitive advantage

The cost containment evaluation questions fulfil the studies first objective of, determining the key cost drivers that exist in these private hospitals and understanding the significance of these cost drivers as a strategic lever. This objective comprises of 5 questions in section B, which can be seen in table 4.2 in line with objective 1.

**Table 4.3: There is growing concern that cost drivers affect the JMH business strategy in healthcare**

| Strongly Agree |       | Agree    |       | Neutral  |       | Disagree |      | Strongly Disagree |   |      |                    |
|----------------|-------|----------|-------|----------|-------|----------|------|-------------------|---|------|--------------------|
| <i>f</i>       | %     | <i>f</i> | %     | <i>f</i> | %     | <i>f</i> | %    | <i>f</i>          | % | Mean | Standard Deviation |
| 16             | 29.23 | 25       | 56.92 | 9        | 12.31 | 10       | 1.54 | 0                 | 0 | 1.86 | 0.68               |

Table 4.3 illustrates that 56.92% of the respondents either agreed or strongly agreed that the cost drivers influences the company strategies. With the stance taken by the Counsel for Medical Schemes (CMS), pushing for a regulated insurance market because of the irresponsible remuneration packages paid to the executive management (Business Day 2014), many business strategies will change in order to become sustainable and competitive. 12.31% of the respondents were neutral while 1.54% either disagreed or strongly disagreed that costs influences business strategy. The mean is 1.86 and the standard deviation is 0.68.

**Table 4.4: Salaries and skilled resources is major cost driver in healthcare**

| Strongly Agree |       | Agree    |       | Neutral  |      | Disagree |   | Strongly Disagree |      |      |                    |
|----------------|-------|----------|-------|----------|------|----------|---|-------------------|------|------|--------------------|
| <i>f</i>       | %     | <i>f</i> | %     | <i>f</i> | %    | <i>f</i> | % | <i>f</i>          | %    | Mean | Standard Deviation |
| 33             | 53.23 | 25       | 40.32 | 3        | 4.84 | 0        | 0 | 1                 | 1.61 | 1.56 | 0.74               |

Table 4.4 illustrates that 53.23% of the respondents strongly agreed while 40.32% agreed that salaries and skilled resources is a fundamental cost driver in healthcare. Accordingly to Rondganger (2013), the primary reason why KwaZulu-Natal is facing a chronic shortage of doctors and nurses could be the affordability of salaries; this was highlighted as one of major factors during a survey by the SA Institute of Race Relations. Another expert view was that the exodus of doctors leaving the country is born from poor treatment of and unrelated lower salaries while in the employ as interns during community service (Child, 2014). The mean is 1.56 and the standard deviation is 0.74.

**Table 4.5: Studies indicate that the ageing population & lifestyle diseases, are contributing to more/increase hospital admissions which in turn increase healthcare costs**

| Strongly Agree |       | Agree    |       | Neutral  |      | Disagree |   | Strongly Disagree |   |      |                    |
|----------------|-------|----------|-------|----------|------|----------|---|-------------------|---|------|--------------------|
| <i>f</i>       | %     | <i>f</i> | %     | <i>f</i> | %    | <i>f</i> | % | <i>f</i>          | % | Mean | Standard Deviation |
| 26             | 41.94 | 33       | 53.23 | 3        | 4.84 | 0        | 0 | 0                 | 0 | 1.63 | 0.58               |

Table 4.5 illustrates that a total of 95.17% of the respondents agreed in some way that ageing population & lifestyle diseases are contributing to increased healthcare costs. The answers for this question seem to correlate with the study by Reinhardt (2003), showing this factor (ageing and lifestyle) contributes to as much as 6% to 7% of health expenditure growth. None of the respondents were in disagreement with this question resulting in a mean of 1.63 and the standard deviation of 0.58.

**Table 4.6: New medical technology expenses are always increasing in healthcare**

| Strongly Agree |       | Agree    |      | Neutral  |       | Disagree |      | Strongly Disagree |   |      |                    |
|----------------|-------|----------|------|----------|-------|----------|------|-------------------|---|------|--------------------|
| <i>f</i>       | %     | <i>f</i> | %    | <i>f</i> | %     | <i>f</i> | %    | <i>f</i>          | % | Mean | Standard Deviation |
| 15             | 23.44 | 40       | 62.5 | 7        | 10.94 | 2        | 3.13 | 0                 | 0 | 1.94 | 0.69               |

Table 4.6 shows that 23.44% of the respondents strongly agreed while 62.50% of the respondents agreed that new medical technology inflates expenses in healthcare. Rettig (cited by Goyen et al, 2008), summaries that technology increases costs because of the development of new treatments for previously untreatable inoperable conditions, including long-term therapy for treatment of such diseases as diabetes, end-stage renal disease, and AIDS. Szczerba & Huesch (2012), argue that this could be seen as the “treatment expansion effect”, which is detailed in chapter 2.

The closing analysis on this question resulted in 10.94% of the respondents being neutral while 3.13% of the respondents disagreed. The mean is 1.94 and the standard deviation is 0.69.

**Table 4.7: Cost containment methods can be used as an effective tool to increase efficiencies and effectiveness**

| Strongly Agree |       | Agree    |       | Neutral  |      | Disagree |      | Strongly Disagree |   |      |                    |
|----------------|-------|----------|-------|----------|------|----------|------|-------------------|---|------|--------------------|
| <i>f</i>       | %     | <i>f</i> | %     | <i>f</i> | %    | <i>f</i> | %    | <i>f</i>          | % | Mean | Standard Deviation |
| 18             | 29.03 | 38       | 61.29 | 4        | 6.45 | 2        | 3.23 | 0                 | 0 | 1.84 | 0.68               |

Table 4.7 shows that 61.29% of the respondents agreed while 29.03% strongly agreed that cost containment methods can be effective in increasing efficiencies and effectiveness. Kibicho *et al* study in 2012, maintain that cost containment does have an effect budgets and strategy, however these constraints can be overcome by successful alignment of cost containment and business strategies by stakeholder engagement. The closing analysis on this question resulted in 6.45% of the respondents being neutral while 3.23% of the respondents disagreed. The mean is 1.84 and the standard deviation is 0.68.

#### **4.2.2.1.2 Summary of cost containment**

There were five likert type statements ranging from Strongly Agree to Strongly Disagree, and respondents were asked to investigate if cost containment can gain competitive advantage. Results showed that majority of the participants answered positively to all the statements as their mean value was below three (03). For example, >90% of the respondents positively agreed that there is growing concern that cost drivers effect the JMH business strategy in healthcare, Salaries and Skilled Resources is major cost driver in healthcare, and Studies indicate that the ageing population & lifestyle diseases, are contributing to more/increase hospital admissions which in turn increase healthcare costs.



### 4.2.3 Leadership trait of management in relation to performance

The effect of leadership traits in relation to company performance fulfils the studies second objective of evaluating the impact of leadership as a strategic lever of business performance. This second objective comprises of 5 questions in section B, which can be seen in table 4.2 in line with objective 2.

**Table 4.8: I as a leader am present and visible to employees regularly**

| Strongly Agree |       | Agree    |       | Neutral  |      | Disagree |      | Strongly Disagree |   |      |                    |
|----------------|-------|----------|-------|----------|------|----------|------|-------------------|---|------|--------------------|
| <i>f</i>       | %     | <i>f</i> | %     | <i>f</i> | %    | <i>f</i> | %    | <i>f</i>          | % | Mean | Standard Deviation |
| 35             | 54.69 | 25       | 39.06 | 3        | 4.69 | 1        | 1.56 | 0                 | 0 | 1.53 | 0.67               |

Table 4.8 shows that 54.69% of the respondents strongly agreed while 39.06% respondents agreed that as leaders they are present and visible to the employees regularly. A key successful trait identified by Grandolf & Hirsch (cited in Wheatley 2010), on conclusion of their study was the leaders personality and visibility. Although this is another generic component of leadership but this underlying trait is critical and crucial in any industry. This is the essential for forming and vital for nurturing relationships, which are the critical success factors in any institution. The closing analysis on this question resulted in 4.69% of the respondents being neutral while 1.56% of the respondents disagreed. The mean is 1.53 and giving a standard deviation of 0.68.

**Table 4.9: In JMH managers and leaders provide employees with a vision and sense of mission needed to be effective**

| Strongly Agree |       | Agree    |       | Neutral  |       | Disagree |      | Strongly Disagree |      |      |                    |
|----------------|-------|----------|-------|----------|-------|----------|------|-------------------|------|------|--------------------|
| <i>f</i>       | %     | <i>f</i> | %     | <i>f</i> | %     | <i>f</i> | %    | <i>f</i>          | %    | Mean | Standard Deviation |
| 10             | 16.63 | 31       | 48.44 | 12       | 18.75 | 8        | 15.5 | 3                 | 4.69 | 2.42 | 1.05               |

Table 4.9 illustrates that 48.44% of the respondents either agreed or strongly agreed that the managers and leaders in the institution provide a sense of vision and mission to the effective. Leadership and management characteristics are often postulated has similar and in Doppler and Lauterburg's words (cited in Schmitt 2012), "A leader does the right things - A manager does the things right" this proves correct. The ultimate precedence is that a leader must also be a good manager to turn a vision into reality (Bass 2008), this is what gives the company a strategic edge. The summary of the remaining analysis was that 18.75% of the respondents being neutral while 15.5% of the respondents disagreed and 4.69% strongly disagreed. The mean is 2.42 while the standard deviation is 1.05.

**Table 4.10: As a leader/manager, I provide regular on job training and mentoring with regards to responding and solving problems**

| Strongly Agree |       | Agree    |       | Neutral  |       | Disagree |      | Strongly Disagree |      |      |                    |
|----------------|-------|----------|-------|----------|-------|----------|------|-------------------|------|------|--------------------|
| <i>f</i>       | %     | <i>f</i> | %     | <i>f</i> | %     | <i>f</i> | %    | <i>f</i>          | %    | Mean | Standard Deviation |
| 22             | 33.85 | 31       | 47.69 | 9        | 13.85 | 2        | 3.08 | 1                 | 1.54 | 1.91 | 0.86               |

Table 4.10 shows that 81.54% of the respondents agreed in some way that as leaders and managers they provide regular on job training and mentoring with regards to responding and solving problems. This function is imperative in management or leadership. Another successful trait identified by Grandolf and Hirsch (2007), was positivity. They explained these leaders with positive attitudes seize control over their situation and have great influences in mentoring and growing individuals. 13.85% of the respondents were neutral with 3.08% disagreeing and a further 1.54% in strong dis agreement. The resulting mean is 1.91 and the standard deviation is 0.86.

**Table 4.11: Our senior leadership adopts a two way approach that asks our employees for their ideas.**

| Strongly Agree |       | Agree    |       | Neutral  |       | Disagree |       | Strongly Disagree |      |      |                    |
|----------------|-------|----------|-------|----------|-------|----------|-------|-------------------|------|------|--------------------|
| <i>f</i>       | %     | <i>f</i> | %     | <i>f</i> | %     | <i>f</i> | %     | <i>f</i>          | %    | Mean | Standard Deviation |
| 7              | 11.11 | 28       | 44.44 | 11       | 17.46 | 12       | 19.05 | 5                 | 7.94 | 2.68 | 1.15               |

Table 4.11 shows that 44.44% of the respondents agreed while a further 11.11% strongly agreed that our senior leadership adopts a two way approach that involves requesting employee ideas. With the impenitent complexity surround this sector, Weberg (2012) insists that an internal leadership style must be built on adaptive capabilities with open engagement that leads to innovative problem solving methods. The closing analysis on this question resulted in 17.46% of the respondents being neutral while at combination of 26.99% of the respondents disagreed in some form or another. The mean is 2.68 and the standard deviation is 1.15.

**Table 4.12: A formal qualification for a manager / leader is needed to ensure that leadership can be a tool for strategic growth**

| Strongly Agree |       | Agree    |       | Neutral  |      | Disagree |      | Strongly Disagree |   |      |                    |
|----------------|-------|----------|-------|----------|------|----------|------|-------------------|---|------|--------------------|
| <i>f</i>       | %     | <i>f</i> | %     | <i>f</i> | %    | <i>f</i> | %    | <i>f</i>          | % | Mean | Standard Deviation |
| 26             | 41.27 | 30       | 47.62 | 4        | 6.35 | 3        | 4.76 | 0                 | 0 | 1.75 | 0.78               |

Table 4.12 shows that combination of 88.89% of the respondents agreed in some form or another that a formal qualification for a manager or leader is needed to for strategic growth. Schultz *et al.* (cited in Schmitt 2012), debated the issue of a type of qualification (business degree or medical degree) needed for a successful leader in healthcare. Their conclusion was that none of the two (business degree or medical degree) should play prejudice the selection of the candidate with the consistent factor of an educational qualification being the crucial factor. 4.76% of the respondents disagreed in some way while the mean was 1.75 and the standard deviation is 0.78.

#### **4.2.3.1 Summary of leadership trait of management in relation to performance**

To measure the leadership trait, there were five statements ranging from Strongly Agree to strongly disagree that were asked. It was found that majority of the participants answered positively to all the statements as their mean value was below three (03). For example, more than 75% of the respondents positively highlighted that I as a Leader am present and visible to employees regularly, As a Leader/Manager, I provide regular on job training & mentoring with regards to responding and solving problems, and A Formal Qualification for a manager / leader is needed to ensure that leadership can be a tool for strategic growth.

#### 4.2.3.2 Organizational factor can influence process management on hospital performance

To determine whether process management (e.g. lean management) has an impact on hospital performance fulfils the studies third objective of gauging what organizational factors can influence process management and its effect on hospital performance. This third objective comprises of 5 questions in section B, which can be seen in table 4.2 in line with objective 3.

**Table 4.13: The current work processes in JMH, make our company efficient and competitive in the healthcare industry**

| Strongly Agree |       | Agree    |       | Neutral  |       | Disagree |       | Strongly Disagree |      |      |                    |
|----------------|-------|----------|-------|----------|-------|----------|-------|-------------------|------|------|--------------------|
| <i>f</i>       | %     | <i>f</i> | %     | <i>f</i> | %     | <i>f</i> | %     | <i>f</i>          | %    | Mean | Standard Deviation |
| 9              | 13.85 | 21       | 32.31 | 21       | 32.31 | 11       | 16.92 | 3                 | 4.62 | 2.66 | 1.06               |

Table 4.13 shows that 13.85% of the respondents strongly agreed while 32.31% respondents agreed that the current work processes in the make the company efficient and competitive in the healthcare industry. According to Kollberg (2007), there needs to be a shift of processes or research in this field that point more to real face-to-face situations in the healthcare contexts. With the nature of the service within this sector it is important that processes are streamlined to improve efficiency. The closing analysis on this question resulted in 32.31% of the respondents being neutral while 19.92% of the respondents disagreed and a further 4.62% strongly disagreed. The resulting mean was 1.53 thereby giving a standard deviation of 0.68.

**Table 4.14: All employee appraisals or performance evaluation are done on real-time process performance**

| Strongly Agree |      | Agree    |       | Neutral  |       | Disagree |       | Strongly Disagree |      |      |                    |
|----------------|------|----------|-------|----------|-------|----------|-------|-------------------|------|------|--------------------|
| <i>f</i>       | %    | <i>f</i> | %     | <i>f</i> | %     | <i>f</i> | %     | <i>f</i>          | %    | Mean | Standard Deviation |
| 3              | 4.84 | 29       | 46.77 | 11       | 17.74 | 14       | 22.58 | 5                 | 8.06 | 2.82 | 1.09               |

Table 4.14 illustrates that 51.61% of the respondents either agreed or strongly agreed that employee appraisals or performance evaluation are done on real-time process performance. Kaplan and Norton (1992), in their work on the Balanced Score Card argue that, other than real time evaluation the most important facet of the performance measurement system is that underlying foundation that this performance system must be built around the company strategy. The summary of the remaining analysis was that 17.74% of the respondents being neutral while 22.58% of the respondents disagreed and 8.06% strongly disagreed. The mean was 2.42 while the standard deviation is 1.09.

**Table 4.15: A lean approach that is used in the manufacturing industry (reducing waste in the system) would be a better tool for process performance & process management**

| Strongly Agree |       | Agree    |       | Neutral  |       | Disagree |      | Strongly Disagree |   |      |                    |
|----------------|-------|----------|-------|----------|-------|----------|------|-------------------|---|------|--------------------|
| <i>f</i>       | %     | <i>f</i> | %     | <i>f</i> | %     | <i>f</i> | %    | <i>f</i>          | % | Mean | Standard Deviation |
| 11             | 17.74 | 42       | 67.74 | 8        | 12.90 | 1        | 1.61 | 0                 | 0 | 1.98 | 0.61               |

Table 4.15 shows that 85.48% of the respondents agreed in some way that a lean approach that is used in the manufacturing industry (reducing waste in the system) would be a better tool for process performance & process management. Farsi *et al* (2014), summation of lean thinking is a concept of using less to do more, although not often used in health care could be successful because he believes lean is a management strategy that is applicable to all organizations because it has to do with improving processes. The remaining analysis revealed that 12.9% of the respondents were neutral with 1.61% disagreeing in some form. The resulting mean was 1.98 and the standard deviation is 0.61.

**Table 4.16: Best operating procedures or performance management systems are used to constantly to monitor and gauge new implementations accuracy**

| Strongly Agree |       | Agree    |       | Neutral  |       | Disagree |       | Strongly Disagree |      |      |                    |
|----------------|-------|----------|-------|----------|-------|----------|-------|-------------------|------|------|--------------------|
| <i>f</i>       | %     | <i>f</i> | %     | <i>f</i> | %     | <i>f</i> | %     | <i>f</i>          | %    | Mean | Standard Deviation |
| 9              | 14.52 | 33       | 53.23 | 9        | 14.52 | 10       | 16.13 | 1                 | 1.61 | 2.37 | 0.98               |

Table 4.16 shows that 14.52% of the respondents agreed while a further 53.23% strongly agreed that Best Operating Procedures or Performance Management Systems are used to constantly to monitor and gauge new implementations accuracy. According to Kollberg (2007), the Flow Model Performance Measurement System is highly successful in the Swedish Healthcare system and is centred on minimizing patient delays and waiting times. The closing analysis on this question resulted in 14.52% of the respondents being neutral while at combination of 17.74% of the respondents disagreed in some form or another. The mean was 2.37 and the standard deviation was 0.98.

**Table 4.17: Work standards are developed in house in most areas of our business and these standards are usually meet**

| Strongly Agree |      | Agree    |       | Neutral  |       | Disagree |       | Strongly Disagree |      |      |                    |
|----------------|------|----------|-------|----------|-------|----------|-------|-------------------|------|------|--------------------|
| <i>f</i>       | %    | <i>f</i> | %     | <i>f</i> | %     | <i>f</i> | %     | <i>f</i>          | %    | Mean | Standard Deviation |
| 5              | 8.06 | 38       | 61.29 | 7        | 11.29 | 10       | 16.13 | 2                 | 3.23 | 2.45 | 0.97               |

Table 4.17 shows that combination of 69.35 % of the respondents agreed in some form or another that work standards are developed in house in most areas of our business and these standards are usually meet. The concluding analysis revealed that 19.36% of the respondents disagreed in some way while 11.29% were neutral. The mean was 2.45 and the standard deviation was 0.0.97.

#### **4.2.3.3 Summary of organizational factor can influence process management on hospital performance**

The analysis shows the distribution of the statements regarding process management on hospital management. Results showed that majority of the statements had average score < 3 from 5-points likert scale (1 = Strongly Agree, 5 = Strongly Disagree) indicating more respondent positively agreed to all the statements. For example, 85% respondents agreed that A lean approach that is used in the manufacturing industry (reducing waste in the system) would be a better tool for process performance & process management, 68% agreed that Best Operating Procedures or Performance Management Systems are used to constantly to monitor and gauge new implementations accuracy, and 69% positively reported that Work standards are developed in house in most areas of our business and these standards are usually meet.



#### 4.2.3.4 Contractual agreement between hospital and medical funder's effectiveness on business strategy

To evaluate the impact that funder contracts (medical aid reimbursements) had on the business strategy fulfils the fourth and final objective of evaluating the Managed Care Organizations (MCOs) reimbursement strategies and plans that impacts the JMH business strategy. This final objective comprises of 5 questions in section B, which can be seen in table 4.2 in line with objective 4.

**Table 4.18: Majority of the patients have lower end medical aid plans with limited benefits and this limit effects length of stay which affects quality of care given**

| Strongly Agree |       | Agree    |       | Neutral  |       | Disagree |       | Strongly Disagree |      |      |                    |
|----------------|-------|----------|-------|----------|-------|----------|-------|-------------------|------|------|--------------------|
| <i>f</i>       | %     | <i>f</i> | %     | <i>f</i> | %     | <i>f</i> | %     | <i>f</i>          | %    | Mean | Standard Deviation |
| 10             | 15.87 | 30       | 47.62 | 9        | 14.29 | 11       | 17.46 | 3                 | 4.76 | 2.48 | 1.11               |

Table 4.18 shows that 15.87% of the respondents strongly agreed while 47.62% respondents agreed that the most patients have lower end medical aid plans with limited benefits and this limit effects length of stay which affects quality of care given. According Marivate (2010), most funders are looking for innovative mechanisms to reduce cost for managed care because with the current reimbursement models (FFS), could lead to hospitals maximizing their revenue by maximizing the service they provided. The closing analysis on this question resulted in 14.29% of the respondents being neutral while 17.46% of the respondents disagreed and a further 4.76% strongly dis agreed. The resulting mean was 2.48 thereby giving a standard deviation of 1.11.

**Table 4.19: Payment models and plans from medical aids have a critical effect on JMHs business decisions and strategies**

| Strongly Agree |       | Agree    |       | Neutral  |      | Disagree |      | Strongly Disagree |   |      |                    |
|----------------|-------|----------|-------|----------|------|----------|------|-------------------|---|------|--------------------|
| <i>f</i>       | %     | <i>f</i> | %     | <i>f</i> | %    | <i>f</i> | %    | <i>f</i>          | % | Mean | Standard Deviation |
| 19             | 29.69 | 41       | 64.06 | 2        | 3.13 | 2        | 3.13 | 0                 | 0 | 1.80 | 0.65               |

Table 4.19 illustrates that 64.06% of the respondents either agreed or strongly agreed that payment models and plans from Medical Aids, have a critical effect on JMHs business decisions and strategies. The current managed care models are taking a strong stance for healthcare providers to take an active role in controlling their own care. According to McAuliff *et al* (2014), funders are seeking a connected network of providers based on reducing healthcare costs and this could have far reaching consequences for companies that do not get contracted to these networks. The summary of the remaining analysis was that 3.13% of the respondents being neutral while 3.13% of the respondents disagreed. The mean was 2.42 while the standard deviation is 1.09.

**Table 4.20: Medical aids dis-courage the use of new medical technology because it increases the cost of healthcare**

| Strongly Agree |       | Agree    |       | Neutral  |       | Disagree |       | Strongly Disagree |      |      |                    |
|----------------|-------|----------|-------|----------|-------|----------|-------|-------------------|------|------|--------------------|
| <i>f</i>       | %     | <i>f</i> | %     | <i>f</i> | %     | <i>f</i> | %     | <i>f</i>          | %    | Mean | Standard Deviation |
| 9              | 14.29 | 27       | 42.86 | 11       | 17.46 | 13       | 20.63 | 3                 | 4.76 | 2.59 | 1.12               |

Table 4.20 shows that a combination of 57.15% of the respondents agreed in some way that a medical aids dis-courage the use of “New Medical Technology” because it increases the cost of healthcare. Slade & Anderson (cited in Marivate 2010) make a telling assertion that, almost half of the healthcare expenditure is due to the spend on new medical technologies. The remaining analysis revealed that 17.46% of the respondents were neutral with 20.63% disagreeing and a further 4.76% of the respondents strongly disagreeing. The resulting mean was 2.59 and the standard deviation was 1.12.

**Table 4.21: Treatment services to the patients are often altered in response to changes in medical aid limits (e.g. from FFS to PDIEM or FIX FEE)**

| Strongly Agree |       | Agree    |       | Neutral  |       | Disagree |      | Strongly Disagree |      |      |                    |
|----------------|-------|----------|-------|----------|-------|----------|------|-------------------|------|------|--------------------|
| <i>f</i>       | %     | <i>f</i> | %     | <i>f</i> | %     | <i>f</i> | %    | <i>f</i>          | %    | Mean | Standard Deviation |
| 10             | 15.63 | 37       | 57.81 | 9        | 14.06 | 6        | 9.38 | 2                 | 3.13 | 2.27 | 0.95               |

Table 4.21 shows that 57.81% of the respondents agreed while a further 15.63% strongly agreed that treatment services to the patients are often altered in response to changes in medical aid limits. Managed care plans use a vast reimbursement system to pay health service providers, one such system or method is the Diagnosis Related Groupings (DRGs) and aligning capitation model (Glied& Janus 2008). In simple terms providers get a capped fee to manage and treat the patient based on the DRG. The closing analysis on this question resulted in 14.06% of the respondents being neutral while at combination of 12.51% of the respondents disagreed in some form or another. The mean was 2.27 and the standard deviation was 0.95.

**Table 4.22: Patients are at the mercy of their medical aids in terms of designated hospitals of their choice.**

| Strongly Agree |       | Agree    |       | Neutral  |       | Disagree |      | Strongly Disagree |   |      |                    |
|----------------|-------|----------|-------|----------|-------|----------|------|-------------------|---|------|--------------------|
| <i>f</i>       | %     | <i>f</i> | %     | <i>f</i> | %     | <i>f</i> | %    | <i>f</i>          | % | Mean | Standard Deviation |
| 14             | 22.95 | 37       | 60.66 | 7        | 11.48 | 3        | 4.92 | 0                 | 0 | 1.98 | 0.74               |

Table 4.22 shows that combination of 83.61% of the respondents agreed in some form or another that patients are at the mercy of their Medical Aids in terms of designated hospitals of their choice. In principle a managed care model grants support for healthcare providers to take an active role in controlling their own care, through care coordination and choice in a connected network of providers (McAuliff *et al* 2014). This could be the corner stone is reducing healthcare costs but the patients choice with regards to facilities gets compromised. The concluding analysis revealed that 4.92% of the respondents disagreed while 11.29% were neutral. The mean was 1.98 and the standard deviation was 0.74.

#### **4.2.3.5 Summary of contractual agreement between hospital and medical funder's effective on business strategy**

Results showed that majority of the participants positively agreed to all the statements regarding contractual agreement between hospital and medical funder's effectiveness on business strategy. It was found that 94% of the respondent indicated that payment models and plans from Medical Aids, have a critical effect on JMHs business decisions and strategies, and 83% mentioned positively that patients are at the mercy of their Medical Aids in terms of designated hospitals of their choice.

#### 4.2.4 Presentation and Analysis of Section C

In Section C, a five point ranking scale, (1= no impact, 3=moderate impact, 5 high impact), was used to assess the impact to which the respondents ranked with the items in the questionnaire.

**Figure 4.4: Rating the impact of experience and qualifications within leadership and management.**

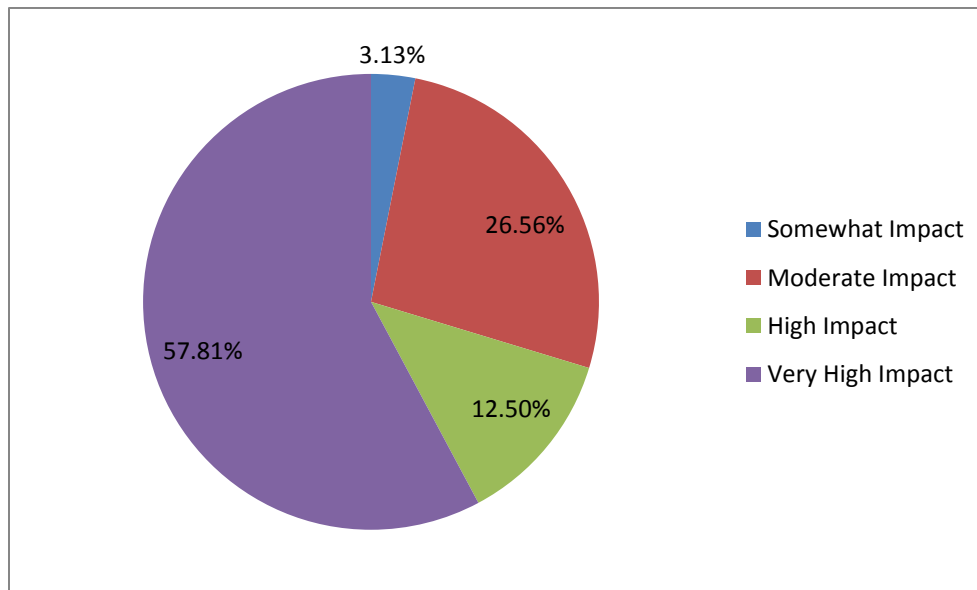


Figure 4.4 indicating when respondents were asked to rate the impact that they might believe skilled leaders / managers in terms of experience and qualifications will have on the healthcare industry, more than two-thirds (70%) indicated that it would have high impact in the organization.

**Figure 4.5: Rating the impact that a change in cost containment strategies will have in the hospital**

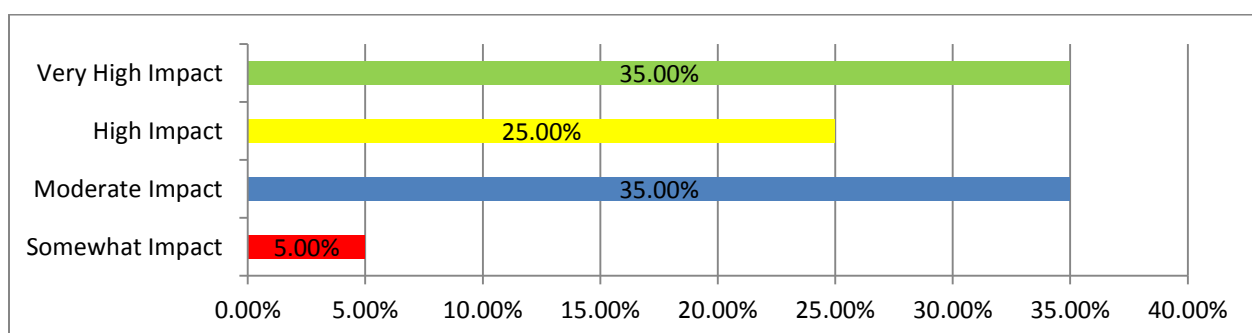


Figure 4.5 highlighted that 60% rated the impact as high that a change in cost containment strategies will have in the hospital.

**Figure 4.6: Rating the impact by introducing a LEAN approach in hospital will have on the financial outcome**

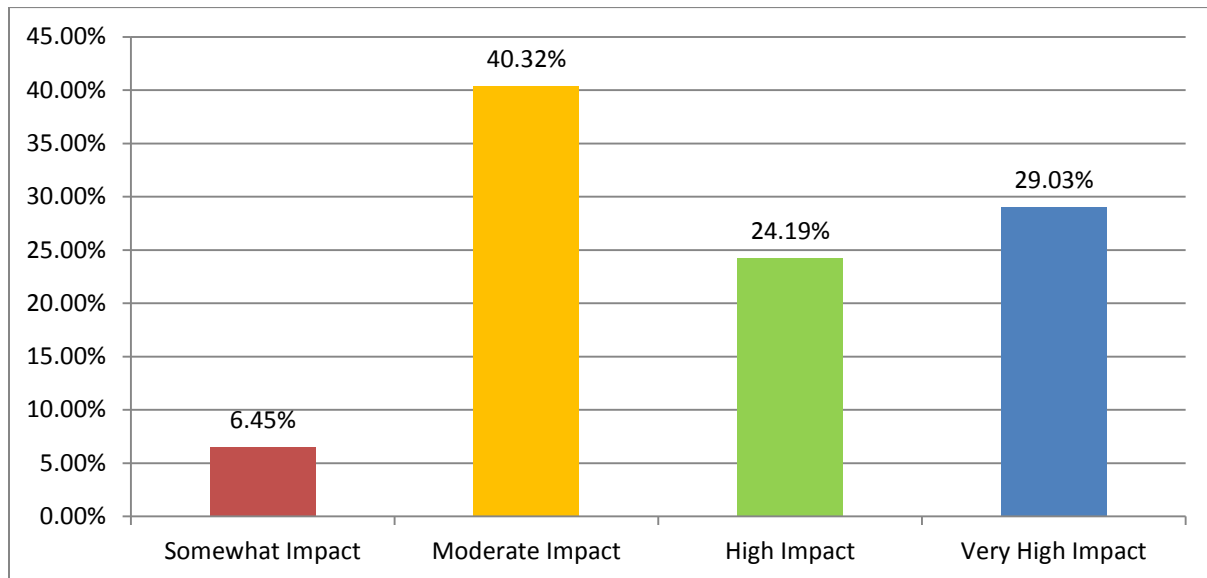


Figure 4.6 indicating when respondents were asked to rate the impact that they might believe that introducing a LEAN approach in hospital will have on the financial outcome, just over half of the respondents mentioned it will have a high impact.

**Figure 4.7: Rating the impact that medical aid limits have on the business**

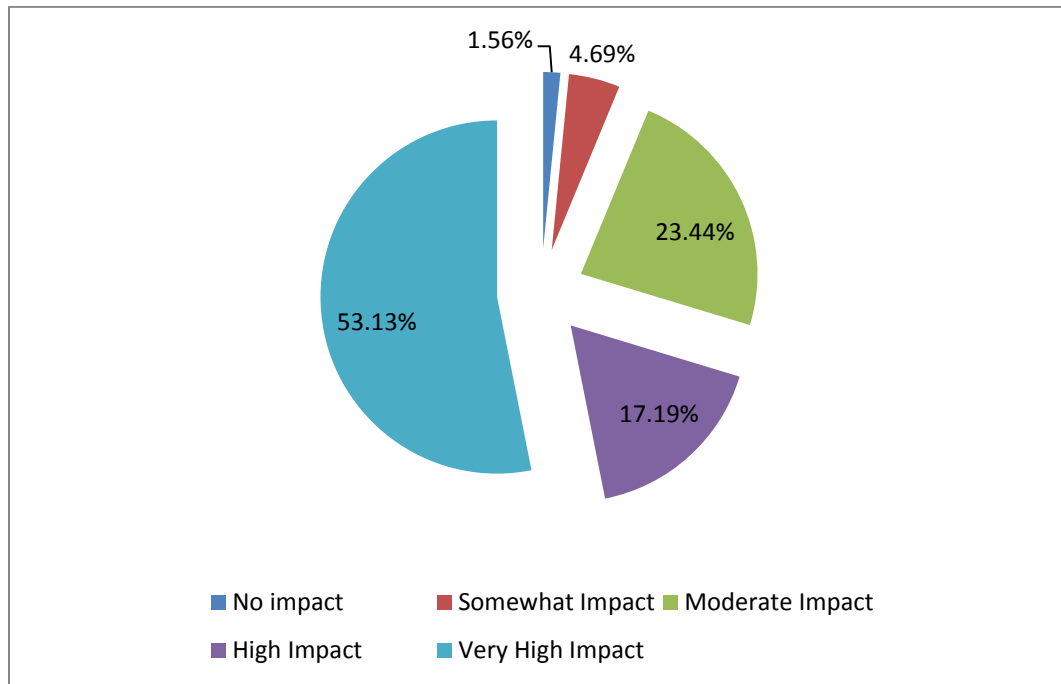


Figure 4.2.3.4 indicating majority of the respondents (70%) reported that Medical Aid Limits will have high impact on the business.

## **4.2.5 Statistical tests**

### **4.2.5.1 Kolmogorov-Smirnov test**

This test showed that overall score for Containment, Leadership, Process Management, and Contractual agreement were not normally distributed (table 4.23). Therefore, further study was conducted using non-parametric test.

**Table 4.23: Tests of normality**

|                       | Kolmogorov-Smirnov |    |         |
|-----------------------|--------------------|----|---------|
|                       | Statistic          | df | p-value |
| Containment           | .122               | 65 | .017    |
| Leadership            | .153               | 65 | .001    |
| Process Management    | .144               | 65 | .002    |
| Contractual agreement | .145               | 65 | .002    |

#### 4.2.5.2 Spearman's rho correlations test

This showed that there was significantly moderate correlation exists between Containment, Leadership, Process Management, and Contractual agreement ( $p < 0.05$ ). There was no significant relationship exists between process management and containment ( $r = 0.204$ ,  $p = 0.104$ ) as illustrated in (table 4.24).

**Table 4.24: Spearman's rho correlations test (r, p)**

|                       | Containment                | Leadership                 | Process Management         | Contractual agreement      |
|-----------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Containment           | 1.000                      | .412 <sup>**</sup> (0.001) | .204 (0.104)               | .423 <sup>**</sup> (0.000) |
| Leadership            | .412 <sup>**</sup> (0.001) | 1.000                      | .597 <sup>**</sup> (0.000) | .328 <sup>**</sup> (0.008) |
| Process Management    | .204 (0.104)               | .597 <sup>**</sup> (0.000) | 1.000                      | .461 <sup>**</sup> (0.000) |
| Contractual agreement | .423 <sup>**</sup> (0.000) | .328 <sup>**</sup> (0.008) | .461 <sup>**</sup> (0.000) | 1.000                      |

<sup>\*\*</sup>. Correlation is significant at the 0.01 level (2-tailed).



### **4.3 Conclusion**

It is apparent from the analysis, that some of the strategic levers identified in this study are in need of review in order to craft a refreshed business strategy. Levers such as cost drivers will require modern methods to be sustainable. It would be beneficial to up skill the leadership or management component at the company because twenty five per cent of individuals have no formal education. The respondents agreed that a new process management will have higher impact within the company. The impact that the funders have on their members could have serious consequences for the businesses and members alike. The next chapter presents the conclusions and recommendations.

## CHAPTER FIVE

### CONCLUSION AND RECOMMENDATIONS

#### 5.1 Introduction

The resolution of this chapter is to consolidate the outcomes of this study in line with the research objectives as stated in Chapter 1 and to steer recommendations for implementation and ideas for future research. This chapter highlights a summary of the main findings and conclusion of each research question and this is followed by a list of recommendations to stakeholders and recommendations for future research.

#### 5.2 Literature review findings

The findings from the academic literature reveal that strategy crafting and execution is of paramount importance in any industry of business. The view from the research review indicates that strategy is derived from the VMOST components of the business.

The strategic enigma for a company indicates that there is an underlying need for a complete understanding of the industry's key strategic levers and enablers that can be adapted to suit the institutions objective that leads to the founding VMOST elements.

Key findings from the four objectives that was the focal point of this study are:

##### *Cost Containment*

- At the outset there is an urgent need for healthcare to contain cost and this is a global phenomenon.
- Due the increasing demand for healthcare, especially in South Africa, the industry must have some regulation.
- The ageing population is huge factor in cost escalations due to the associated disease profile in older individuals
- Specific to South Africa, the lack of competition, new drugs and technology were elements that corresponded to increase costs in the industry.

- Finally the critical shortages of nurse and doctors alike are a area for concern that will increase costs by the nature of supply and demand.

### *Leadership Component*

- The themes of highly capable leaders are essential to the successful and sustainable businesses were apparent throughout this review.
- There was a distinct difference between leaders and managers.
- Leadership styles and approached are built of founding theories and the evolution of leadership is on-going.
- Healthcare leadership is complex and there should not be a preference between a clinically qualified leader and a business orientated leader with regards to selection.
- One spin off from the evolution of leadership is the increasingly important use of emotional intelligence in leading.
- Successfully companies benefit from strategic leadership and the level 5 leadership model encompasses.

### *Business Process Management*

- BPM is central to all facets of business performance within an institution.
- A “process-centric company” have enhanced macro environment responses with key reductions in human intervention errors increases.
- BPM is vitally imperative in healthcare due to the adverse nature of the business especially hospitals.
- Lean methodologies, as BPM systems in healthcare are in infancy stages but there have been successful instances of implementations globally.
- PMS for evaluating processes is another weighty element for business and healthcare.
- PMS allows for pertinent analysis of past data for future improvements.
- There are many PMS available, but the study references the BSC tool is a derivative of business strategy while the FLOW model is a clinical measure in lieu of time reduction.

### *Funder / MCO Re-Imbursements*

- The South African industry is not regulated.
- The funders use of reimbursement contracts attempted to curbed costs are clear.
- The autonomy with the selection of designated provider networks lies with the funders.
- The three big hospital groups in South Africa make up majority of the market share in the private healthcare hospitalisation arena.

### **5.3 Conclusions drawn from the data extraction on these objectives are:**

*Can hospitals in the private sector use **cost containment** as a strategic tool to gain competitive advantage?*

There is a growing concern that the business strategy of the company is affected by cost containment. Salaries and Skilled Resources were identified as a key cost driver with the company. This constraint could be perceived as an internal challenge with the hospital management having the capacity to effect via innovative ways of retaining and training these resources. The ageing population and lifestyle diseases were contributing to more hospital admissions which in turn increase healthcare costs. These results also indicates that the hospitals link to the managed care's cost containment strategy of utilisation by case management and their preference of using generic drugs, to control costs have the ability to control this escalation.

*Identifying differences in **leadership** traits of management and their relationship to hospital performance?*

This research objective tested how individual leadership traits within the management team affected the person and the business unit with regards to performance. It was found that majority of the participants were visible to their employees and they further provided regular on the job support. This finding is consistent with claims by (Bass 2008), that the leadership facet has evolved and this evolution includes functioning ability, behaviour, power, vision, values, charisma, intelligence, gender, and situational interaction, to name just a few.

Another factor borne from this study was that indication by the managers that a formal qualification is needed for strategic growth. This issue is pertinent within this institution, simply because twenty five per cent of this management team do not have a relative formal qualification.

According to Collins 2001, the first domain of his five level leadership model, indicate that the individual at this first level has to be a highly capable before moving onto the next level. Within the confounds of this first level the leaders contribution is based on their skill, talent and knowledge. This could present a significant hindrance for the company because a quarter of the middle management team do not have this entrance pre requisite as argued by Collins.

*Gauging what organizational factors can influence **process management** and its effect on hospital performance?*

There are two thirds of the respondents that agreed performance measurement systems are used to monitor and evaluate the process management and any new implementations, while the same proportion of respondents agreed that most benchmarks are being met. This result supports the view of Kollberg (2007) that performance measurement systems have become an integral part in healthcare management. The impact “A Lean Approach” will have on the financial performance of the company, the overwhelming response was that it will influence the financial outcomes. This result is similar to Singleton *et al* (2011) view, which narrate to successful initiatives in the USA and the UK of “LEAN” implementations in healthcare , were improved processes resulted in 15-20% additional work being complete with the same resources after implementing. This would support the view of the study that “LEAN” could have positive financial implications for the institution.

*How do the contractual agreements between hospital and medical aid funder's (**Reimbursements**) effect business strategies?*

There was strong association between the statement that medical aids reimbursement plans and strategies affect the business strategy. Furthermore there is a general agreement among the middle managers the funders / medical aids have the underlying control in terms network agreements and payment strategies. This view is consistent with Marivate (2010), who asserts that the most funders are leaning towards a fixed fee method of reimbursement that is driven by CPT coding with hospitals incurring more of the risk than the funders.

## **5.4 Recommendations**

Based on the literature review and findings of the study, the following recommendations can be made to the institutions strategy in order to enhance their competitive stance in the private healthcare marketplace.

### **5.4.1 Recommendations on cost containment**

Kotler and Keller (2009) assert that companies can become efficient and market leaders by collaboration with similar companies and forming resolute allies to aid economies of scale. This recommendation supports the view above.

*The formation of a supply chain network:*

JMH should aim to collaborate with other smaller hospital groups in the industry. This collaboration will lead to a forming of a resilient supply chain network for the company. This recommendation will create vast opportunities for smaller companies to become more efficient in sourcing products, without the cost of “physical market presence”. This will further give resource combinations, shared risk and rewards and reduced transaction costs the impetus for using of using cost containment in creating a competitive edge. In summary this collaboration while allow for these (JMH and their allies) companies improved autonomy in sourcing of drugs and technology that could result in buying relatively cheaper and efficient.

This recommendation if implemented correctly, taking into considerations the compliance and legal issues surrounding the memorandum of understand events, will neutralise Kibicho and colleagues (2012) view, of the high increases in drug expenditures.

## **5.5 The JMH educational program**

The second recommendation in this centrum could see the company JMH offering a fast track education system. This could be the offering a subsidized education system to external individuals and offer these communities around their businesses this program. This is consistent with the current internal bursary program. A similar process could be implemented whereby the external people are given a chance of life improvement. Again the recruitment will be easier from this now educated pool resources and the strategic benefit could see the individuals that are not employee be classified as a corporate social initiative to up skill the community.

There would be financial benefit as in the skills grants offered by government to companies, this will mean JMH recovering a portion of their costs.

This recommendation if implemented correctly taking into considerations the legal and contractual requirements, will ease issue of nursing shortages in the country that was raised by (Child 2014).

### **5.5.1 Recommendations on leadership**

As discussed previously, the complexities of the issues that confront the health care system make leadership a vital and fundamental component of business strategy. This primary recommendation is central to the evolution of the company.

#### **5.5.1.1 JMH leadership formal mentoring program**

There must be a serious effort from the executive management and directors to improve or up skill the middle management team or any leader / manager in the employ that requires this intervention. The company should utilise a training coordinator aligned to human resources. This coordinator should quantify training needs as junior management programs (JPM), middle management programs (MMP) and senior management programs (SMP). Once this analysis is complete, JMH must identify an institution that are offering these training courses and allow these managers to reach or enhance their potential. Once these individuals are trained, JMH should complement this creating an internal mentorship. Whereby a senior manager partners a team of middle managers to monitor, evaluate and grow these managers. There would be financial benefit as leverage. The skills grants offered by government to companies will be applicable to this recommendation and this will mean JMH recovering a portion of their costs. This recommendation when implemented correctly will close the gap of 25% of the middle management work force not being formally educated or qualified extracted by the study.

This strategic urgent recommendation will further provide a JMH with a platform to enter the Collins (2001), level 5 leadership model. By educating this team, these leaders will satisfy the criteria of the first level. Creating a “highly capable individual with talent, knowledge, skills, and good work habits”.

This up skilling of leadership will create increased benefits in other facets of business for JMH such as:

- Improved patient / manager trust relationship in situations where patients need this leadership from the providers of healthcare for elements such as diagnosis, assessment, advice, and treatment.
- The progressive ability to foster strategic change and decision making that will improve and costs could decrease.
- These leaders will be able to identify gaps in technology and medical procedures to lead change that improves the value of health care whilst minimising the need for unnecessary tests, procedures, and medications. This will improve the nurse leadership at ward level.

These benefits supports the view by Soski and Jung's (2009) research and development of the evidence-based model of leadership, which emphasizes that companies are better strategically positioned to counter market changes, when the leadership is developed.

## **5.6 Recommendations on process management**

In response to the global demands being placed on the health care to lower cost and improve sustainability for all stakeholders many hospitals are seeking an improved process management system. This recommendation supports the view of a “LEAN” implementation.

### **5.6.1 JMH LEAN strategy**

A JMH lean approach could re-in vigour the business in many areas. Below are a few examples of a “LEAN” approach to aid the recommendation of implementing “LEAN” within JMH:

- The procurement department for surgical and medical consumables could benefit from the “just in time” system. This approach will give arise to more space becoming available as a result of this “JIT” process. Space is a precious in the sector and specifically this company. This will further result in fewer stock days which will minimise expenses.
- The theatre units could be reassessed to incorporate a morning and afternoon shift to allow for the doctors that consult during the day. This implementation will reduced that wastage of paid hours during the day and improve efficiencies by using less resources to do more work.



- A patient alert system similar to the “Virginia Mason Medical Centre”, this concept aims to colour code the patient’s wrists bands to create awareness rather. This awareness is in contrast to recorded notations in a patient file. This is a much more efficient patient eccentric way to identify allergies or treatment plans.

In summary the “Lean Approach” (Japanese manufacturing processes) has many similarities to health care processes. These important similarities encompass concepts of “quality, safety, customer satisfaction, staff satisfaction, and cost-effectiveness” which are applicable in all JMH hospitals that require explicitly consistent improvement and innovation. This view endorsed by Robinson *et al* (2012), which concurs that there are many hospitals implementing a method of lean production to improve quality and efficiency especially in the US.

### **5.6.2 JMH balanced score card**

A final recommendation under this object would be for the institution to implement the balance score card. There could be other performance measurement systems available but the BSC would be the best suited to this institution because it transcends the company strategy into the four parameters.

This will prove to be a catalyst to enhance nursing and middle managers on all aspects of business. For example in the nursing division, by assessment on the financial performance of their unit or department, these managers will get an insight as to how their unit fits into this company’s business paradigm. It will provide a clear line of sight from top to bottom in regards to finances which could prove to ignite a competitive advantage.

## **5.7 Recommendations on funder reimbursements**

The main recommendation to this issue would be a collaborative effort in growth discounting reimbursement models between the funder and JMH.

### **5.7.1 JMH risk sharing reimbursement tariff**

In terms of growth discounting, there should be joint ventures between the hospitals and the funders.

One example could be a growth discount model, where by the funder can select the JMH hospital as a designated network provider and if the funders membership increased by a certain proportion and concurrently when the hospitals revenue increases with that specific funder, there should be some kind of a discount structure that rewards growth on both sides, a joint profit sharing model.

Hospital management should consider the sway of using generic medication for treatment practices with the emphasis on patient care before cost control. This would prove to be a concerted effort to manage patients in the risk sharing reimbursement domain between funder and hospital whilst hospital still maintained profits. This recommendation is aimed at mutual benefit for JMH and the funder in that the funder will reimburse at a cheaper rate that will drop their cost overall. These recommendations support the view of McAuliff *et al* (2014), which explains that it would take a collaborative effort between funders and hospitals to reduce costs.

## **5.8 Recommendations for future research**

The study focused predominately on JMH and primarily in the Durban area.

It would be interesting to note the responses from middle managers from other hospital groups such as the big three hospital groups. Would these be strategic levers and enablers that affect their company differ from group to group or geographically since these groups have footprints throughout the country?

A triangular approach would be best suited in order to gain more insight into strategic levers such as cost containment, leadership, process management and funder reimbursement's strategies in use at the company. The results of the current study give a strong indication that these strategic levers can be used as a means to get efficiencies and effectiveness however more research is needed to extract the differences between hospitals that belong to the bigger groups or individualised.

This study can be replicated for other stakeholders in the private healthcare industry that work under the confines of funders. These would include doctors, pathologists, radiography units, etc. Research is required to compare the strategic levers against performance, in order to verify the results of this study.

## **5.9 Conclusion**

This study confirms that these strategic levers identified, has the ability to use gain efficiencies and effectiveness in this market. In addition this study found that there are a few areas within these strategic levers that require urgent intervention to improve effectiveness and recommendations were levelled at providing the necessary impetus to the pre-study objectives. The main areas of focus to negate these unsatisfactory measures are leadership, process management and funder reimbursements contracts. Improvement to these parameters would allow the institution to differentiate services, improve customer satisfaction, strengthen strategic partners and raise stakeholder value.

## Bibliography

Armistead, C., Pritchard, J-P. and Machin, S. (1999). 'Strategic Business Process Management for Organisational Effectiveness'. Long Range Planning, 32, 1, 96–106.

Armstrong, M., 2009, *Armstrong's Handbook of Performance Management An evidence-based guide to delivering high performance*, Kogan Page Limited, Great Britain

Bass, B.M., & Bass, R., 2008, *The Bass Handbook of Leadership: Theory, Research, and Managerial Applications*. Simon and Schuster, New York

Bicheno, J., 2008, "The Lean Toolbox for Service Systems", Picsie Books, Buckingham

Boyatzis, R., & McKee, A. (2005). *Resonant leadership: Renewing yourself and connecting with others through mindfulness, hope, and compassion*. Boston, MA: Harvard Business School Press.

Business Day, 2014, "EDITORIAL: Medical schemes need policing", viewed on 12<sup>th</sup> January 2015, from, <http://www.bdlive.co.za/opinion/editorials/2014/09/04/editorial-medical-schemes-need-policing>

Bass, B. M., 2008, *The Bass handbook of leadership: Theory, research, & managerial applications* (4th ed.). New York: Free Press.

Black, K. (2009) *Business Statistics: Contemporary Decision Making*, 6th edition, Jefferson City: John Wiley and Sons.

Bleistein, S.J., Cox, K., Verner, J., 2005, "Strategic Alignment in Requirements Analysis for Organizational IT: an Integrated Approach", ACM Symposium on Applied Computing, viewed on 12<sup>th</sup> May 2015, from, [https://static.aminer.org/pdf/PDF/000/566/709/strategic\\_alignment\\_in\\_requirements\\_analysis\\_for\\_organizational\\_it\\_an\\_integrated.pdf](https://static.aminer.org/pdf/PDF/000/566/709/strategic_alignment_in_requirements_analysis_for_organizational_it_an_integrated.pdf)

Bleistein, S., Cox, K., Verner, J., Validating strategic alignment of organizational IT requirements using goal modeling and problem diagrams., *The Journal of Systems and Software*, Vol. 79, 2006, pp. 362-378.

Burns, N., Groves, K.,G., 1993, *The Practice of Nursing Research. Conduct, Critique and Utilization*. Second Edition. Philadelphia, WB Saunders Company.

Centre for Development and Enterprise (CDE), 2011 ”, viewed on 12<sup>th</sup> January 2015, from <http://www.cde.org.za/images/pdf/REFORMING%20HEALTHCARE%20IN%20SA%20full%20report.pdf>

Civan, A., &Köksal, B., 2010, *The effect of newer drugs on health spending: Do they really increase the costs?*, *Health Economics*, 19(5), 581-595.

Cutler, D. M., & McClellan, M., 2001, *Is technological change in medicine worth it?* *Health Affairs*, 20(5), 11-29.

Cookson. D., Read. C., Mukherjee. P., Cooke. M., 2011, “*Improving the quality of Emergency Department care by removing waste using Lean Value Stream mapping*”, *The International Journal of Clinical Leadership*, viewed on 12<sup>th</sup> January 2015 from, <http://www.emeraldinsight.com/journals.htm?>

Collins, J., 2001, “Level 5 Leadership: The Triumph of Humility and Fierce Resolve”, *Harvard Business Review*, Viewed 20<sup>th</sup> February 2015, from, <https://hbr.org/2001/01/level-5-leadership-the-triumph-of-humility-and-fierce-resolve-2>

Counsel for Medical Schemes, 2013., *Annual report 2012/13*, viewed on 02 February 2014, available at, <https://www.medicalschemes.com>

Child. K., 2014, “*Is there a doctor in the house*”, *Times Live*, viewed on 01 Feb 2015, from <http://www.timeslive.co.za/thetimes/2014/03/13/is-there-a-doctor-in-the-house>

De Hert, S. G., 2009, *A European view: Managed care health plans: Better or cheaper treatment strategies?* *Journal of Cardiothoracic and Vascular Anaesthesia*, 23(2), 137-139.

Farsi, Y., A., Abri, R., A., Hajri, A., A., Balushi., S., A., 2014, “*The Need For Lean Thinking In The Omani Health Care Sector*”, *Oman Medical Journal* Vol. 29, No. 4:248-249

Fink, A., 2003 *The Survey Kit: How to sample in surveys*, 2nd edition, London: Sage.

Gibson, J., 2008, *Organizations: Behavior, Structure, Processes*. 13th ed, McGraw-Hill/Irwin.

Goleman, D., Boyatzis, R., & McKee, A. (2002). *The new leaders: Transforming the art of leadership into the science of results*. London, England: Little, Brown.

Glesne, C., Peshkin, A., 1992, *Becoming qualitative researchers: An introduction*, White Plains, NY: Longman

Glied, S., & Janus, K., 2008, *Managed care in Kris Heggenhougen*(Ed.),*International Encyclopedia of public health* (pp. 195-202). Oxford: Academic Press.

Goyen.M., Debatin. J.,F., 2008., “*Healthcare costs for new technologies*”, *The Europe Journal of Nuclear Medicine and Molar Imaging*.

Grandolf, S., & Hirsch, L., 2007, “*13 traits of highly successful health practice leaders*”. viewed on 12<sup>th</sup> January 2015 from, <http://healthcaresuccessstrategies.com/articles/highly-successfulpractices.html> Kollberg. B., 2007, *Performance Measurement Systems in Swedish Health Care Services*

Husby, B. C., 2012, “*Integrating People, process and Technology in Lean Healthcare*”,

Investor Words, 2013, viewed on 12<sup>th</sup> January 2015, from, [http://www.investorwords.com/16289/cost\\_control.html](http://www.investorwords.com/16289/cost_control.html)

Islam, M.M., Valderas J.M., Yen, L., Dawda, P., Jowsey, T., 2014, “ *Multimorbidity and Comorbidity of Chronic Diseases among the Senior Australians: Prevalence and Patterns*”, *Public Library of Science*, vol. 9, no.1.

Kaiser, E.D.U., 2012. “*U.S. Health Care Costs: Issue Modules, Background Brief*.” <http://www.kaiseredu.org/issue-modules/us-health-care-costs/background-brief.aspx>.

Kaplan, Robert S. and David P. Norton (1992). “*The Balanced Scorecard - Measures that drive performance*.” *Harvard Business Review* 39(January-February): 71-79.

Kaplan, Robert S. and David P. Norton (1993). “*Putting the Balanced Scorecard to Work*.” *Harvard Business Review* 39(September-October): 75-85.

Kaplan, Robert S. and David P. Norton (1996a). *The Balanced Scorecard: translating strategy into action*. Boston, Harvard Business School Press

Kemsley. S., 2015, *Business Process Management in Health Care*, For the Record, viewed on 10 May 2015, from, [http://www.fortherecordmag.com/news/100314\\_exclusive.shtml](http://www.fortherecordmag.com/news/100314_exclusive.shtml)

Kotler, P. and Keller, K. (2009) *Marketing Management*. 13th Edition. New Jersey: Pearson Prentice Hall.

Kumar, S, Adhish, V, & Deoki, N 2014, 'Making Sense of Theories of Leadership for Capacity Building', *Indian Journal Of Community Medicine*, 39, 2, pp. 82-86, Academic Search Complete, EBSCOhost, viewed 23 February 2015.

Kibicho, J. & Pinkerton, S.D., 2012, “*Multiple Drug Cost Containment Policies In Michigan's Medicaid Program Saved Money Overall, Although Some Increased Costs*”, *Health affairs*, vol. 31, no. 4, pp. 816-26.

Kollberg., B., 2007, “*Performance Measurement Systems in Swedish Health Care Services*”, *Lean Advancement Initiative History*, ”, viewed on 12<sup>th</sup> January 2015 from, <http://lean.mit.edu/history/history.html>.

Laschinger, H., Wong, C., Cummings, G., & Grau, A., 2014, '*Resonant Leadership and Workplace Empowerment: The Value of Positive Organizational Cultures in Reducing Workplace Incivility*', *Nursing Economic\$*, 32, 1, pp. 5-44, Academic Search Complete, EBSCOhost, viewed 23 February 2015

Lean Enterprise Institute, 2010, “*LeanTimeline.swf* (application/x-shockwave-flash Object).” <http://www.leaninstituut.nl/TimeLine/LeanTimeline.swf>

Mäkilä, M., 2014, “*Measuring and managing process performance in a contemporary multinational organization: a case study*”, view on 10 May 2015 from, [http://epub.lib.aalto.fi/en/ethesis/pdf/13614/hse\\_ethesis\\_13614.pdf](http://epub.lib.aalto.fi/en/ethesis/pdf/13614/hse_ethesis_13614.pdf) Marivate, D., 2010, “*Cost containment strategies and their relationship to quality of care within the SOUTH AFRICAN private healthcare industry*” viewed on 3<sup>rd</sup> September 2014, from [petd.up.ac.za/thesis/available/etd-05152011-102916/.../dissertation.pdf](http://petd.up.ac.za/thesis/available/etd-05152011-102916/.../dissertation.pdf)

Maheshwari, B., Kumar, V. and Kumar, U. (2006) Optimizing success in supply chain partnerships [online], *Journal of Enterprise Information Management*, 19(3), pp.277 – 291  
Available from: <http://www.emeraldinsight.com/journals.htm?issn=1741-0398&volume=19&issue=3&articleid=1554242&show=html>

Mas, N., & Seinfeld, J., 2008, *Is managed care restraining the adoption of technology by hospitals?* *Journal of Health Economics*, 27(4), 1026-1045.

Matter, B., 2009, “*Strategy and Design of Organisational Architecture*”, *Strategic Management Journal*, Vol. 30, No. 11.

McCormack, K. and Johnson, B. (2001). ‘Business process orientation, supply chain management and the e-corporation’,

McAuliff. K., Viola. J.J., Keys, C.B., Back, L.T., Williams. A.E., Steltenpohl, C.N., 2014, “*Empowered and disempowered voices of low-income people with disabilities on the initiation of government-funded, managed health care*”, *Psychosocial Intervention Journal*, Vol 23, Pg 115-123.

Motsoaledi, A., 2013, *Health Budget Speech*, National Assembly, 15 May 2013.

National Association for States United for Aging and Disability, 2014, viewed on 12<sup>th</sup> January 2015 from, <http://www.nasuad.org2>

Northouse, P. G. G., and Northouse. P.G., 2009, “*Leadership: Theory and Practic*”. Sage Publications, viewed on 12<sup>th</sup> January 2015from, <http://www.sagepub.com/journals.nav>

Nurse, E.W., 2011, “*A Comparative Analysis of the Relationship Between CEOs’ Leadership Style and Healthcare Organizational Viability.*”

Plowman, D. A., & Duchon, D., 2008, “*Dispelling the myths about leadership: From cybernetics to emergence*”, In M.Uhl-Bien & R. Marion (Eds.), *Complexity leadership part 1: Conceptual foundations* (pp. 129–153). Charlotte, NC: Information Age Publishing

Polit, D.,F., Hungler, B.,P., 1993, *Nursing research: Principles and methods*. 3rd edition, Philadelphia, Lippincott



Radnor, Z., Davies, R., Burgess, N., 2009, *How much Lean are English hospitals implementing?* National Health Executive, pp. 60-62.

Reinhardt, U.E., 2003, *Does the aging of the population really drive the demand for health care?* Health Affairs, 22(6), 27-39

Rondganger, L., 2013., “SA needs 14 351 doctors, 44 780 nurses”, Daily News, viewed on 12<sup>th</sup> January 2015, <http://www.iol.co.za/dailynews/sa-needs-14-351-doctors-44-780-nurses-1.1456417>

Redman, T, Wilkinson, A (2009) Contemporary Human Resource Management: Texts and Cases, 3rd ed, Pearson Education Limited, England

Rumelt, R.P., 2011, “*Good Strategy/Bad Strategy*”, Crown Business. ISBN 978-0-307-88623-1

Rust, T., A., 2013, “*Dynamic Analysis of Healthcare Service Delivery: Application of Lean and Agile Concepts*”, Worcester Polytechnic Institute.

Schmitt, M., 2012, *Leadership and Healthcare Performance*

Simmons, R., 1995, *Levers of Control: How managers use innovative control systems to drive*, Harvard Business School Press

Singleton, S., & Carr, P., 2011, “*Experience of the Toyota Production System in the NHS in the North East of England*”, Paper presented at the Lean in Healthcare Workshop, Monash Prato centre, Italy.

Salkind, N., J., 2000, *Statistics for people who (think they) hate statistics*. Thousand Oaks, Calif, Sage Publications, Inc., Chicago Style

Slade, E. P., & Anderson, G. F., 2001, *The relationship between per capita income and diffusion of medical technologies*. Health Policy, 58(1), 1-14.

Sosik, J. J., & Jung, D. (2009). Full range leadership development: Pathways for people, profit and planet. New York: Psychology Press.

Sondhi, R., Total Strategy., Great Britain, Airworthy Publications International Limited, 1999.

Bursa. K, 2012, “APICS International Conference & Expo”, view on 10 May 2015, from, <http://www.apics.org/docs/annual-conference/12-1145-apics-2012-final-program>

Szczerba, R. J., &Huesch, M.D., 2012, “*Why technology matters as much as science in improving healthcare*”, BMC Medical Informatics and Decision Making

Tang, S., Tao, J., Bekedam, H., 2012, “*Controlling cost escalation of healthcare: making universal health coverage sustainable in China*”, Bio Medical Central Public Health

Thorpe. K.E., Philyaw. M., 2012., “*Medicalization of Chronic Disease and Costs.*” Annual Review of Public Health Vol33., Pages 409 – 423

Trade Competition and Applied Economics (Econex), 2013, “*Role and Contribution to the Economy*”, A study conducted by (Econex) on behalf of South African Private Practitioners Forum (SAPPF) and Health Man (Pty) Ltd.

The South African Civil Society Information Service (SACIS) 2013, “*What's Driving the High Cost of Private Healthcare in South Africa?*”, viewed on 12<sup>th</sup> January 2015 from, <http://sacsis.org.za/site/article/1812>

Uhl-Bien, M., & Marion, R., 2008, “*Complexity leadership part 1: Conceptual foundations*”. Charlotte, NC: Information Age Publishing.

Voss, C. and Huxham, C. (2004). ‘Problems, Dilemmas and Promising Practices’. Proceedings of the 11th Annual Euroma Conference, 309-318.

Wagner, E. H., 2009, “*Chronic Disease Management: What Will It Take to Improve Care for Chronic Illness?*” Effective Clinical Practice ECP  
Web Exclusive

Weberg, D., 2012, “*Complexity Leadership: A Healthcare Imperative*”, Wiley Periodicals, Nursing Forum Volume 47, No. 4.

Wheatley, B.A., 2010, “*Leadership Styles of Healthcare Executives: Comparisons of Transformational, Transactional, and Passive-Avoidant Styles*”

Wyman. O., 2014, “Key Performance Levers in your Business - THE PERFORMANCE IMPROVEMENT PRIORITIES OF BILLION DOLLAR CEOs”, view on 10 May 2015 from, [www.oliverwyman.com](http://www.oliverwyman.com)

Zikmund, W. G., 2003, Business research methods (3rd ed.), Mason, Ohio: Thompson South-Western.

## Annexure 1

### Introductory letter

Lenny Mudaly

Graduate School of Business & Leadership, University  
of KwaZulu-Natal,

Westville Campus

Dear Respondent

My name is Lenny Mudaly (**Student No: 213569765**). I am a Master of Business Administration student studying at the University of KwaZulu-Natal and I am researching;

*The evaluation of strategic levers as a means to get effectiveness and efficiencies within the JMH Group of Private Hospitals*

- Your confidentiality is guaranteed as your inputs will not be attributed to you in person, but reported only as a population member opinion.
- The questioner may last for about 20 minutes.
- Any information given by you cannot be used against you, and the collected data will be used for purposes of this research only.
- Data will be stored in secure storage and destroyed after 5 years.
- You have a choice to participate, not participate or stop participating in the research. You will not be penalized for taking such an action.
- The research aims to have a concise understanding of the key strategic levers that exist in Joint Medical Holding (JMH) group of hospitals within the South African Private Healthcare Sector. This study will further examine the influence that these strategic levers have on business operations that ultimately effect quality of care outcomes
- Your involvement is purely for academic purposes only and there are no financial benefits involved.
- 

I can be contacted at:

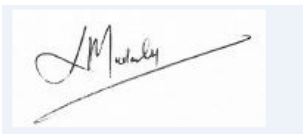
Email: [lennym@jmh.co.za](mailto:lennym@jmh.co.za)

My supervisor is Dr A Kader.

Contact details: email: [abdullak@nedbank.co.za](mailto:abdullak@nedbank.co.za)

You may also contact, the HSSREC Research Office: 031 260 8350 or email Mariette Snyman, [Snymanm@ukzn.ac.za](mailto:Snymanm@ukzn.ac.za)

Thank you for your contribution to this research.



**Lenny Mudaly**

## Annexure 2

### Consent Letter

**UNIVERSITY OF KWAZULU-NATAL  
GRADUATE SCHOOL OF BUSINESS AND LEADERSHIP  
MBA Research Project**

**Researcher:** Lenersen (Lenny) Mudaly (031) 314 3000

**Supervisor:** Dr Abdulla Kader (082) 901 0225

**Research Office:** Ms M Snyman (031) 260 8350

### CONSENT

I..... (full names of participant) hereby confirm that I understand the contents of this document and the nature of the research project, and I consent to participating in the research project.

I understand that I am at liberty to withdraw from the project at any time, should I so desire.

If you are willing to participate in this survey, please indicate (by ticking as applicable) whether or not you are willing to allow the survey to be processed online via Question Pro

|  | Willing | Not willing |
|--|---------|-------------|
|  |         |             |

SIGNATURE OF RESPONDENT

DATE

.....

.....

## Annexure 3

### Ethical Clearance



03 March 2015

Mr Lamisen Mudaly (213569765)  
Graduate School of Business & Leadership  
Westville Campus

Dear Mr Mudaly,

Protocol reference number: HSS/0125/013M

Project title: The evaluation of strategic levers as a means to get effectiveness and efficiencies within the JMM Group of Private Hospitals

#### Full Approval – Expedited Approval

With regards to your application received on 28 February 2015, the documents submitted have been accepted by the Humanities & Social Sciences Research Ethics Committee and FULL APPROVAL for the protocol has been granted.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number.

Please note: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully,

Dr Sharmika Singh (Chair)

/ms

Cc Supervisor: Dr Abdulla Kader  
Cc Academic Leader Research: Dr E Mkhapo  
Cc School Administration: Mr Zama Bulirayi / Ms Gail Mthengo

Humanities & Social Sciences Research Ethics Committee

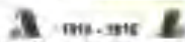
Dr Sharmika Singh (Chair)

Westville Campus, Guyan House Building

Postal Address: Private Bag X54001, Durban 4000

Telephone: +27 (0) 31 260 3307/3308/3309 Fax: +27 (0) 31 260 4608 Email: [hssc@ukzn.ac.za](mailto:hssc@ukzn.ac.za) / [secretary@ukzn.ac.za](mailto:secretary@ukzn.ac.za) / [hr@ukzn.ac.za](mailto:hr@ukzn.ac.za)

Website: [www.ukzn.ac.za](http://www.ukzn.ac.za)



1/1/2015 10:10:10

Excluded/Concluded: ☐ Rejected ☐ Rejected/Grading ☐ Rejected/Revised ☐ Rejected/Revised/Revised

## Annexure 4

# Questionnaire

### Part 1: Demographic data

Name and your current position in Healthcare: \_\_\_\_\_

Practice / Employment Address: \_\_\_\_\_

Your Current Qualification: \_\_\_\_\_

Your Current Period of Employment \_\_\_\_\_

### Part 2: Statements about Strategic Levers in Healthcare

#### Instruction

The following statements describe some of the components associated with strategic levers and its influence in process management at your business unit. Kindly examine these statements and signal, based on your experience, the degree with which you agree or disagree with the statements. Please respond to the statements by placing a cross (X) in the applicable box.

| No | Statement Made                                                                                              | Strongly Agree | Agree | Neutral | Dis- Agree | Strongly Dis- Agree |
|----|-------------------------------------------------------------------------------------------------------------|----------------|-------|---------|------------|---------------------|
| 1. | There is growing concern that cost drivers effect business strategy in healthcare                           |                |       |         |            |                     |
| 2. | I as a Leader am present and visible to employees regularly                                                 |                |       |         |            |                     |
| 3. | The current processes make our company efficient and competitive in healthcare                              |                |       |         |            |                     |
| 4. | Majority of the patients have lower end medical aid plans with limited benefits that effect quality of care |                |       |         |            |                     |
| 5. | Salaries and Skilled Resources is major cost driver in healthcare                                           |                |       |         |            |                     |
| 6. | I as a Leader provides employees with a vision and sense of mission                                         |                |       |         |            |                     |
| 7. | Managers get evaluated on real-time process performance                                                     |                |       |         |            |                     |
| 8. | Limits on medical aid reimbursements from medical funder's effect business                                  |                |       |         |            |                     |

|     | decisions of our company.                                                                                                        |                |       |         |           |                    |
|-----|----------------------------------------------------------------------------------------------------------------------------------|----------------|-------|---------|-----------|--------------------|
| No  | Statement Made                                                                                                                   | Strongly Agree | Agree | Neutral | Dis-Agree | Strongly Dis-Agree |
| 9.  | Studies indicate that the ageing population and lifestyle disease increase hospital admissions – which increase healthcare costs |                |       |         |           |                    |
| 10. | I train my employees regularly in responding and solving problems                                                                |                |       |         |           |                    |
| 11. | A lean approach (reducing waste in the system) would be a better process for effective in performance                            |                |       |         |           |                    |
| 12. | Manage Care Organisations discourage the use of new technology                                                                   |                |       |         |           |                    |
| 13. | New Medical Technology expenses are always increasing in healthcare                                                              |                |       |         |           |                    |
| 14. | Our senior Leaderships asks our employees for their ideas                                                                        |                |       |         |           |                    |
| 15. | Formal performance management systems in constantly used to monitor and gauge new implementations                                |                |       |         |           |                    |
| 16. | Treatment practices are often altered in response to changes in medical aid reimbursements (e.g. from FFS to DRG).               |                |       |         |           |                    |
| 17. | Can Cost Containment be used as an effective tool to increase efficiencies                                                       |                |       |         |           |                    |
| 18. | A Formal qualification is needed to ensure that leadership can be a tool for strategic growth                                    |                |       |         |           |                    |
| 19. | We develop work standards in most areas and usually perform to this standard                                                     |                |       |         |           |                    |
| 20. | Medical Aids have a significant impact in controlling healthcare costs                                                           |                |       |         |           |                    |



**Part 3: Ranking of the impact of strategic levers of effective business performance**

On a scale from 1 to 5, please rate the **impact that you might believe skilled leaders / managers in terms of experience and qualifications will have on the healthcare industry.**  
(1= no impact, 3=moderate impact, 5 high impact) - please place (X) in the applicable box.

|   |   |   |   |   |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
|   |   |   |   |   |

On a scale from 1 to 5, please rate the **impact that you might believe introducing a LEAN approach in this hospital will have on the financial outcome.**  
(1= no impact, 3=moderate impact, 5 high impact) – please place (X) in the applicable box.

|   |   |   |   |   |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
|   |   |   |   |   |

On a scale from 1 to 5, please rate the **impact that you might believe a change in cost containment strategies will have on your hospital.**  
(1= no impact, 3=moderate impact, 5 high impact) – please place (X) in the applicable box.

|   |   |   |   |   |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
|   |   |   |   |   |

On a scale from 1 to 5, please rate the **impact that you might believe Medical Aid Limits have on the business**  
(1= no impact, 3=moderate impact, 5 high impact) – please place (X) in the applicable box.

|   |   |   |   |   |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
|   |   |   |   |   |