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Regulating The Employment Of Doctors Within The Private Sector In South Africa: A Policy Analysis

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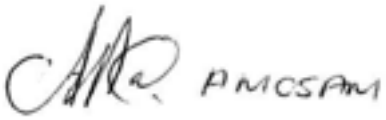
A research report submitted to the Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, in partial fulfilment of the requirements for the degree of Master of Medicine in the field of Public Health

Johannesburg, 15 October 2018

DECLARATION

I, Dr Atiya Mosam, declare that this research report is my own personal work. It has not been submitted previously at this or any other University. This thesis is being submitted to the Faculty of Health Sciences, University of the Witwatersrand, Johannesburg. This report has been submitted in partial fulfillment of the requirements for the degree, Master of Public Health Medicine in the field of Community Health.

Signed
Dr A Mosam



15 October 2018

DEDICATION AND ACKNOWLEDGEMENTS

I dedicate this work to my husband, Khalid Fadal, for challenging me to new ambitions through encouragement and unwavering support.

I would like to acknowledge my supervisor, Dr Duane Blauuw for his knowledge and guidance through this daunting process…. and for consistently noting my aversion to hyphens.

To Dr Nicola Christofides, thank you once again for your open-door policy and guidance in helping me make sense of the confusion I sometimes found myself in.

To my parents, my eternal gratitude for supporting my every endeavour and instilling in me the belief that I could achieve anything I put my mind to.

To my brother-in-law, Ismail Fadal, thank you for the brilliant notebook that made a molehill of the mountain that was my qualitative analysis.

To my consultants and colleagues in the School of Public Health, University of the Witwatersrand, thank you for the numerous learning moments and the encouraging space in which to make mistakes.

Finally, I would like to acknowledge Professor Shan Naidoo and the School of Public Health for the financial support for transcription and analysis software respectively.

ABSTRACT

Introduction: Submissions to the Health Market Inquiry (HMI) postulated that the Health Professions Council of South Africa (HPCSA) regulations that prevent private hospitals from employing doctors is one of the reasons for high private sector costs. This study aimed to understand the current regulatory environment surrounding the HPCSA policy on employment of doctors and the implications of such a policy in light of the current health system policy reforms in South Africa.

Methodology: The study was conceptualised as a policy analysis study with qualitative and quantitative components. The qualitative component consisted of document reviews and interviews with key stakeholders in order to investigate the current regulatory environment and implications of the regulations. The 20 stakeholders interviewed represented regulatory bodies, clinician associations, hospital groups, medical schemes and universities. The quantitative component consisted of a survey of doctors in South Africa to ascertain their views on the current HPCSA policy and its implications for clinical practice. A database of 21 065 doctors was obtained from MedPages and the survey yielded a response rate of 7.7%.

Results: Whilst only 5 stakeholders viewed the HPCSA policy as increasing costs of care, 20 stakeholders felt that the policy impeded quality of care provided. 46.6% of doctors surveyed did not feel that employment would lead to decreased costs but only 30.6% agreed that the HPCSA policy did impede quality of care. Both stakeholders and doctors did not feel that employment of doctors would necessarily lead to unethical practices and loss of autonomy. Stakeholders and doctors were of the opinion that other measures such as multi-disciplinary practices and clinical protocols would be more effective in reducing costs and increasing quality of care but that conditional employment should be allowed to fill service gaps.

Conclusion: Whilst key stakeholders and doctors were in favour of employment, the prevailing sentiment was that the policy should allow for employment of certain types of doctors' or for certain services. It was therefore felt that the HPCSA policy needs to be amended, not only to allow conditional employment as highlighted above but more broadly to ensure that the HPCSA regulations support more innovative, cost effective, and integrated means of delivering patient care through multi-disciplinary practices and global fees.

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ABBREVIATIONS

1. AMA - American Medical Association
2. BHF - Board Of Health Care Funders
3. CMS - Council For Medical Schemes
4. CPM - The Corporate Practice of Medicine
5. HMI - Health Market Inquiry
6. HPCSA - Health Professions Council Of South Africa
7. MPBP - Medical and Dental Professions Board
8. NDOH - National Department of Health
9. SAMA - South African Medical Association SAMA
10. SAMJ - South African Medical Journal
11. SAPPF - South African Private Practitioners Forum SAPPF
12. SASA - South African Society of Anaesthesiologists
13. OECD - Organisation For Economic Co-orporation And Development
14. PMBs - Prescribed Minimum Benefits
15. UCT - University Of Cape Town
16. WHO - World Health Organization
17. WITS - University Of The Witwatersrand
18. WMA - World Medical Association

CHAPTER ONE: INTRODUCTION, LITERATURE REVIEW, AIMS AND OBJECTIVES

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1. Introduction

South Africa has recently embarked on the implementation of a National Health Insurance (NHI) system and in June 2017 the White Paper on the NHI was released by the National Department of Health (NDOH). According to the White Paper, the NHI is envisioned to be a health financing system that utilises the pooling of funds to realise the right to health care for all South Africans, based on need rather than socio-economic status (1).

The current South African health system is organised into two distinct sectors; the public sector which provides free services at primary health care level but charges income-dependent fees at higher levels of care. By contrast the private sector depends largely on user fees, which are paid out-of-pocket or through private medical aid schemes. The higher costs of these services dictates that they are accessible to only those of higher socio-economic status (1,2). This imbalance is evidenced by the statistics regarding South Africa's health spend of 8.5% of GDP, of which 4.1% is spent in the public health sector (84% population coverage) and 4.4% is spent in the private health sector (16% of the population) (3,4), with public sector spending staying relatively stagnant whilst private sector spending substantially increasing (2).

This clear disparity in health care spending, and the associated fragmented risk pools from a multitude of medical schemes, disadvantage the poor and vulnerable. These are amongst the main reasons why South Africa has decided to pursue universal health coverage through an NHI system and consequent massive overhaul of the health system (1).

The high costs of private health care have been attributed to a few distinct reasons. Firstly, private health care in South Africa has been largely unregulated, leaving the sector to define its costs and benefits without mechanisms to protect users from escalating costs. In addition, the fee-for-service payment model that exists in the private sector induces costs as it creates an incentive to provide services that may not be required or appropriate.

Further to this, discrepancies between provider fees and medical scheme benefit packages, result in out-of-pocket payments for the patient. Other costs that contribute to the costs of private health care include medical aid administration and hospital costs (1,5).

Due to the rising costs of private healthcare in South Africa, in January 2014 a formal inquiry was established by the Competition Commission of South Africa (5). The purpose of the Healthcare Inquiry is to establish the cost drivers behind the high costs of private healthcare, investigate the nature of competition with the private health care market, and to "implement measures to increase market transparency" (5, p.74).

The inquiry called upon a range of stakeholders to provide submissions and supporting documentation to the commission for consideration. As a result many different explanations have been postulated regarding the potential cost drivers. These include increased patient volumes and intensity of care, an aging patient cohort, fragmented patient care, and regulations around employment of doctors (6–8).

With reference to the employment of doctors, the Health Professions Council of South Africa (HPCSA) has stipulated in its policy document on business practices that doctors may not be employed by private hospitals (9). It has been argued in certain of the submissions to the commission that these regulations result in elevated health care costs. This occurs through limitations on hospitals' ability to influence appropriate or cost-effective clinical care as well as by preventing global fees mechanisms (single payments made to a healthcare team to cover all costs including hospitals for a defined episode of care) that would lead to innovative, cost-effective care (6,7). Therefore, in light of the NHI implementation and its associated restructuring of the health care system to include contracting of private providers, it is important that the HPCSA policy on employment of doctors is explored and stakeholder views understood.

2. Problem Statement and Study Justification

Regulations on the employment of doctors are hypothesised as cost drivers within the private sector. However, given the preclusion of doctors employment by the regulations, evidence to support these assertions cannot be found in the South African context and there is little evidence on the opinions of doctors with respect to this policy. Deeper investigation is needed from South Africa, and from other countries in order to provide evidence for policy

development on the regulation of employment of doctors and associated ethical practices regarding remuneration.

3. Literature Review

The Merriam-Webster dictionary defines a professional as a person "characterised by or conforming to the technical or ethical standards of a profession" that requires special education, training or skill (10). Professionals are also generally governed by bodies and practices relevant to their specific professions(11,12). Yet despite the diversity of fields that possess professional status, most professions adhere to a code of conduct based on commonly accepted ethical principles and values such as integrity, honesty and respect for the rights and interests of others (13).

However, according to the World Medical Association (WMA), ethics and ethical behaviour in the field of medicine is especially unique, not only because of the potential for life-altering consequences, but also for the fact that medicine and medical personnel usually deal with a vulnerable patient population (14). As such, the WMA highlights that certain ethical principles such as autonomy and compassion, whilst not exclusive to the medical profession, should be safe-guarded from transgressions. Furthermore, the WMA notes that autonomy of clinicians has recently evolved from clinician-determined accountability to accountability to third parties such as hospitals and managed healthcare organisations, which may then involve conflicts of interest. To this end, the WMA recognises that various countries should have their own ethical standards and associated laws, published by their respective governing bodies in order to assist clinicians to navigate ethical challenges that may arise on practice (14).

In the case of the HPCSA, legal and regulatory authority is mandated in the Health Professions Act No. 56 of 1974. Policies by the HPSCA are enforceable, stringently regulated and may have criminal implications in some instances (15). As part of its focus on maintaining ethical standards, the HPCSA has produced many booklets regarding different aspects of ethical practice (9,16,17) . Amongst these are guidelines for perverse incentives that details potential conflicts of interest as these practices threaten both clinician autonomy and ethical practice. These practices may have financial and non-financial implications and include clinician self-referrals, medical scheme incentives, clinician-endorsed health items, clinician ownership of health facilities or expensive medical technology, gifts from patients or pharmaceutical companies, and industry sponsored research (16).

Many of these perverse incentives arise from undesirable business practices. These practices raised enough of a concern to prompt the HPCSA to clearly outline which business models were acceptable in the South African health system (9). These business models encompass corporate ownership, managed care, franchises, group practices as well as employment of practitioners, which as noted earlier is of specific interest and importance to the South African health sector in light of both the NHI implementation and the Health Care Inquiry (9).

The HPCSA notes that the employment of doctors is a complicated matter that must be regulated in order to protect doctor's autonomy and safeguard patients from the perverse incentives of both over-servicing and unnecessary cost cutting (9). As a result the HPCSA policy on employment of doctors stipulates that doctors can only be employed by the following:

1. The Public Health Service
2. Universities or Training Institutions (for the purposes of training or research only)
3. Fellow practitioners that are registered with the HPCSA (9).

The main reason underpinning the selection of these specific employers is the lack of profit motive that would potentially endanger clinical care. The HPCSA has however, made provision for interested parties to apply to be employed by institutions not listed above and the policy stipulates the considerations that are taken into account when an application is reviewed (9). These considerations include:

1. Motive for application.
2. Services to specific groups of people such as non-profit and charitable organisations.
3. Training of students.
4. Autonomy of clinicians.
5. Method of remuneration.

Despite this, the HPCSA has clearly stated that private hospital groups may under no circumstances employ doctors, once again from the viewpoint of a profit motive possibly producing perverse incentives or hampering the autonomy of clinicians (9).

Counter arguments to the HPCSA policy have been postulated by other stakeholders such as private hospital groups and non-governmental organizations. For example, the major hospital groups Life, Medi-Clinic and Netcare all stipulated in their submission to the Competition

Commission that the inability to employ doctors or engage in risk sharing models impedes cost effectiveness and quality of care (6–8). The Health Systems Trust, a South African NGO, also argues for the employment of doctors but from the position that lack of ability of hospitals to employ doctors leads hospitals to implement other strategies to attract and retain doctors. These strategies, such as subsidised consulting rooms on hospital premises and availability of state of the art technology, lead to an elevation of overall health costs through additional infrastructure and technological expenses on behalf of the hospital groups. Furthermore, doctors may be incentivised to utilise said technology or increase usage of hospital facilities in lieu of subsidised consulting rooms. (18). This concept was also highlighted in the National Department of Health (NDOH) submission which discussed the concept of a "Medical Arms Race" which arises due to private hospital investing in new technology in order to attract doctors to their facilities (19).

As a result of these competing arguments and viewpoints as well as the relative lack of experience in this area in the South African context, it would be helpful to consider international best practice and experiences on this issue. However, most countries that employ doctors do so through public institutions or national health systems. As a result, the literature on employment of doctors by private hospitals is sparse as very few countries mirror the South African context with its large private sector (3). The literature available thus focuses largely on the American health system, where a large private sector employs more than half the doctors in the country in hospitals or other health delivery systems (20).

In understanding the current regulations surrounding employment of doctors in South Africa, it is important to note that South Africa is not the only country to institute a policy precluding doctors from being employed by private institutions. In America, in the 1890s, the American Medical Association (AMA) opposed what they termed, "The Corporate Practice of Medicine" (CPM), where employment of doctors by corporations or profit-making entities was viewed as possibly influencing a clinicians decision-making ability(21). However, in 1965, a Supreme Court ruling found that hospitals have a legal responsibility toward quality care and as such should have oversight over doctors affiliated to their hospitals. By the end of the 20th century, the AMA had reviewed its stance on the matter and subsequently removed the CPM prohibition from its ethical guidelines and effectively allowing for doctors to be employed by corporate entities such as private hospitals. (21).

This practice of hospital-employed doctors is the result of the American Medical Association (AMA) Opinion 4.06 on Physician-Hospital Contractual Relations. This statute (issued March 1981; updated June 1994) specifies that physicians and hospitals may enter into various contractual agreements that are mutually satisfactory to both parties (22). This includes hospital employment, hospital-associated specialty status or independent practice with hospital staff privileges. In addition the financial agreements between both parties are also flexible, in that a physician may be reimbursed on a salaried basis, at an hourly rate or in whichever manner is deemed suitable for the arrangement in place (22).

This range of employment options is reflected in a study by the AMA on physician practice arrangements (23). The study showed that physicians were employed in a range of different models including solo practices, single specialty practices, multidisciplinary practices and direct hospital employment. These arrangements differed by specialty with emergency medicine physicians more likely to be employed by a hospital whilst family physicians were least likely to be employed. Additionally, emergency medicine physicians were more likely to be in solo practices whilst the internal medicine physicians were more likely to involved in multidisciplinary practices. These arrangements may be a reflection of dynamics and type of work expected of each specialty as internal medicine physicians are more likely to be involved in multidisciplinary care than emergency medicine physicians. In addition, the study showed that whilst only 5.6% of doctors were employed directly by hospitals, 42% of doctors were employees in practice arrangements such as multidisciplinary group practices, a possibility that the current HPCSA regulations currently preclude (23).

Despite this long-standing practice of allowing doctors to be employed by hospitals, there still exists much debate in the American context on whether a doctors ability to advocate for proper patient care is influenced by financial incentives or cost saving measures (24,25). However, there is also no firm evidence yet that employment of doctors leads to improved quality of care (26,27). There have been initiatives in the American context to improve quality of care through a system of monitoring quality indicators and reimbursing physicians accordingly to their delivery of key quality indicators (28). This system, however, would be difficult to implement locally given the current HPCSA regulations and system of independent private practice in South Africa. Finally, with respect to cost of care, the current argument for employment of doctors by private hospitals in the Health Market Inquiry is that employment of doctors would lead to reduced cost of care. However, American studies have

shown that employed doctors contributed to increased costs of care through practice patterns of more services being provided in high cost hospital settings (29).

From the above literature, it is evident the employment of doctors is a complex issue that has a range of advantages and disadvantages, some of which may be specific to the country context in question. It follows that any policy on the subject should be context specific and should take into consideration the possible advantages and advantages of different employment agreements. Therefore, with the current overhaul of the South African health system and special focus on the private sector practices, it would be useful to understand the regulatory environment of the HPCSA policy and unpack recommendations from various stakeholders in order to ensure that the policy is aligned with the new vision for South African health care and universal coverage.

4. Research Question

How best to regulate employment of doctors in South Africa in order to address escalating private sector costs without impeding on provider autonomy?

5. Aim

To understand the current regulatory environment surrounding the HPCSA policy on employment of doctors as well as the views of key stakeholders and doctors, and the implications of such a policy in light of the current health system policy reforms in South Africa.

6. Objectives

1. To describe the policy environment surrounding the HPCSA policy on employment of doctors in South Africa.
2. To understand the views of key South African stakeholders about the HPCSA policy on employment of doctors in South Africa.
3. To survey the opinions of private doctors regarding the current HPCSA policy on employment of doctors in South Africa.

CHAPTER TWO: METHODOLOGY

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1. Conceptual Approach

This study undertook a policy analysis study with multiple components, including document reviews, interviews, surveys and a stakeholder analysis.

The analysis utilised various frameworks and guidelines such as the Walt and Gilson model for policy analysis (30) and the World Health Organization (WHO) guidelines (31) on stakeholder analysis. The Walt and Gilson model examines health policies through a framework that focuses on the content, context and processes of a policy as well as the actors (stakeholders) involved whilst the WHO detail the process and tools required to undertake a stakeholder analysis.

2. Study Design

This study undertook a mixed method study design to fulfil the various objectives. This is tabulated below:

Objective	Method 1
1. To describe the regulatory environment surrounding the HPCSA policy on employment of doctors in South Africa	• In-depth document and literature review of the South African regulatory environment • Interviews with key informants from the HPCSA and the National Department Of Health.
2. To understand the views of key South African stakeholders about the HPCSA policy on employment of doctors in South Africa.	• Interviews with key stakeholders
3. To survey the opinions of private doctors regarding the current HPCSA policy on employment of doctors in South Africa.	• Anonymous online survey

3. Study Population and Sampling

a) Objective 1: Policy Regulation and Implementation

This objective utilised purposive and snowball sampling in order to identify relevant informants within the HPCSA and the NDOH to provide insight into the current regulatory environment. The Deputy Director General for Health Regulation and Compliance at the NDOH and the President of the HPCSA Council were interviewed. The members of the HPCSA Business Practice Committee were requested on multiple occasions to participate in the study. This was done via the unit's secretary as well as through other stakeholders but the committee did not opt to participate in the study.

b) Objective 2: Stakeholder Analysis

This objective utilised the WHO guidelines (31) on stakeholder analysis to identify key stakeholders and subsequently map each stakeholder in terms of position regarding the HPCSA Policy.

Sampling of relevant stakeholders was done via purposive and snowball sampling. Stakeholders were identified from the Competition Commission submissions and were approached for an interview. Identified stakeholders were then asked post interview to recommend other relevant experts for interviews.

Stakeholders interviewed are listed in Table 2.1 below. Stakeholders included regulatory bodies such as the National Department Of Health (NDOH), Health Professions Council Of South Africa (HPCSA), Council For Medical Schemes (CMS) and Board Of Health Care Funders (BHF). Clinicians were represented by four societies. The stakeholders from hospital groups and medical schemes included representation from all the major hospital groups and some of the larger medical schemes.

Table 2.1: Stakeholders Interviewed

Stakeholder Category	Stakeholder	Code In Text
Regulatory Bodies	National Department Of Health	NDOH
	Health Professions Council Of South Africa	HPCSA
	Council For Medical Schemes	CMS
	Board Of Health Care Funders	BHF
Clinician Associations	South African Medical Association	SAMA
	South African Private Practitioners Forum	SAPPF
	Clinician Association 1	CA 1
	South African Society of Anaesthesiologists	SASA
Hospital Groups	Hospital Group 1	HG 1
	Hospital Group 2	HG 2
	Hospital Group 3	HG 3
	Hospital Group 4	HG 4
	Hospital Group 5	HG 5
Medical Schemes	Medical Scheme 1	MS 1
	Medical Scheme 2	MS 2
	Medical Scheme 3	MS 3
Universities	University Of Cape Town	UCT
	University Of The Witwatersrand	WITS
Other Healthcare Organisations	World Health Organisation	WHO
	PPO Serve	PPO Serve

c) Objective 3: Online Survey

The online survey focused on all doctors that have completed community service in South Africa and who are now registered for independent practice. According to the HPCSA database, the total number of doctors registered for practice until 2017 is 44 653 (32). A complete database of these doctors was difficult to obtain due to recent legislative changes preventing contact details of people to be released to third parties. However, a database was obtained from the MedPages (33), which consisted of 21065 doctors. Another avenue used was the Communications Department of the South African Medical Association, who sent out the survey link to the 12852 doctors registered as SAMA members.

The sample size calculation was based on the precision of the estimate of the proportion of doctors agreeing with the HPCSA policy. A minimum sample size of 96 is needed assuming a

population of 21065, with a confidence level of 95%, an expected frequency (i.e proportion of doctors agrreing to the HPCSA policy) of 50% and a confidence limit of 10%.

No sampling strategy was used in order to mitigate a possible low response typical of self-administered online questionnaires. Response rates for these types of surveys may vary from 10-25% (34), thereby requiring that the survey be sent to as many potential respondents as possible.

Inclusion Criteria:
All doctors that are registered for independent practice according to the HPCSA database.

Exclusion Criteria:
No email address available for the doctor in question.

4. Data Collection

a) Document Review

Objective 1 was fulfilled by a document review and literature for this objective will be gathered using an online search through recognised databases and websites such as the HPCSA and NDOH websites.

b) Interviews

All interview questionnaires were developed by the researcher and probed stakeholders support of the HPCSA Policy as well as their views on the implications of the policy and recommendations for amendments. Interviews were held in English and were taped using a digital audio recorder. Transcription was done by a transcription company.

With respect to the interviews for specific objectives, Objective 1 was partially fulfilled by a structured in person interview with the President of the HPCSA Council. Attempts made to secure an interview with the HPCSA Desirable Business Practice Committee included telephonic and email correspondence with the relevant secretary to the committee as well as requests by the NDOH and other HPCSA appointees. However, as these requests were unsuccessful, the researcher was unable to gather information on the current implementation of the HPCSA policy. The questions in the interview related to the current HPCSA policy, and the regulation and implementation of the policy by the HPCSA (see Appendix A).

The interviews held for the stakeholder analysis of Objective 3 utilised semi-structured interviews with open-ended questions (see Appendix B). The interviews were conducted either in person or telephonically with the stakeholders identified during the initial phase of the stakeholder analysis. The questions in the interview related to each stakeholders understanding and opinion on the HPCSA policy as well as their ideas on how the policy will influence efforts to establish efficient cost-effective health care.

c) Online Survey

The survey was developed by the researcher (see Appendix C). The questionnaire was developed by the researcher and research supervisor and were based on the issues raised in the Competition Commission submissions as well as the key stakeholder interviews. No pilot study was done and the questionnaire was not validated.

The survey covered demographic details, current employment details, opinions on the HPCSA policy as well as opinions on a series of statements related to cost of care, quality of care and autonomy. The survey was then placed onto REDCap™ which is an online survey application.

A detailed information sheet was sent via email to respondents requesting their participation in the study. The email contained a link to the anonymous self-administered online questionnaire. Strategies to mitigate the low response rate typical of these data collection efforts included the formation of a simple, short questionnaire designed to be less time consuming and to be answered via various platforms including mobile devices.

The researcher also followed up with possible respondents via weekly reminder emails for a period of three weeks over December 2017 (SAMA) and February 2018 (Med Pages Database).

5. Data Analysis

a) Qualitative Data

Post transcription, qualitative data from interviews was checked against the audio recording for accuracy and spelling, before being imported into MAXQDA™. The data was analysed using the following process: familiarization with the interview content before developing a

thematic framework through a deductive and inductive process. Thereafter data was coded according to themes before interpretation of results within theme.

Themes included:

1. Stakeholder Insights On The South African Private Sector
2. Support of the HPCSA Policy
3. Implications of the HPCSA Policy
4. Implications for quality of care
5. Implications for cost-effectiveness of care
6. Implications for autonomy and ethical practice
7. Recommendations for amendments to the HPCSA policy
8. Employment of doctors
9. Employment alternatives
10. Recommendations for broader policy amendments
11. Regulation of the private sector

b) 2. Quantitative Data

The survey collected data from 13 categorical questions, 4 numerical questions and 15 questions based on a 10 point Likert scale. There were also two open ended questions to provide context for previous answers.

Quantitative data were exported from REDCap™ into Excel. Data were cleaned manually by the researcher by removing incorrect, duplicate or missing content. The data were then transferred to Stata 13TM for analysis. Some variables were recoded for ease of and more meaningful analysis. The 10 point Likert scale was converted into 3 categories based on agreement. Categories 1- 4 were recoded as disagreement, 5 and 6 were recoded as neutral and 7 – 10 were recoded as agreement.

Descriptive analysis was done using summary measures of central tendency and dispersion for continuous data and tabulations for categorical data. Multinomial logistic regressions were done for the following outcome variables:

1. Doctors should be allowed to be employed
2. Doctors that would consider employment by a private hospital over their current practice arrangements

3. Doctors that would consider employment in a multidisciplinary practice over their current practice arrangements

The regressions were done in order to derive demographic and employment predictors of agreement with the statement. Odds ratios were reported for the regressions and measures of statistical significance (P values of 0,05 and 95% confidence intervals) were used to determine association.

6. Ethics

The research protocol and questionnaire was submitted to the Human Research (Medical) Ethics Committee of the University of Witwatersrand for ethical approval and was granted approval in April 2016 (Clearance Certificate Number M160259 / see Appendix D).

With respect to the interviews, informed written consent for interviewing and taping was obtained from all participants prior to the commencement of the interview (see Appendix E, F and G). Prior to the commencement of the interview, all participants were asked whether their names/respective organisations could be named in the final report or whether they preferred to remain anonymous in entirety. Participants were coded according to their preferences except in instances where naming some participants would lead to identification of participants that preferred to remain anonymous (e.g. medical schemes and private hospitals), in which case all participants in that group were coded as anonymous. Audio records of interviews were transferred to a secure personal computer, to which only the researcher has access. Files will remain encrypted and password protected and will be stored for 10 years before being destroyed.

With regard to the online survey, the contact details of the doctors were obtained from Med Pages. These details are available in the public domain through websites such as Med Pages and will not constitute an infringement of privacy. In addition, doctors are free to ignore the email, should they wish to do so.

Participants were sent an email detailing the study (see Appendix H) and the link to the online survey. The first page of the survey contained a question regarding consent and only those clicking “I Consent” were allowed to proceed with the survey. No identifying information was requested and responses were completely anonymous. Participants were not coerced into

completing the questionnaire and no monetary or other compensation was offered to any respondents.

CHAPTER THREE: QUALITATIVE RESULTS

The following chapter will highlight the results of the policy analysis as well as stakeholder interviews regarding the HPCSA policy. The policy analysis will discuss the context, content and formulation of the policy as well as an analysis of the stakeholders interviewed with respect to their views on each other.

The stakeholder interviews will then be discussed in order to highlight the themes that emerged from the interviews. Broadly these themes are related to the stakeholder's views of the current private health sector in South Africa, stakeholder support of the HPCSA policy, views on the implications of the policy and finally recommendations for amendments to the policy.

1. Analysis Of The HPCSA Policy

a) Content Of The HPCSA Policy

The HPCSA Policy Document on Undesirable Business Practices [3] states that the employment of doctors is a complex issue which needs to be considered on a case by case basis in order to determine the motive for employment.

In the document, the policy makes provision for the employment of doctors by the following entities:

1) The public service
2) Universities and training institutions (for training and research only)
3) Practitioners registered by the HPCSA

Furthermore, page 6 of the policy stipulates certain criteria to be considered regarding applications for permission to employ doctors, most notably criterion two which states:

"Service to specific groups of people: Such as non-profit, charitable and similar organisations. Private Hospitals should not be allowed to employ because of a profit motive." [HPCSA Policy]

The rationale for the above stipulations, as highlighted in the policy document lies in the HPCSA concern that the autonomy of ethically bound doctors may conflict with the profit motive of corporations such as private hospitals.

Additional regulations to this policy lie in Booklet 2 of the HPCSA Guidelines For Good Practice In The Health Care Professions (35). This booklet addresses ethical and professional rules governing health professionals and the rules therein stipulate that doctors may only employ health professionals that support or complete their clinical treatment pathways. An example of this would be an orthopaedic surgeon employing a physiotherapist in order to improve mobilization post-operatively. In the case of doctors, doctors may only employ other doctors that fall into the same professional category as themselves. This means that an orthopaedic surgeon may employ other orthopaedic surgeons to work in an orthopaedic practice but is unable to employ an anaesthetist to provide anaesthetic services for their orthopaedic surgeries.

b) Context Of The HPCSA Policy

Whilst the HPCSA policy document (9) is dated September 2005, stakeholders that were interviewed stated that the specific rules governing the employment of doctors have been in place since the late 1980's. However, we were not able to obtain any documentation to support this assertion. The HPCSA Business Practice Committee, who oversee this policy and its implementation, were approached for an interview in order to better understand the historical context of this policy as well as its current implementation but did not respond to our multiple requests.

The 2005 document (page 3) does highlight the context from which the Undesirable Business Practices policy arose as one where the change in South Africa's socio-economic climate led to changes in health care provision and a subsequent need to protect the public from undesirable business practices. Further to that, the document is unclear on the specifics of the previous statement and allows much room for interpretation.

c) Processes Involved In The Formulation And Implementation Of The HPCSA Policy

As stated previously, prior to 2005, no formal policy regulating the employment of doctors can be found. The 2005 policy document (9) as well as articles in the South African Medical Journal (SAMJ) (36,37) make reference to a June 2003 workshop held by the HPCSA during which the draft policy drawn up by a specific task team was debated. The task team included

Medical and Dental Professions Board (MPBP) chairman, Professor Len Becker, and former chief investigator into undesirable health business practices, Professor Jan van der Merwe.

The workshop attendees consisted of chairpersons or representatives of the various professional boards and associations, SAMA, the national and provincial departments of health, pharmaceutical companies, optometry businesses and private hospital executives. Mr. Boyce Mkhize, the registrar of the HPCSA at the time, conceded in the SAMJ article that civil society was under-represented at the workshop, with only two community members being present. The policy whilst due to be finalised by October 2003, only came into effect in September 2005 (37) and in 2006 the Desirable Business Practice (now termed Business Practice) Committee was formed to oversee the implementation of the policy (37).

Whilst no information could be obtained from the Business Practice Committee on the number of applications for exemption that the committee received per year as well the circumstances surrounding the granting of exemption, the 2013/2014 HPCSA Annual Report stated that the committee had met 4 times in the preceding year to review a total of 19 application (37). No further information was given on these applications and no other Annual Reports (2006 -2017) have included information of this nature.

2. Analysis Of Stakeholders Interviewed

The stakeholders interviewed were listed in Table 2.1 above. Interviewees fell into 5 categories namely; regulatory bodies, clinician associations, hospital groups, medical schemes and universities. A sixth category contained the World Health Organisation and PPO Serve, which is health care company that has a new model of care to South Africa, where clinicians are organised into a consortium in order to provide multidisciplinary, proactive and quality care (38).

Table 3.1 summarises how stakeholders viewed each other in the interviews. These views will assist to contextualise individual stakeholder views on the private sector as well as the broader policy context of the HPCSA policy. Stakeholders such as BHF, SAPPF, SASA, HG 1 and MS 1 expressed views that the NDOH and HPCSA were ineffective in their roles with a resultant regulatory vacuum. NDOH, HPCSA, BHF, SAMA and SASA were of the opinion that hospital groups were too profit driven . In contrast to these polarising views, universities were seen as innocuous institutions that contributed to clinical knowledge.

Table 3.1: Stakeholders Views On Other Stakeholders

(Row headings represent the stakeholder expressing their views on the stakeholders represented in each column)

	National Department Of Health	***Health Professions Council of South Africa***	***Council For Medical Schemes***	***Clinicians***	***Hospital Groups***	***Medical Schemes***	***Universit***
National Department of Health				More concerned with the fee amount than the fee structure models	Independent hospitals have lower cost structures than conglomerate hospital groups		
Health Professions Council of South Africa					Hospital groups are motivated by corporate greed		
Board of Health Care Funders	Fragmented in its functioning, especially with respect to the HPCSA	1) Perpetuate antiquated systems 2) Does not understand national policies and its role in implementing these policies 3) Causes fragmentation of care and systems		Price makers who view themselves as beyond regulation	Concerned with profit over social health agenda		
PPO Serve		Dysfunctional body					
World Health Organisation				Doctors are more influential than administrators/ hospitals/ medical schemes			

Table 3.1 (cont.): Stakeholders Views On Other Stakeholders

(Row headings represent the stakeholder expressing their views on the stakeholders represented in each column)

	National Department Of Health	***Health Professions Council of South Africa***	***Council For Medical Schemes***	***Clinicians***	***Hospital Groups***	***Medical Schemes***	***Universit***
South African Medical Association				Doctors are mostly price takers with a few specialties being price makers	1) Hospital groups are oligopolies with too much market power 2) Concerned only with profits and providing for the elite 3) Not-transparent about outcomes and quality of care	Promote under-utilisation of health care in order to maximise profits	
South African Private Practitioners Forum	Should interfere less with regulation of private sector and allow market forces to self-regulate costs					Fairly ethical but definitely profit driven	
South African Society of Anaesthesiologists	1)Regulatory vacuum in terms of private hospital governance 2) Not always willing to work with stakeholders to develop solutions	Weak and unsupportive in guiding the professions	Fail to regulate the medical schemes effectively		Distrustful and profit driven entities		In conjunctio the public s provide g clinical knov and efficie

Table 3.1 (cont.): Stakeholders Views On Other Stakeholders

(Row headings represent the stakeholder expressing their views on the stakeholders represented in each column)

	National Department Of Health	***Health Professions Council of South Africa***	***Council For Medical Schemes***	***Clinicians***	***Hospital Groups***	***Medical Schemes***	***Universit***
HG 1		1) HPCSA needs to be more clear about their role as a regulator but should not be involved in issues regarding pricing 2) Misaligned to NHI vision (global fees)		1) Doctors need be taken to task for milking the system 2) Doctors should be regulated because they feel that they are special entities beyond reproach 3) Doctors take no financial risk			
MS 1	Involved in corrupt private licencing practices	1) Self-regulatory body which consists of professionals that may have a vested interest in the rules they enforce 2) Lack proper governance and competence 3) Plagued by corruption					
MS 2				Price makers that are unconcerned with sustainability of high fees			

3. Stakeholder Insights On The South African Private Sector

The views of individual stakeholders with respect to the current functioning of the private sector are important to contextualise the implications of the HPCSA policy. In addition, stakeholder's recommendations on how the policy could be amended or broadened was based on how they view the private sector and the cost drivers within the sector.

The main theme to emerge in this area is that of the cost of private sector care and the factors that contribute to these costs. The WHO, SAMA, CA 1, HG 2, HG 3, MS 1, MS 2 attributed escalating private sector costs to the current system of doctors being allowed to charge fee for service with a lack of transparency of costs. HG 2 and MS 2 felt that the doctors were able to charge prices based on their own determination of worth (e.g. qualifications, perceived experience etc.). The representative of HG 3 felt that the trade-off between efficiency and ethical behaviour was sometimes difficult to balance as doctors were reluctant to disclose their fees when attempts were made to understand input costs of health services and sometimes used the argument of autonomy to subvert these attempts. The example given was one where an attempt was made to understand the costs of joint surgery by orthopaedic surgeons and is detailed in the following quote:

> *"And we had to go through these conversations with each and every one of them. The range of the fee charged ranged between eight-thousand-rand professional fee for an arthroplasty and forty-five thousand rand for a primary elective arthroplasty and it all has to do with how well qualified I perceive myself to be, where I did my fellowship, how long did I study, you know what are the kind of patients that come to me. So, it was very difficult to have those conversations with the doctors because doctors always go hide behind this autonomy thing, so I am an independent practitioner and it is unethical for me to discuss with you what I charge my patients."*
>
> **Hospital Group 3**

By contrast, SAPPF felt that 80% of doctors were price takers because the fees they are paid are determined by the medical schemes. The remaining 20% of doctors, according to SAPPF, charge private fees which are higher than the rates medical aids are prepared to pay and as a

result these doctors run the risk of a bad debt problem if patients do not pay the co-payment on their bill.

With respect to the contribution of hospitals to private sector costs, the NDOH, HPCSA, BHF, SAMA, SAPPF, CA 1 and MS2 were of the opinion that hospitals, especially the larger conglomerates were profit-driven entities with shareholders that expected returns on investment and as such were responsible for supplier-induced demand. This was further illustrated by MS 1, MS 2 and the WHO who observed that whilst hospitals could not directly influence admissions, the perverse incentives of free practice spaces, facilities and state of the art technology (which the MS 1 representative called the Hospital Arms Race) influenced doctors to maintain a steady rate of admissions into these hospitals.

This stark difference in viewpoints was highlighted by the NDOH and WHO who pointed out that the current fragmented private healthcare system lent itself to a lot of finger pointing and shifting of blame. The WHO representative iterated this message by saying,

> *"By having this fragmented system, that is hospital, there's a specialist and there's pathology and all the segments, they blame each other. It's like we (the doctors) are just doing our own medical thing and the hospitals cost 60% and the hospitals say oh we don't cost you for admissions, it's the doctors who are sending (admitting) the patients right and then it's really difficult to understand."*
>
> **World Health Organisation**

This was further emphasized by the WHO and SAMA who had conflicting views on the costs that hospitals and doctors contributed to each episode of care. The WHO representative quoted an Organisation For Economic Co-orporation And Development (OECD) study that showed that hospital costs contributed 60% of overall costs whilst doctors' fees contributed 20%. The representative further went on to explain that in recent years the doctor's costs have been increasing whilst the hospital costs had been decreasing. SAMA, however, held a different view and quoted a CMS report showing that doctors costs had decreased in recent years whilst hospital costs had escalated.

Despite the difference in opinions on attributing cost increases, a few stakeholders such as WHO, BHF, SAPPF, MS 2, WITS and PPO Serve opined that the main factor driving up

costs was not the individual cost per service or consumable but rather the unchecked utilisation of services. Whilst over-servicing in a fee-for-service environment was postulated as a reason for the increased utilisation, the stakeholders felt that clinical practices of doctors and duplication of services (e.g. multiple doctors ordering similar blood tests for one episode of care due to fragmentation of care) contributed more towards utilization than the perverse incentive of over-servicing. This concept was aptly stated by the representative from WITS who said,

> *"The fact that the doctors are not the greatest earners is not the reason that they are not the greatest cost driver. The most powerful cost driver is the doctors pen… it is how they prescribe, how they investigate, how they manage."*
>
> **University Of The Witwatersrand**

Finally, SAMA, HG 2, MS 1 and MS 2 provided the argument that a lack of regulation of the private sector was the reason for the unparalleled escalation of costs. HG 2 felt that the lack of oversight with respect to over-servicing by doctors was a key contributor, whilst MS 1 felt that the lack of regulation of hospital licensing allowed development of hospitals in a manner that facilitated over-servicing due to excess capacity. This was supported by the BHF, who said,

> *And the bottom line is the more hospitals you get, the more utilisation, the burden of disease hasn't changed. The population hasn't changed, disease profile hasn't changed but the utilisation goes higher cause in those cases like the smallest thing gets put into the bed.*
>
> **BHF**

SAMA, HG 2, MS 1 and MS 2, however, all stated that the lack of review by the NDOH of the prescribed minimum benefits (PMBs) for medical scheme holders was the reason for elevated costs. According to SAMA, the current PMBs are based on the Oregon list, which is an American based list of diagnoses. These PMBs do not reflect the disease burden or priorities in South Africa and therefore by virtue of the fact that PMBS are mandatory but

expensive services, they contribute to the high costs in the private sector. This is highlighted by SAMA in the following quote:

> *"The PMBs were adopted from the Oregon list which was intended to be an insurance for catastrophic cover, so it covers only serious things that require hospitalization. You have got a policy that is hospicentric and primary health care not covered. But let's just say the person has a lump, they can't have access to diagnosis, they sit around until finally they go hey I am gonna die from this lump. By the time they present, it is an advanced state of cancer. And they can't go to the GP, the system is so hospicentric that whenever they need things they get brought into the hospitals and get investigated and so forth. The Minister missed an opportunity to review the Medical Schemes Act almost twenty years after implementation I think it was promulgated in 1998 and he was supposed to review the PMB's every two years he never did that. So why are we surprised that we are stuck with an American system when we took the American benefit definition."*
>
> **SAMA**

4. Stakeholder Views On The HPCSA Policy

When discussing the HPCSA policy with the various stakeholders, four broad concepts were discussed; namely support of the HPCSA policy, implications of the HPCSA policy, recommendations for amendments to the HPCSA policy, and recommendations for broader policy amendments. Some of the broad concepts were then subdivided into smaller themes as detailed below:

Table 3.2: List of concepts and subthemes from stakeholder interviews

Concept	Sub-Themes
1. Implications of the HPCSA Policy	a) Implications for cost of care b) Implications for autonomy and ethical practice c) Implications for quality of care
2. Recommendations for Amendments to the HPCSA Policy	a) Employment of doctors b) Employment alternatives
3. Recommendations for Broader Policy Amendments	a) Regulation of the private sector

The section below will discuss each of the broad concepts and their subthemes in the order listed above.

a) Support of the HPCSA Policy

The figure below (Figure 3.1) shows highlights the extent to which each of the interviewees supported or opposed the HPCSA policy on the employment of doctors. Proponents included the NDOH, HPCSA, SAMA, SAPPF, SASA and UCT whilst opponents to the policy were HG 5, MS 3 and WITS. The rest of the stakeholders either partially supported or partially opposed the policy.

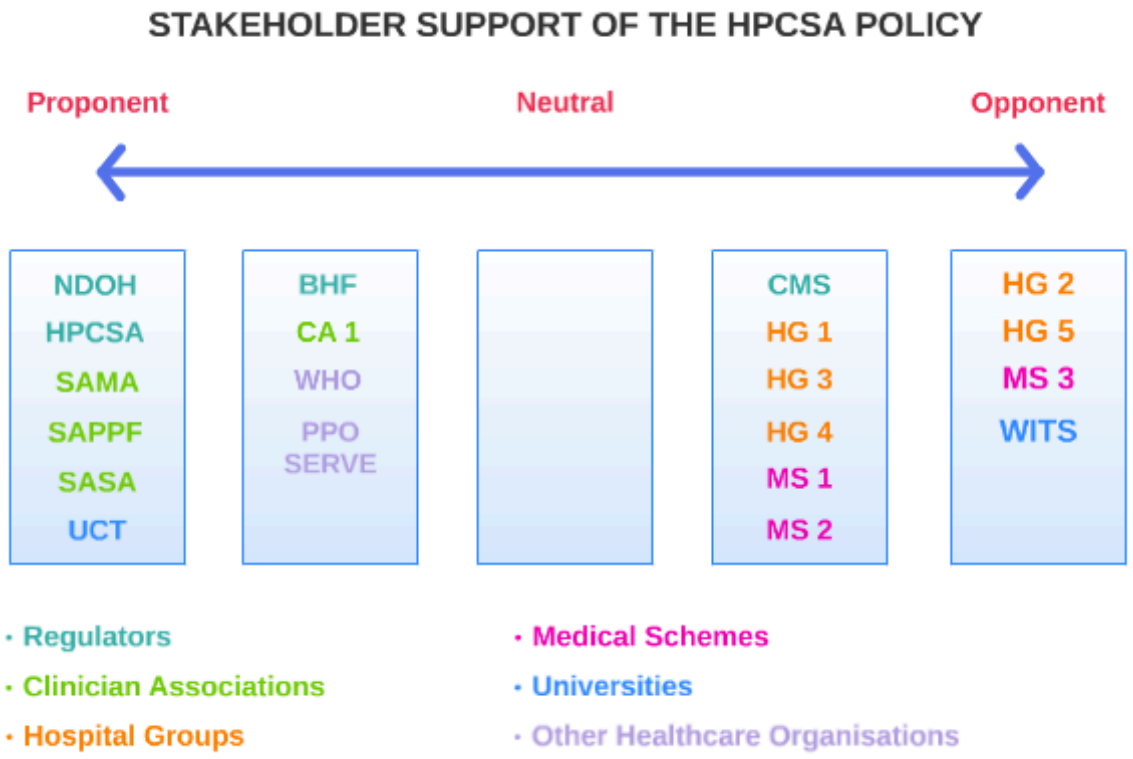


Figure 3.1: Stakeholder Support Of The HPCSA Policy

b) Implications of the HPCSA Policy

The implications of the HPCSA policy, as highlighted in the Competition Commission submissions included implications for cost of care as well as autonomy and ethical practices. A third set of implications relating to quality of care was discussed by many stakeholders during the interviews. These implications are important in contextualising why various stakeholders do or don't support the HPCSA policy and sheds light on to their recommendations for the amendment of the policy.

Implications for cost of care

The financial implications of the current HPCSA policy related mainly to the current private sector system of fragmented care by multiple individual providers. Due to the HPCSA policy precluding multidisciplinary practices or direct employment models, reimbursement occurs on a fee for service basis as opposed to case based payments or salaries and as such have implications for overall cost of care.

In relation to the above, HG 3 states the fragmented fee for service model results in difficulty in costing an individual episode of care since hospital fees, doctors' fees and out of pocket payments are unknown to other stakeholders involved in patient care, except for medical aids who process the payment of episodes of care. The stakeholder's argument is thus that if a doctor were to be employed, hospitals would be able to provide oversight on clinical decision making and efficiency of care by instituting peer created protocols and peer review mechanisms, and would thus be able to have greater knowledge and control over cost of care. In contrast, SAMA hold the view that employment of the doctor would decrease costs at the expense of doctor's autonomy as they would be pressurised to prioritise efficiency and cost containment over quality of care.

Related to the issue of autonomy versus cost, stakeholders such as SAPPF, HG 3 and MS 3 attribute the high costs to either the influence of supplier-induced demand and over-servicing by doctors as a result of the current fee for service model or by a failure of doctors to realise the costs attributed to their clinical decision making. The stakeholders feel that this situation thus arises from the current lack of review of both the clinical decision-making of doctors as well as the efficiency of their services and is aptly stated by the MS 2 representative as,

> *"This is what I think is so important for doctors or specialists in particular to understand, is what are my downstream costs. In other words, what I turn over I know and I understand what my costs are to every medical aid… but they don't have any idea of what the downstream costs are when they admit a patient to hospital and they order pathology, they order radiology, when they order… physiotherapy, when they order medication… whatever they order, they have no idea of what that cost is and they have no idea of using brand as opposed to generics, they just don't see that… because they're too busy to know, to look into it, you know, they are busy people. "*
>
> **Medical Scheme 2**

The other viewpoint espoused by HG 1, HG 3, MS 3 as well as PPO Serve is with respect to the policy precluding doctors from working in teams or be employed by a hospital. The stakeholders feel that this results in difficulties in implementing global fees for episodes of care, which ultimately means that two patients with identical conditions requiring similar care may incur vastly different costs. In a hospital setting, the fragmented care often means that a

patient with more than one doctor may endure duplication of investigations as well as increased length of stay if doctors do not communicate effectively with each other, thereby resulting in increased costs of care. This idea is expressed by a representative of one the hospital groups as,

> *"So there in terms of multi-disciplinary work what I often seen from a cost perspective is in our hospitals we have got very long lengths of stay and what often happens is I want to discharge a patient yesterday and I was the pulmonologist and I didn't quite bump into you the pathologist and we didn't have a conversation about the patient so I actually find the patient could go home yesterday but you, I didn't see you and before I knew it is tomorrow, a cost of a day is a huge cost in ICU, so over and above the fact that the patient stayed longer in an acute care hospital, they are exposed to all sorts of risk."*

Hospital Group 3

The HPCSA, however, does not see their policy as being a barrier to the institution of global fees. The example given is of a cataract surgery, where the ophthalmologist could be paid a fixed fee for the entire surgery and post-operative care and the onus then lies on the surgeon to negotiate the hospital fees, anaesthetist costs etc. In this way, patients or medical schemes will be aware upfront of the cost per episode of care. SASA however countered this by stating that the current policy precludes an opthalomologist from employing an anaesthetist but were concerned that this model may result in perverse power dynamics that may affect patient care, for example the possibility of an anaethestist cancelling the surgery of a patient deemed at risk for surgery may be affected if the anesthetist is employed by the surgeon.

Ultimately though, the concern by the National Department of Health on the possible cost containment achieved by allowing doctors to be employed by hospitals, is whether these cost savings would reach the patient or would this only mean greater profits for hospital groups and the NDOH representative felt that this cost saving would only benefit patients of the entire private healthcare system was rigorously regulated.

Implications for autonomy and ethical practice

The issue of autonomy and ethical practices of doctors with respect to the HPCSA policy was raised by both proponents and opponents of the policy as well as by 4 of the 5 hospital group respondents. The HPCSA feels very strongly that doctors have an ethical responsibility to safeguard the interest of the patient and maintain the integrity of the medical profession and as is stated in the actual policy document, the viewpoint of the HPCSA as well as SAMA is that a doctor that is employed by a profit-making entity will be coerced to choose profits over patients either through direct instruction by the employers or through perverse incentives such as bonuses tied to clinical activities.

This is contrasted by the opinions held by BHF, HG 1, HG 5, MS 3, WITS and WHO felt that unethical practice and perverse incentives, such as giving doctors consulting rent-free consulting areas or access to new technology, already exist in both the public and private sector. Although HG 1 felt that doctors needed to be regulated, other stakeholders stated that whilst regulation of doctors is needed to prevent unethical, perverse practices, doctors themselves need to be responsible for their own behaviour and autonomy. This was highlighted by opinions from a hospital group and a medical scheme, who felt that although many doctors behave ethically, the current system was still riddled with unethical practices. These stakeholders are quoted as saying,

> *"Doctors actually need to be managed. I'm not saying that the corporate is definitely always going to manage in the right way, but please don't come with the assumption that doctors are currently behaving ethically honestly and are not over-servicing, they are not milking the system. Because they absolutely are."*
>
> **Hospital Group 1**

> *"So, when you talk about ethics and all of that and the possibility of ethics being compromised then actually all of that is based on the assumption that it doesn't happen at the moment and it's completely untrue."*
>
> **Medical Scheme 3**

It was also highlighted by SASA that the HPCSA policy exists in a larger regulatory vacuum within the South African health sector. This refers to the inability of the regulators to regulate all stakeholders, be it hospitals, medical schemes or doctors, in terms of their ethical practices and profit motives, and therefore this attempt at regulating autonomy and ethical behaviour through employment practices instead of through proper governance and regulation was misguided. A few stakeholders reiterated the view that aside from the stringent governance needed when doctors are employed by hospitals, international experience has shown that governance for doctors as a whole is essential and it was felt that doctors in South Africa have been left to regulate themselves for far too long leading to the problems of over-servicing and increased costs.

> *"So, the concern that doctors will now make that decisions to boost the hospitals income. How is that worse from making decisions to boost their own income, it's exactly the same thing, if not better because at least at corporate level with us negotiating with the corporate hospital, we can say to them that if you increase the utilization, we can see it in the data, we have standard models of evaluating it and we will not pay more for that."*
>
> **Medical Scheme 3**

Finally, as a way to balance the issues of cost versus autonomy the concept of protocols was discussed. Protocols were viewed by some stakeholders as a middle ground to instituting cost-effective clinical care without impeding autonomy. SASA, SAPPF, HG 1, HG 2, HG 3 and MS 2 were not opposed to clinical protocols, so long as they are established by the relevant clinician societies, agreed to by the doctors working in or with the hospital and deviations from the protocol should be motivated by the doctor to the relevant society in order to allow doctors autonomy where needed. However, CA 1 felt that protocols impede on the experience and knowledge that a doctor amasses over his or her working life and therefore in certain instances protocols may prove to be less cost effective. The rationale behind this opinion was that an experienced clinician would be able to use their expertise to diagnose and treat instead of following pre-defined steps that would ultimately lead to the same result but would take longer and would cost more.

Implications for quality of care

All of the hospital groups as well as two of the medical schemes cited quality of care as a major consequence of the inability of doctors to be employed by hospital groups or by each other. The consensus from these stakeholders is that the HPCSA policy leads to decreased quality of care through various mechanisms. These include a lack of continuous care as well as a lack of integrated care as detailed below.

With respect to continuity of care, one way in which quality is compromised is by the "Absent Specialist Syndrome", which was highlighted by two hospitals groups. In contrast to the public-sector hospitals, specialists in the private sector work in silos and are unable to implement formal arrangements to support each other in ensuring continuous patient care. According to HG 1, this results in periods of time, usually after hours when certain critical areas such as the intensive care or maternity units are devoid of doctors and any emergencies result in a doctor from casualty being called to the ward to assist. Additionally, ward rounds are dependent on the schedule of individual doctors and are therefore not consistent in timing as they are in the public sector where doctors work in teams. In relation, the HG 3 representative stated that ill patients requiring after-hour observation or follow-up are left to the ward nurses or their treating doctor instead of appointing one doctor to follow up on tests results or monitor unstable patients. As such this fragmented approach may lead to gaps in continuity of care if a doctor is otherwise occupied and cannot attend to the patient in question.

Linked to this need for patients to receive timeous and appropriate clinical care is the concern that the HPCSA policy precludes doctors from forming group practices. The representative from PPO Serve opined that these practices could be designed to provide multidisciplinary and pro-active care through a mix of specialties as well as mid-level staff such as medical officers and clinical associates with the ultimate goal being quality patient care. This sentiment is reflected in this quote by a senior representative of a medical scheme:

> *"I think that's very bad because health care is a team sport. If we do not have proper teams taking care of patients it's unlikely, its most likely that there will be, you know poor coordination of care, duplication of care. And one might link that to the current fee for service environment where everyone works for his own account and not for himself then you absolutely lose... the*

focus of incentive should be the well-being of the patient, you know, in a holistic manner.

Medical Scheme 1

Another concern raised by HG 1 and HG 3 is the effect that a lack of integration has on clinical governance and accountability as doctors that fail to keep updated with new knowledge cannot undergo peer review to ensure that they used the latest evidence-based medicine. Furthermore, whilst peer review may not be the only mechanism of clinical governance, the hospitals felt that they have very little power in ensuring adherence to best practice. This was illustrated in an example by HG 3 where it was stated,

"I was at one of our hospitals talking about antibiotic stewardship, at the end the most bold one said to me look I get that you want like a public health view about antibiotics resistance but honestly what matters to me is that my patient is better tomorrow and even more better tomorrow than the day after tomorrow. So that is really what matters to me. And I am going to give a higher dose Meropenem to all my patients that they don't get surgical infection, I mean how do you even argue with that?"

Hospital Group 3

HG 1 therefore viewed the consequences of this lack of integrated practices and review as a loss of opportunities for doctors to share skills with peers and other healthcare workers as well as to institute peer-reviewed clinical protocols to guide doctors on clinically sound yet efficient and cost-effective treatment pathways.

Finally, stakeholders felt that another disadvantage to not allowing group practices is that it services cannot be offered as packages of care rather than individually charged services. As a result, individually charged services precludes doctors from partaking in activities that may impact quality but are not necessarily billable. For example, HG 1 raised the issue that multidisciplinary team meetings could take up to an hour of clinician's time but are not billable under current fee-for-service structures as there is no coding for them. In this way, certain activities that may impact quality may be neglected by doctors because they are not reimbursed under the current fragmented system. This idea is detailed by this quote by the HG 1 representative,

"And a good example of coordination of care, is the team meeting in rehab environment where we sit and we go through a patient, at least once a week, sometimes twice a week, spend at least 10 to 15 minutes of 4 or 5 professionals discussing a patient. It's an hour, an hour and a half of professional time. How do we bill for that, how do we recover that? But yet that coordination of care is vital, because it then puts in place how the various health inputs are actually managed and managed appropriately. And that included discharge planning, making sure that the patients remain independent, fit and healthy in the community."

Hospital Group 1

c) Recommendations For Amendments To The HPCSA Policy

The recommendations brought forth by stakeholders included recommendations for amendments to the HPCSA policy and the recommendations focused on broader policy amendments to improve the private sector as a whole, with a view toward lowering the increasing costs of care in the private sector.

Recommendations for the employment of doctors by hospitals

Table 3.3: List of stakeholders discussing recommendations for employment of doctors by hospitals

Stakeholder Category	Stakeholder	Employment Model Proposed
Regulatory Bodies	HPCSA	No Employment Of Doctors
	CMS	Conditional Employment Of Doctors
Clinician Associations	SASA	No Employment Of Doctors
Hospital Groups	HG 1	Conditional Employment Of Doctors
	HG 2	Conditional Employment Of Doctors
	HG 3	Conditional Employment Of Doctors
	HG 4	Conditional Employment Of Doctors
	HG 5	Conditional Employment Of Doctors
Medical Schemes	MS 2	Conditional Employment Of Doctors
	MS 3	Unrestricted Employment Of Doctors
Other Healthcare Organizations	WHO	Conditional Employment Of Doctors

With respect to an amendment in the HPCSA policy specifically to allow employment of doctors by private hospitals, the HPCSA and SASA were opposed to any amendments which would allow for this to occur. This would be, even with the governance structures promised by the private hospitals to ensure autonomy and prevent perverse incentives such as peer created protocols and oversight by clinician associations. Conversely, only MS 3 motivated for an unrestricted policy on employment of doctors, thereby allowing doctors freedom of choice to either be employed by hospitals, HMOs or group practices, or to work independently if they so wish.

> *"So doctors should be able to decide I want to do my practice on my own, I want to carry work for my own account or I want to forget about all the hassles of billing medical schemes etcetera and I want to work for, for argument sake Mediclinic, in their cardiac unit and get paid a salary there and be a part of a multidisciplinary team. And we would welcome that*

because then we would be in a position to negotiate these new models that we think definitely results in better quality care and better efficiencies."

Medical Scheme 3

Most stakeholders however felt that there was a way to achieve compromise by means of employment of doctors only under certain conditions. These stakeholders included all five hospital groups, MS 2 and the CMS, although there were distinct differences in how these groups of stakeholders viewed conditional employment. The hospital groups advocated for the employment of certain specialties such as emergency medicine doctors and interventionists for ICU to ensure that critical patients received timeous care whilst also advocating for employment of medical officers to oversee the wards after hours in order to provide continuous care for those that needed monitoring.

"So there are some serious concerns in the industry which can be addressed by, and I don't think that any organisation is saying let's open it up and employ everybody. It's saying allow us to employ in certain areas."

Hospital Group 1

In contrast, MS 2 was of the opinion that specialists are too few in number to allow for employment and that any drives to coerce an employment model would lead to specialists leaving the country. They thus felt that conditional employment should be restricted to general practitioners (or medical officers) who are more numerous than specialists.

Finally, the CMS and WHO stated that whilst they felt there was space for the employment of doctors in the South African private sector, there is still a real danger of doctors being compelled to perverse incentives such as supplier induced demand. Therefore, employment according to the CMS should be restricted to HMO type models which are not managed by either hospitals or medical schemes whilst the WHO felt that employment by hospitals is possible but will need to be strictly regulated to ensure that doctors autonomy is not infringed upon and patients receive quality care.

Employment Alternatives

Table 3.4: List of stakeholders discussing recommendations for employment alternatives for doctors

Stakeholder Category	Stakeholder	Proposed Employment Alternative
Regulatory Bodies	NDOH	Group Practices
	HPCSA	
	CMS	
	BHF	Group Practices
Clinician Associations	SAPPF	Group Practices
	SASA	
Hospital Groups	HG 1	
	HG 4	Full Spectrum Of Employment Models
Medical Schemes	MS 1	Group Practices
	MS 3	Full Spectrum Of Employment Models
Universities	UCT	Group Practices
	WITS	Group Practices
Other Healthcare Organizations	PPO Serve	Group Practices

The second set of recommendations regarding employment were all centred on alternative employment models that did not include direct employment by a hospital. As stated previously, stakeholders felt that, even though direct employment of doctors by hospitals may not be a suitable solution to the problem of elevated private sector costs, the HPCSA regulations still precluded doctors from functioning effectively in multi-disciplinary teams. The issue of group practices was raised by 9 of the stakeholders interviewed, including the NDOH, hospital groups, medical schemes, universities and doctor's associations. The NDOH, however, did acknowledge that the HPCSA would be willing to amend its regulations and policies to align with the NHI priorities, as stated,

> *"So the HPCSA has indicated that while it is their policy that there's no group practices or multidisciplinary teams they would be willing to revisit and revise that policy… Once there's some finality about exactly what the NHI would want. So they wouldn't want their policy to stand in the way of that kind of benefit. So we had agreed that we would engage with them*

further around these issues once we finalised what it is that we want from a NHI perspective in terms of contracting."

National Department Of Health

Of note was the opinion of the HG 1 representative who felt that it was inconsistent to allow nurses, physiotherapists etc. to be employed by a doctor and thus form a group practice related to a certain specialty but then to not allow doctors to employ other doctors from different specialties and thus form a multi-disciplinary group practice.

"We can't have separate policies for doctors, pharmacists and nurses and different healthcare professionals. Because actually we're all the same, and as much as we think we are very important, and very effective, no one or not one of us on our own can actually fix a person from illness to wellness."

Hospital Group 1

Group practices that allowed for a multi-disciplinary approach to ambulatory and in-hospital care were seen by stakeholders to be a conduit to quality, efficient, equitable and accessible care. From an efficiency point of view, BHF and SAFFP thought that group practices could realise economies of scale for procurement, use one management system and shared staff as well as arrange for 24-hour cover to fill gaps in after-hours service delivery that were highlighted earlier. According to CMS. HG 1 and MS 1, quality was seen to be impacted through a system of mentoring (especially junior staff), cross-skilling and peer review, allowing for accountability for outcomes. Finally, public sector functioning could be improved by allowing a system where these group practices or the individual staff within them could be released to assist public sector facilities, whilst being assured that their private sector workload was being covered by colleagues. These ideas were aptly stated by SAPPF as,

"Well I think as I said I don't think employing doctors is the way to go. What I would rather see is doctors, we need to move out of the solo practice environment into a group practice environment. Where there will be economies of scale, where they'll be other advantages. Young, inexperienced doctors can come into a group practice. Be mentored by senior

colleagues. So, there's a beneficial experience in terms of learning and a transfer of experience. That sort of thing. I mean in a large group practice one can organise things in such a way that you have for example twenty-four/seven cover in a labour ward by an obstetrician. You can also release members of that group practice to assist in the public service. So, they big benefits in my view to moving away from solo practice into large group practices. And I'm saying probably you have a minimum of ten, ten to twenty doctors in a group would be the sort of model that I would I think would make economic sense. "

SAPPF

Stakeholders had varied opinions on how these practices should be arranged. Population-based models arranged to serve geographical populations were favoured by stakeholders such as BHF, HG 4 and PPO Serve whilst MS 1 and WITS vouched for a disease-focused model (e.g. practices centred on diabetes etc.). There were however some concerns about perverse incentives that may arise in these types of group practices and it was felt that strong regulation and oversight was still needed, even if this model were to be employed. The HPCSA viewed these perverse incentives to arise from the reimbursement model, where group practices based on fee-for-service models would still be at risk of over-servicing whilst capitation based models may result in underservicing. Despite this, the HPCSA was not averse to global payment contracts between group practices and purchasers of health services.

Another aspect to consider is the oversight of these group practices. Stakeholders had varied opinions on this area with MS 1 and MS 3 being of the opinion that these practices could be part of and overseen by a hospital group in order to allow for a single contract for an episode of care and a holistic view on outcomes and quality of care. Others, including the HPCSA and WITS felt that group practices should only be part of a hospital if the hospital were a non-profit entity. The rationale for this is that, similar to direct employment of doctors, group practices that are managed by a for-profit hospital may fall prey to the same dangers of perverse incentives and lack of autonomy. A third group of stakeholders held the view that group practices should be independent, contract individually with hospitals and medical schemes and be overseen by an independent regulator.

Aside from group practices and direct employment, three stakeholders were of the opinion that all restrictions on employment for doctors should be removed, thereby allowing a

spectrum of models from direct employment to health maintenance organisations to be adopted and for doctors to ultimately be allowed autonomy in deciding their preferred choice of employment.

> *"So to me I think that's the issue that's at stake. I think if you look at doctors, there's a great deal of individualism and a great deal of intellect and skill that comes to the party. And you can't necessarily push everyone into the same box. So I can't imagine you necessarily making everyone a salaried doctor."*
>
> **Hospital Group 4**

d) Recommendations for Broader Policy Amendments

Whilst many stakeholders discussed amendments to the HPCSA policy, there was also a strong view that this HPCSA policy exists in a larger regulatory vacuum and is but a small problem in a larger set of issues in the private sector. This was highlighted in stakeholder's opinions on the cost drivers in the private sector and as such many of the interviewees had opinions on how regulation of the private sector may be needed to complement the amendments to the HPCSA policy.

Regulation of the private sector

Table 3.5: List of stakeholders discussing recommendations for regulation of the private sector

Stakeholder Category	Stakeholder	Proposed Regulatory Mechanisms
Regulatory Bodies	CMS	Regulation Of Private Sector Prices
	BHF	Regulation Of Private Sector Prices
Clinician Associations	SAMA	Regulation Of Private Sector Prices
	SAPPF	Regulation Of Doctors Practice And Private Sector Prices
	CA 1	Regulation Of Private Sector Prices
	SASA	Regulation Of Doctors Practice And Private Sector Prices
Hospital Groups	HG 1	Regulation Of Doctors Practice
	HG 2	Regulation Of Private Sector Prices
	HG 4	Regulation Of Private Sector Prices
Medical Schemes	MS 1	Regulation Of Doctors Practice And Private Sector Prices
	MS 2	Regulation Of Doctors Practice And Private Sector Prices
	MS 3	Regulation Of Doctors Practice And Private Sector Prices
Universities	UCT	Regulation Of Private Sector Prices
	WITS	Regulation Of Doctors Practice And Private Sector Prices
Other Healthcare Organizations	PPO Serve	Regulation Of Private Sector Prices

As highlighted in the section discussing the stakeholder views on the private sector, lack of regulation of the private sector as a whole was seen to be a contributing factor towards the unchecked increases in costs. Stakeholders therefore felt that stronger regulation of doctors as well as of prices within the private sector was essential to lowering the current high costs.

Stakeholders, including SAPPF, SASA, HG 1, MS 1, MS 3 and WITS were of the opinion that the oversight of doctor's post training and certification is specifically needed in order to curb over-servicing and unethical practices, and ensure quality care. Recommendations included the institution of quality standards formulated by the relevant clinician societies. These metrics could be the standards against which doctors could be peer reviewed, reviewed by their employer or in the case of the NHI, reviewed by the Office of Health Standards Compliance.

"So, I've always said that good governance and best practice, and clinical best practice, should come before the for-profit motive. The for-profit motive, or the profit motive, will effectively look after itself, if efficiency and quality are being done appropriately."

Medical Scheme 3

The other issue related to regulation was that of regulating private sector service fees. 14 of the 21 stakeholders had firm opinions on this issue. The CMS and SAMA felt that private sector was operating in a regulatory vacuum where pricing was concerned. The NDOH attempt at producing a reference price list had been rejected after a legal battle and therefore current negotiations on price were based on the CMS 2006 price guide. Both CMS and SAMA acknowledged that CMS was not legally mandated in the Medical Schemes Act to produce tariff guides and the annual circulars and the 2006 price guide merely serve as suggestions. It was therefore deemed necessary that some legal mechanism be instituted to provide guidance and regulation in the areas of private sector tariffs.

From the perspective of the medical schemes, tariff guidelines were seen as necessary especially with respect to the legally mandated prescribed minimum benefits. The concern in this instance is that medical schemes are mandated to cover these PMBs but are powerless to negotiate with providers the fees associated with these PMBs. As a result, either the entire cost is paid by the medical scheme to their detriment or some of the cost is transferred to the patient as an out of pocket payment, which could ultimately lead to patients leaving the medical aid if the out of pocket payments were deemed too high.

Whilst 14 stakeholders supported the formulation of a reference price list for doctors and hospital fees, only two stakeholders were of the opinion that this price list should contain ceiling prices for items. The rest of the stakeholders felt that the price list should contain benchmarked prices that could form a basis for negotiation with individual providers. Stakeholders supporting price benchmarking were also of the view that the price list should be formulated, reviewed and regulated by an independent body as they did not trust the state to follow a fair process, based on their previous experience in 2009 with the National Reference Price List negotiations and the ensuing legal battle.

"So, it's got to be a competitive rate, it's got to be based on their costs, it's got to be based on their skills and experience and the risk and responsibility that they carry in their role. But, should it be benchmarked so that there is transparency on what the pricing should be? Absolutely."

SASA

CHAPTER FOUR: QUANTITATIVE RESULTS

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1. Response Rate

The survey was sent to two databases. The SAMA database consisted of 12852 and the Med Pages database consisted of 21065. However, due to the possibility of duplication between the two databases, only the Med Pages database was used to estimate the response rate. In total, 2024 responses were captured with 395 incomplete or duplicated responses. This led to a 1629 complete responses and a 7.7% response rate.

2. Socio-demographic Results

With respect to the socio-demographic profile of respondents, the mean age was 46.7 years (SD of 11.7) with a minimum of 26 years and a maximum of 85 years of age, reflecting a population of mid-career professionals. With respect to gender, 959 (58.9%) of the respondents were male whilst 669 (41.1%) of the respondents were female, which is consistent with the overall country distribution (39, p.303).

3. Employment Characteristics

Table 4.1.: Employment Characteristics Of Respondents

Category		n	%
1. Employment (N=1628)			
Yes		1,579	97.0
No		49	3.0
2. Employment Province (N=1579)			
Eastern Cape		92	5.8
Free State		65	4.1
Gauteng		634	40.2
KwaZulu Natal		255	16.2
Limpopo		47	3.0
Mpumalanga		51	3.2
Northwest		22	1.4
Northern Cape		36	2.3
Western Cape		377	23.9
3. Employment Area Type (N=1579)			
Urban		1,151	72.9
Peri-Urban		245	15.5
Rural		166	10.5
Deep Rural		17	1.1
4. Employment Sector (N=1579)			
Public Sector		473	30.0
Private Sector		823	52.1
Public And Private Sector		283	17.9
5. Type Of Work (N=1579)			
General Practitioner	Full Time	508	32.2
General Practitioner	Part Time	95	6.0
Specialist	Full Time	691	43.8
Specialist	Part Time	52	3.3
Registrar		98	6.2
Other		135	8.6

Of the 1628 respondents, 1579 (97.0%) were currently working and 49 (3.0%) were not working (see Table 4.1) for various reasons including retirement, maternity leave, full time studies and sabbatical. The average number of years that those currently working have been practicing for was 20.0 years, which corresponds to the mean age of respondents as most doctors in South Africa would start working around the age of 25.

The majority of respondents were working in either Gauteng, Western Cape and KwaZulu Natal respectively (see Table 4.1). All the other provinces were represented, although in smaller numbers. In regard to the geo-locality of the employment, 1151 (72.9%) respondents categorized their area of work as urban whereas on 17 (1.1%) of respondents worked in a deep rural setting. The distribution of doctors amongst provinces and between urban and rural areas echoes the current maldistribution of doctors in South Africa where the urban areas have approximately 5 times more doctors than rural areas (39, p.303).

With regards to sector of work responses were received from doctors in both the private and public sector with 823 (52.1%) doctors working in the private sector alone and 473 (30.0%) of doctors working exclusively in the public sector. A further 283 (17.9%) of doctors worked in mixed public-private arrangements (see Table 4.1).

Of the doctors responding, most were working full time as either general practitioners (32.2%) or specialists (43.8%) (see Table 4.1). Part time general practitioners were 6.0% of the respondents whilst part time specialists equalled 3.3%. 98 (6.21%) of the doctors responding worked in other areas such as management, research, academia or administration. Of the specialists, the largest number of responses came from the anaesthetists (17.24%) followed by those in the surgical specialties (10.58%) (see Figure 4.1). The increased response rate from anaesthetists reflects a keen interest by their clinician association in this research and analysis was done in order to determine whether there were any significant effects of the large sample of anaesthetists on the overall results. Given that the results did not differ significantly when the responses from anaesthetists were included or excluded, they were thus included in the overall sample.

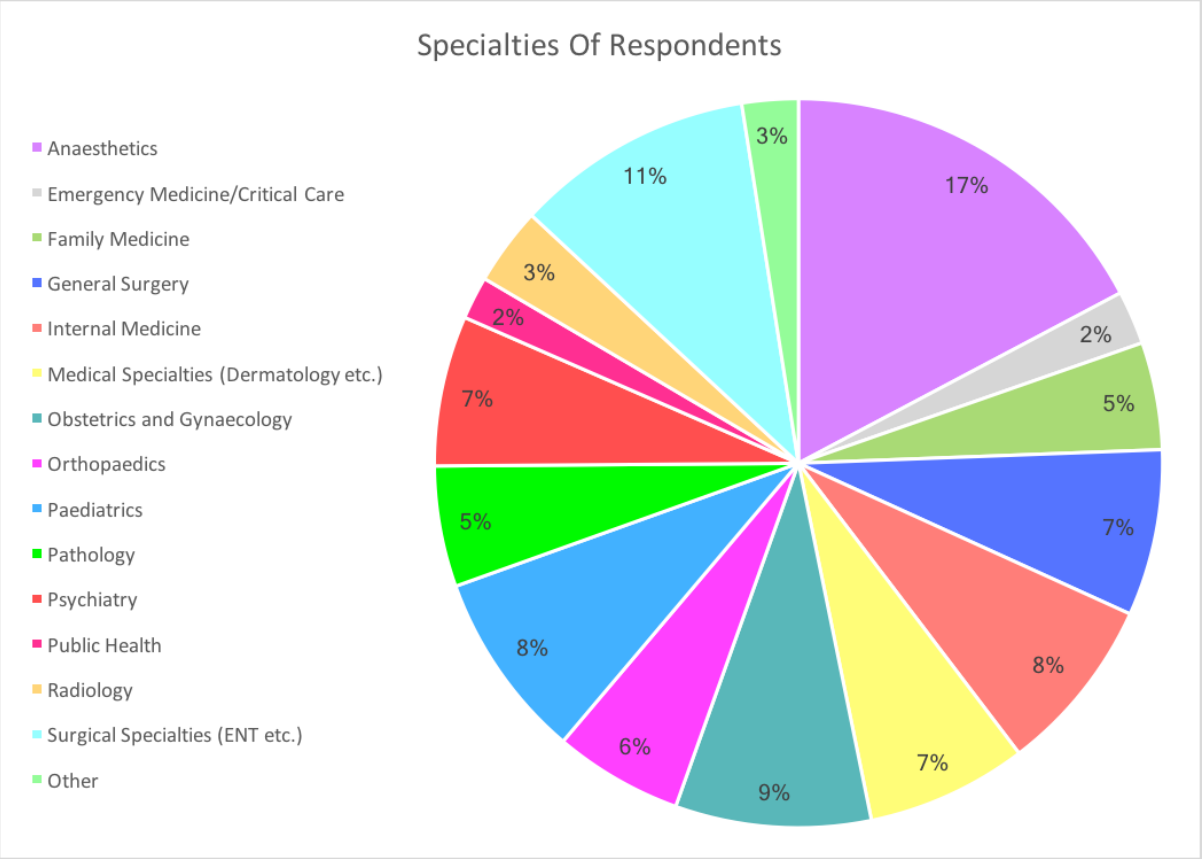


Figure 4.1: Breakdown Of Respondents By Specialty

Respondents were also asked about previous or current experience working in different employment models; namely employment by mining companies, general practitioner network practices, occupational health practices, health maintenance organisations, private hospitals and multidisciplinary practices (see Table 4.2). This was done in order to ascertain whether working in these alternative employment models would serve as a predictor for future choice of alternative employment.

Table 4.2: Previous Experience With Alternative Employment Models

Category (N=1626)	N (%)
Mining Companies	131 (8.1)
General Practitioner Network Practice	265 (16.3)
Occupational Health Practices	99 (6.1)
Health Maintenance Organisations	40 (2.5)
Private Hospitals	364 (22.4)
Multidisciplinary Practices	114 (7.0)
Any Of The Above	681 (41.9)

4. Views On The HPCSA Policy

With respect to the respondent's awareness of the existence of the HPCSA policy of doctors, only 909 (55.8%) of doctors were aware of the HPCSA policy regulating the employment of doctors (see Table 4.3). Of those aware of the policy, the majority were working in the private sector (63.0%) with the remaining 37% distributed equally between the public sector and mixed public/private sector employment. Of those aware of the policy, 31.3%, were general practitioners, 58.3% were specialists and 2.91% were registrars. Tests of association were done (Chi Square) and the p-values showed a relationship between both sector ($p<0.01$) and work description ($p<0.01$) and awareness of the policy. It thus appears that doctors that are specialists and in the private sector are more aware of the policy, which aligns with the fact that the policy affects these doctors more than the others.

When asked about their views on whether doctors should be allowed to be employed by private hospitals, 494 (30.3%) of doctors disagreed whilst 795 (48.8%) agreed that doctors should be allowed to be employed. 339 (20.8%) agreed that doctors should be employed only under certain conditions (see Table 4.3). The p-value of $p<0.01$ showed a relationship between awareness of the HPCSA policy and agreement that doctors should be allowed to be employed. However, despite 69.7% of doctors agreeing that doctors should be allowed to be employed (with or without conditions attached), only 26.0% of respondents would opt for employment over their current practice arrangements.

Table 4.3: Views On The HPCSA Policy

Category		N	n	%	P-Value (Chi Square)
Awareness Of Policy					
Overall		1628	909	55.8	
Sector Of Work	Public Sector Doctors	892	165	18.5	<0,01
	Private Sector Doctors	892	562	63.0	
Work Description	General Practitioners	892	279	31.3	
	Specialists	892	520	58.3	<0,01
	Registrars	892	26	2.91	
Agree That Doctors Should Be Allowed To Be Employed					
No		1628	494	30.3	
Yes (Under Certain Conditions)		1628	339	20.8	<0,01
Yes		1628	795	48.8	

In respect to the conditions under which doctors should be allowed to be employed, the most common answers to the open-ended questions included employment to fill service gaps such as emergency doctors, intensivists and medical officers for after-hours service (32.1%) employment that does not interfere with clinical autonomy (17.6%), employment that does not interfere with service delivery or duties in the public sector (10.1%) and remuneration that is fair and consistent with a doctors expertise (9.2%).

5. Respondents Opinions On Issues Relating To Cost, Quality and Ethical Care

Respondents were then asked to rate a set of statements related to private sector costs, quality of care, and autonomy and ethical practices. Each statement was rated on a scale from 1 to 10, with a rating of 1 denoting strong disagreement and a rating of 10 denoting strong agreement. The mean ratings as well as the percentages with each category of agreement with each statement opinions can be found in Table 4.4 below.

Doctors strongly felt (77.9% disagreement) that individual doctors' fees do not contribute more towards overall private sector costs than hospital costs, which would then correlate with the opinion of 46.6% of the doctors that the employment of doctors will not reduce costs. On the other hand, they viewed coordination of care and treatment protocols to be better interventions to reduce costs (Table 4.4).

When quality is considered, respondents were ambivalent about the impact of employment of quality but as with cost, felt that coordination of care and treatment protocols would improve

quality of care. Although there was no overwhelming majority with regards to autonomy and ethical practice, 44.1% of doctors agreed that employment would lead to a loss of autonomy whilst 44.7% disagreed that employment would lead to unethical practice.

Table 4.4 Opinions On Issues Relating To Cost, Quality, Ethical Care And Regulatory Mechanisms

Category	Mean (SD)	% Disagree (1-4 on the Likert Scale)	% Neutral (5-6 on the Likert Scale)	% Agree (7-10 on the Likert Scale)
Statements Regarding Cost Of Care				
Doctors' fees contribute more to high patient care costs than hospital fees.	2.9 (2.4)	77.9	11.7	10.4
The employment of doctors by private hospitals will lead to reduced cost of care.	4.6 (2.8)	46.6	26.2	27.2
The use of standardized treatment protocols by health care providers will lead to reduced cost of care.	6.3 (2.8)	26.1	21.5	52.5
Better coordination of care by health care providers will lead to reduced cost of care	7.0 (2.4)	13.3	24.3	62.5
Statements Regarding Quality Of Care				
The employment of doctors by private hospitals will lead to increased quality of care.	5.0 (2.8)	40.8	28.7	30.6
The use of standardized treatment protocols by health care providers will lead to increased quality of care.	6.1 (2.8)	28.1	19.5	52.5
Better coordination of care by health care providers will lead to increased quality of care.	7.8 (2.4)	9.7	11.9	78.4
Statements Regarding Autonomy And Ethical Practices				
The employment of doctors by private hospitals will lead to a loss of clinical autonomy.	5.7 (3.1)	36.4	19.5	44.1
The employment of doctors by private hospitals will interfere with a doctor's ethical behaviour.	5.1 (3.1)	44.7	19.0	36.3

Similarly, to their opinions on ethics and autonomy, there was a mixed response to the issue of regulation of doctors but 61.8% did not agree with private market regulation and 52.2% with price setting (Table 4.5).

Table 4.5: Opinions On Regulatory Mechanisms

Category	Mean (SD)	% Disagree (1-4 on the Likert Scale)	% Neutral (5-6 on the Likert Scale)	% Agree (7-10 on the Likert Scale)
Statements Regarding Regulation				
Doctors' fees should be regulated.	5.0 (3.2)	44.8	18.9	36.3
The private market should be regulated by the Department of Health.	4.0 (3.2)	61.8	12.4	25.7
Price setting of doctors' fees is an effective method of reducing patient care costs.	4.5 (3.0)	52.2	18.8	29.0

6. Alternative Employment Models: Opinions and Predictors

Doctors were also asked if they would choose alternative employment models over their current practice arrangements. Each statement was rated on a scale from 1 to 10, with a rating of 1 denoting strong disagreement and a rating of 10 denoting strong agreement. The mean ratings as well as the percentages with each category of agreement with each statement opinions can be found in Table 4.6.

Table 4.6: Opinions On Alternative Employment Models

Category	Mean (SD)	% Disagree (1-4 on the Likert Scale)	% Neutral (5-6 on the Likert Scale)	% Agree (7-10 on the Likert Scale)
Statements Regarding Employment Alternatives				
If hospitals were allowed to employ doctors, I would consider being employed by a hospital over my current practice arrangements.	4.1	25.9	56.2	17.8
If employment of doctors is allowed, I would consider working in a multidisciplinary group practice over my current practice arrangements.	4.9	36.7	43.8	19.5

Despite 70.0 % of doctors agreeing that doctors should be employed, it appears that doctors themselves would not necessarily take up employment if it was available to them. A cross-tabulation was thus done to look at the number of doctors agreeing to the concept of employment versus those that would choose to be employed (Table 4.7).

Of those that responded that doctors should be allowed to be employed (with or without conditions), only 383 (34.0%) would consider private hospital employment whilst a larger number of 516 (45.8%) would consider employment in a multi-disciplinary practice. However, there was a statistically significant relationship between agreement with employment of doctors and choice to be employed ($p<0.01$) or choice to work in a multidisciplicary practice ($p<0.01$).

Table 4.7: Tabulation Of Doctors Agreeing To The Concept Of Employment Versus Those That Would Choose To Be Employed

Category	I Would Choose The Following Employment Model Over My Current Practice Arrangements			
	Employment			
	Disagree (1-4 on the Likert Scale) n (%)	Neutral (5-6 on the Likert Scale) n (%)	Agree (7-10 on the Likert Scale) n (%)	P-Value (Chi Square)
Doctors should be allowed to be employed				
No	488 (82.8)	48 (9.7)	37 (7.5)	<0.01
Yes	503 (44.6)	241 (21.4)	383 (34.0)	
	Multidisciplinary Practice			
	Disagree (1-4 on the Likert Scale) n (%)	Neutral (5-6 on the Likert Scale) n (%)	Agree (7-10 on the Likert Scale) n (%)	P-Value (Chi Square)
Doctors should be allowed to be employed				
No	338 (68.6)	77 (15.6)	78 (15.82)	<0.01
Yes	372 (33.0)	239 (21.1)	516 (45.8)	

Multinomial logistic regression models were then used to determine factors associated with three outcome variables; namely:

1. Agreement with the employment of doctors.
2. Consideration of employment by hospitals over current arrangements.
3. Consideration of employment in a multidisciplinary practice over current arrangements.

Agreement with the employment of doctors by private hospitals

Table 4.8: Multinomial Regression For Factors Associated With Agreement With The Employment Of Doctors By Private Hospitals

		Odds Ratio	P>|z|	[95% Conf. Interval]	
Disagree	**Base Outcome**				
Agree (With Conditions)	Age	1.0	0.24	1.0	1.0
	Female Gender (base= male)	1.8	<0.01	1.3	2.5
	Work Province (base= Gauteng)				
	Eastern Cape	1.5	0.33	0.7	3.2
	Free State	1.5	0.30	0.7	3.3
	KwaZulu Natal	0.9	0.60	0.6	1.4
	Limpopo	1.4	0.53	0.5	4.5
	Mpumalanga	0.6	0.26	0.2	1.5
	Northern Cape	0.5	0.32	0.1	2.0
	North West	1.2	0.72	0.4	3.4
	Western Cape	0.8	0.21	0.5	1.1
	Rural Area Employment (base= urban area employment)	1.9	0.03	1.0	3.4
	Sector Of Employment (base= private sector)				
	Public Sector	2.4	<0.01	1.6	3.5
	Public And Private Sector	1.9	<0.01	1.3	2.9
	Work Description (base= general practitioners)				
	Specialists	0.9	0.58	0.3	0.6
	Registrars	0.7	0.33	0.3	1.5
	Other	1.6	0.10	0.9	3.0
	Work Time (base=full time work)				
	Part Time	1.3	0.27	0.8	2.2
	Other	Omitted Due To Collinearity			
	Specialisation (base= general practitioners)	0.9	0.63	0.7	1.2
	Previous Employment In Private Sector Hospitals	1.1	0.50	0.8	1.6
	Previous Employment In Multidisciplinary Practices	1.3	0.46	0.7	2.3
	Aware of HPCSA Policy	0.5	<0.01	0.4	0.7
	Previous Application For Exemption From The HPCSA Policy	2.2	0.25	0.6	8.4
	Prevented From Employment By HPCSA	2.7	0.01	1.2	5.8

Table 4.8 (cont.): Multinomial Regression For Factors Associated With Agreement With The Employment Of Doctors By Private Hospitals

		Odds Ratio	P>|z|	[95% Conf. Interval]	
Disagree	**Base Outcome**				
Agree	Age	1.0	0.38	1.0	1.0
	Female Gender (base= male)	1.4	0.03	1.0	1.8
	Work Province (base= Gauteng)				
	Eastern Cape	2.3	0.01	1.2	4.3
	Free State	1.3	0.48	0.6	2.7
	KwaZulu Natal	0.9	0.70	0.6	1.4
	Limpopo	1.6	0.34	0.6	4.5
	Mpumalanga	1.0	0.94	0.5	2.2
	Northern Cape	0.7	0.44	0.2	1.9
	North West	0.7	0.55	0.3	1.9
	Western Cape	0.8	0.24	0.6	1.1
	Rural Area Employment (base= urban area employment)	2.0	0.01	1.2	3.3
	Sector Of Employment (base= private sector)				
	Public Sector	2.4	<0.01	1.6	3.4
	Public And Private Sector	1.6	0.01	1.1	2.3
	Work Description (base= general practitioners)				
	Specialists	0.5	<0.01	0.4	0.7
	Registrars	0.5	0.05	0.3	1.0
	Other	0.9	0.75	0.5	1.6
	Work Time (base=full time work)				
	Part Time	1.0	0.99	0.6	1.6
	Other	Omitted Due To Collinearity			
	Specialisation (base= general practitioners)	1.1	0.63	0.8	1.4
	Previous Employment In Private Sector Hospitals	1.0	0.99	0.7	1.4
	Previous Employment In Multidisciplinary Practices	1.2	0.54	0.7	2.0
	Aware of HPCSA Policy	0.2	<0.01	0.2	0.3
	Previous Application For Exemption From The HPCSA Policy	2.1	0.26	0.6	7.4
	Prevented From Employment By HPCSA	5.5	<0.01	2.8	10.9

The following factors showed a statistically significant relationship with agreement that doctors should be employed; gender, province of work, rural employment, private sector employment, specialisation, awareness of the policy and previous occurrences of the doctor being denied private sector employment by the HPCSA (Table 4.8).

In comparison to males, females were more likely to agree with both conditional and unconditional employment (1.8 times ($p<0.01$) and 1.4 times ($p=0.03$) more likely respectively), indicating that direct employment models may have benefits that are more amenable to females. Public sector doctors, whose current employment arrangements includes employment by hospitals, were 2,4 times more likely ($p<0.01$) to agree to both conditional and unconditional employment than private sector doctors. Similarly, doctors in mixed public/private arrangements were 1.9 times ($p<0.01$) and 1.6 times ($p=0.01$) times more likely to agree to both conditional and unconditional employment than private sector doctors, thereby suggesting that employment in the public sector plays a role in agreement with employment. In addition, specialists and registrars (doctors currently specialising) were each 0.5 times less likely ($p<0.01$ and $p=0.05$ respectively) to agree with unconditional employment of doctors than were general practitioners, which would correlate with the fact that hospitals are specialist centred with little scope for general practitioners. These findings may signify that private sector specialists are reluctant to deviate from their current independent practices.

In terms of other employment characteristics, doctors working in the Eastern Cape were 2.3 times more likely ($p=0.01$) to agree to unconditional employment than the reference population of Gauteng-based doctors (largest population in the sample). Likewise, doctors employed in a rural area were 1.9 ($p=0.03$) and 2.0 ($p=0.01$) times more likely to agree with unconditional and conditional employment respectively than doctors in an urban setting.

Those that were unaware of the HPCSA policy were 2 and 5 times more likely ($p<0.01$) to agree to conditional and unconditional employment whilst a significant increase in agreement is found amongst those prevented by the HPCSA from being employed as they were 2.7 ($p=0.01$) and 5.5 times ($p<0.01$) more likely to agree to both conditional and unconditional employment than those that were not prevented from being employed. This may be due to the fact that these doctors already saw the value in employment and as such had pursued this type of employment.

Consideration of employment by hospitals over current arrangements

Table 4.9: Multinomial Regression For Factors Associated With Considering Employment By Private Hospitals Over Current Practice Arrangements

		Odds Ratio	P>|z|	[95% Conf. Interval]	
Neutral	**Base Outcome**				
Disagree	Age	1.0	0.67	1.0	1.0
	Female Gender (base= male)	1.4	0.04	1.0	1.9
	Work Province (base= Gauteng)				
	Eastern Cape	1.6	0.16	0.8	3.3
	Free State	1.7	0.17	0.8	3.4
	KwaZulu Natal	1.5	0.05	1.0	2.4
	Limpopo	1.5	0.41	0.6	3.4
	Mpumalanga	1.1	0.80	0.5	2.4
	Northern Cape	1.6	0.42	0.5	5.3
	North West	3.2	0.07	0.9	11.4
	Western Cape	1.1	0.47	0.8	1.6
	Rural Area Employment (base= urban area employment)	0.7	0.16	0.4	1.1
	Sector Of Employment (base= public sector)				
	Private Sector	2.1	<0.01	1.4	3.0
	Public And Private Sector	1.6	0.04	1.0	2.4
	Work Description (base= general practitioners)				
	Specialists	1.0	0.79	0.7	1.3
	Registrars	1.1	0.69	0.6	2.2
	Other	0.7	0.23	0.4	1.2
	Work Time (base=full time work)				
	Part Time	0.5	<0.01	0.3	0.8
	Other	Omitted Due To Collinearity			
	Specialisation (base= general practitioners)	0.9	0.31	0.7	1.1
	Previous Employment In Private Sector Hospitals	0.8	0.19	0.6	1.1
	Previous Employment In Multidisciplinary Practices	1.0	0.92	0.6	1.8
	Aware of HPCSA Policy	1.5	0.01	1.1	2.0
	Previous Application For Exemption From The HPCSA Policy	0.8	0.83	0.2	4.3
	Prevented From Employment By HPCSA	0.4	0.01	0.2	0.8

Table 4.9 (cont.): Multinomial Regression For Factors Associated With Considering Employment By Private Hospitals Over Current Practice Arrangements

		Odds Ratio	P>|z|	[95% Conf. Interval]	
Neutral	**Base Outcome**				
Agree	Age	1.0	0.47	1.0	1.0
	Female Gender (base= male)	1.3	0.14	0.9	1.9
	Work Province (base= Gauteng)				
	Eastern Cape	2.0	0.07	0.9	4.1
	Free State	0.8	0.58	0.3	1.9
	KwaZulu Natal	1.7	0.04	1.0	2.7
	Limpopo	1.9	0.19	0.7	5.1
	Mpumalanga	0.8	0.66	0.2	2.0
	Northern Cape	0.7	0.73	0.2	3.3
	North West	2.4	0.21	0.6	9.1
	Western Cape	0.8	0.32	0.5	1.2
	Rural Area Employment (base= urban area employment)	0.8	0.33	0.4	1.3
	Sector Of Employment (base= public sector)				
	Private Sector	1.0	0.84	0.6	1.4
	Public And Private Sector	1.2	0.57	0.7	1.9
	Work Description (base= general practitioners)				
	Specialists	0.5	<0.01	0.3	0.8
	Registrars	0.9	0.76	0.4	1.8
	Other	0.6	0.09	0.3	1.1
	Work Time (base=full time work)				
	Part Time	0.6	0.09	0.4	1.1
	Other	Omitted Due To Collinearity			
	Specialisation (base= general practitioners)	1.0	1.00	0.7	1.4
	Previous Employment In Private Sector Hospitals	1.3	0.20	0.9	1.9
	Previous Employment In Multidisciplinary Practices	0.8	0.47	0.4	1.5
	Aware of HPCSA Policy	1.2	0.42	0.8	1.6
	Previous Application For Exemption From The HPCSA Policy	4.2	0.07	0.9	19.4
	Prevented From Employment By HPCSA	2.1	0.01	1.2	3.8

Table 4.9 shows that the following factors showed a statistically significant relationship with agreement to choosing employment by private hospitals over current employment practices; gender, province of work, sector of employment, part time employment, specialization, awareness of the HPCSA policy and previous occurrences of the doctor being denied private sector employment by the HPCSA.

In contrast with the results of the previous section, females were 1.4 times more likely ($p=0.04$) to not consider employment than males. Similarly, doctors working in the private sector or in mixed public/private arrangements were 2.1 ($p<0.01$) and 1.6 ($p=0.04$) times more likely than their public-sector counterparts to not choose employment over their current practice arrangements. This may be consistent with the fact that public sector doctors are already employed by hospitals and are thus more used to direct employment models. In terms of daily work arrangements, doctors working part time were 0.5 times ($p<0.01$) more likely to agree with employment, possibly due to the appeal of decreased administration and income security associated with employment. Once again, specialists were 0.5 times less likely ($p<0.01$) to agree to employment as general practitioners for possibly the same reasons noted in the previous sub-section.

With respect to the policy itself, those who were aware of the policy were 1.5 times more likely ($p=0.01$) to not choose employment over their current practice arrangements.

Consideration of employment in a multidisciplinary practice over current arrangements

Table 4.10: Multinomial Regression For Factors Associated With Considering Multidisciplinary Practice Over Current Practice Arrangements

		Odds Ratio	P>|z|	[95% Conf. Interval]	
Neutral	**Base Outcome**				
Disagree	Age	1.0	0.48	1.0	1.0
	Female Gender (base= male)	1.2	0.32	0.9	1.6
	Work Province (base= Gauteng)				
	Eastern Cape	1.3	0.50	0.6	2.5
	Free State	1.4	0.33	0.7	3.0
	KwaZulu Natal	1.1	0.59	0.7	1.7
	Limpopo	0.9	0.91	0.4	2.3
	Mpumalanga	1.5	0.36	0.6	3.6
	Northern Cape	2.5	0.10	0.6	9.4
	North West	0.7	0.39	0.3	1.7
	Western Cape	1.0	0.78	0.7	1.3
	Rural Area Employment (base= urban area employment)	0.4	<0.01	0.3	0.7
	Sector Of Employment (base= public sector)				
	Private Sector	1.4	0.06	1.0	2.1
	Public And Private Sector	1.3	0.25	0.8	2.0
	Work Description (base= general practitioners)				
	Specialists	1.3	0.09	1.0	1.9
	Registrars	1.3	0.48	0.6	2.5
	Other	1.0	0.97	0.6	1.7
	Work Time (base=full time work)				
	Part Time	0.7	0.24	0.4	1.2
	Other	Omitted Due To Collinearity			
	Specialisation (base= general practitioners)	0.8	0.06	0.6	1.0
	Previous Employment In Private Sector Hospitals	0.8	0.19	0.6	1.1
	Previous Employment In Multidisciplinary Practices	1.1	0.67	0.6	2.0
	Aware of HPCSA Policy	1.3	0.08	1.0	1.8
	Previous Application For Exemption From The HPCSA Policy	0.5	0.38	0.1	2.3
	Prevented From Employment By HPCSA	0.6	0.14	0.3	1.2

Table 4.10 (cont.): Multinomial Regression For Factors Associated With Considering Multidisciplinary Practice Over Current Practice Arrangements

		Odds Ratio	P>|z|	[95% Conf. Interval]	
Neutral	**Base Outcome**				
Agree	Age	1.0	0.98	1.0	1.0
	Female Gender (base= male)	1.1	0.47	0.8	1.5
	Work Province (base= Gauteng)				
	Eastern Cape	1.5	0.24	0.8	2.8
	Free State	0.9	0.83	0.4	2.0
	KwaZulu Natal	0.9	0.79	0.6	1.5
	Limpopo	1.2	0.60	0.5	2.9
	Mpumalanga	1.5	0.39	0.6	3.5
	Northern Cape	1.5	0.58	0.4	6.0
	North West	0.8	0.65	0.3	2.0
	Western Cape	0.7	0.06	0.5	1.0
	Rural Area Employment (base= urban area employment)	0.7	0.15	0.5	1.1
	Sector Of Employment (base= public sector)				
	Private Sector	0.8	0.18	0.5	1.1
	Public And Private Sector	0.9	0.75	0.6	1.4
	Work Description (base= general practitioners)				
	Specialists	0.9	0.39	0.6	1.2
	Registrars	0.9	0.78	0.5	1.8
	Other	0.6	0.08	0.4	1.1
	Work Time (base=full time work)				
	Part Time	1.0	0.92	0.6	1.7
	Other	Omitted Due To Collinearity			
	Specialisation (base= general practitioners)	0.9	0.33	0.7	1.2
	Previous Employment In Private Sector Hospitals	1.1	0.69	0.8	1.5
	Previous Employment In Multidisciplinary Practices	0.9	0.74	0.5	1.6
	Aware of HPCSA Policy	0.9	0.71	0.7	1.3
	Previous Application For Exemption From The HPCSA Policy	2.4	0.19	0.6	8.9
	Prevented From Employment By HPCSA	3.0	<0.01	1.6	5.4

The following factors showed a statistically significant relationship with agreement to choosing multidisciplinary practice over current employment practices; rural area employment and previous occurrences of the doctor being denied private sector employment by the HPCSA (Table 4.10).

Those in rural areas were 2.5 times more likely ($p<0.01$) to agree to work in a multidisciplinary practice than those in an urban area, which correlates with the results above that stated that rural doctors were more likely to agree that doctors should be employed. Once again, in terms of those agreeing to multidisciplinary practices, doctors that were prevented from employment were 3 times more likely (p,0.01) to choose multidisciplinary practices, which again may be due to the fact that they already consider these practice arrangements as favourable and hence had sought these arrangements previously.

CHAPTER FIVE: DISCUSSION, LIMITATIONS AND CONCLUSION

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1. Discussion

The aim of this study was to understand the current regulatory environment surrounding the HPCSA policy on employment of doctors, to explore the views of key stakeholders and to survey doctors to ascertain their opinions regarding the policy. This chapter will briefly recap on the policy analysis whilst synthesizing the results from the interviews with that of the doctor's opinions, using existing literature to contextualise the findings. The discussion will again be framed with respect to the views of the impact of the policy on cost, ethics and autonomy, and quality. Finally, the recommendations for amendments to the policy, for alternative employment models and for private sector regulation will be further unpacked before drawing final conclusions with respect to this policy and further research.

The HPCSA policy regulating the employment of doctors has been in effect, according to stakeholders, since the late 1980's. As with the exact date of institution of this policy, the circumstances prompting the formulation of the policy is still unknown. The rationale for the policy, however, is that employment of doctors by private hospitals would impede clinical autonomy and interfere with ethical behaviour of doctors. In response to the recent Health Market Inquiry held by the Competition Commission of South Africa, various stakeholder submissions argued that the policy preventing doctors from employment by hospitals was archaic and contributed towards the high private sector costs of care.

In examining the different opinions of stakeholders on the HPCSA policy, it is pertinent to first understand individual viewpoints on costs contributing to the overall high private sector costs of care. The biggest point of contention amongst stakeholders was around whether hospitals or specialist contribute more towards the overall costs. The OECD study (40) quoted by the WHO representative shows that

overall South African hospitals costs are unexpectedly high when compared to the country's GDP as the general trend is that of countries with higher GDPs having hospital costs proportional to their GDP.

Furthermore, hospital costs, according to the OECD study as well as a 2008 report by the CMS (41), contribute twice as much to overall costs as specialist costs. However, the relatively higher hospital costs can be attributed to the fact that hospitals provide 24-hour care, whilst specialists only see the patient for a brief period during their entire hospital stay. Additionally, although hospital costs are a larger contributor, the OECD study highlighted these costs have stabilized or decreased whilst specialist costs have been increasing, a trend also reflected in the CMS report. Converse to this finding, 78.0% of the doctors surveyed in this study felt that doctors' fees did not contribute more to overall costs than hospital fees.

Another lens through which costs were viewed was that of utilisation. Stakeholders were of the view that, especially in respect to the fee-for-service resultant supplier-induced demand, increased utilisation was more to blame for high private sector costs than either hospitals or specialists individually. Besides the OECD and CMS studies, an independent analysis done by the Competition Commission for the HMI also reflected relatively high hospital admission rates (42). Moreover, the OECD and CMS studies also pinpointed expensive supplier induced services (such as caesarean sections being 75% of all deliveries) as well as the perverse relationship between hospitals and specialists to be contributors to the increasing costs.

As a result of the above, based on their view of cost drivers in the private sector, stakeholders held varied positions with respect to the support of the HPCSA policy. Besides the NDOH and HPCSA, three of the four clinician's societies were opposed to the employment of doctors by hospitals. Interestingly, the majority of doctors surveyed (48.8%) were supportive of hospital employment whilst a further 20.8% were in favour of employment under certain conditions (e.g. to fill service gaps in emergency services and ICU). However, despite the support for employment, doctors would still favour their current independent practices over hospital employment. These figures are similar to those reported in a 2016 study by the Physicians Foundation in America (43) where the percentage of doctors (including those

employed) who viewed employment as a positive trend in healthcare reform has decreased from 55.3% to 50.1% in the two-year period 2014 – 2016.

In contrast to the response from South African doctors regarding their stated choice of employment over current practice arrangements, a study by Physicians Advocacy Institute in America found that over a 3-year period ending in 2015, doctor's employment by hospitals had increased by 50% (44). Similarly, a 2014 article in the New England Journal of Medicine (45) stated that 61% of residents (doctors currently specialising) planned on pursuing employment by hospitals or doctor owned practices for various reasons including better work-life balance, perceived lack of business acumen and preference for spending more time on clinical rather than administrative work. Whether the choices of the American doctors as opposed to the South African cohort reflects a gradual mind-set shift over the past 20 years, a difference in value systems between the two health care systems, or is simply a reflection of a South African private sector that is too financially lucrative for independent doctors will need to be further investigated. Furthermore, as with the American example, the opinions and choices of South African doctors may shift in favour of employment if the HPCSA policy were to be amended to allow for employment of doctors.

When probed on their views regarding the consequences of the HPCSA policy, the prevailing view was no different to those listed in the HMI submissions, in that the policy had implication for the cost of care as well as autonomy and ethical practice. However, a third aspect regarding quality of care, which was not highlighted in the submissions was brought to the fore during the interviews.

The arguments regarding cost of care centred mainly around the fact that the current fragmented private health system with its fee-for-service structures resulted in a lack of coordinated care, duplication of services and possible over-servicing. Therefore, it was rationalised that the employment of doctors would lead to greater oversight by the employees on the costs of clinical care through mechanisms such as clinical protocols as well as allow for the formulation of multidisciplinary practices where doctors could coordinate better patient care. This rationale is disputed by a 2017 study (29) which showed that medical schemes in America paid 27% more for services by employed doctors than by independent doctors. This increase was attributed to both

increased costs associated with hospital services than with services provided in independent doctors' practices as well as the higher volume of services performed by hospital employed doctors.

When the surveyed doctors were asked to respond to these ideas, 46.6% disagreed that employment of doctors would lead directly to decreased cost of care. The Physicians Foundation study cited earlier (43) also found that in 2016, 66.2% of doctors disagreed that doctor's employment would lead to decreased cost. This is in contrast to the 75.6% of doctors that showed disagreement in 2012, possibly indicating that as more doctors become employed, their viewpoints regarding the implications of employment are shifting (43).

However, from the doctors surveyed in this study, with only 27.2% agreeing that employment would reduce cost of care, doctors were in agreement that protocols and coordination of care (52.5% and 62.5% respectively) would lead to reduced costs. This finding therefore indicates that other avenues to introduce protocols and multidisciplinary care may be more effective than those introduced by direct employment of doctors by hospitals. However, similar to the findings related to agreement with employment versus actual choice to pursue employment, it should be noted that whilst doctors may agree that protocols and coordination of care would decrease costs, they may not necessarily choose to pursue these interventions.

The issue of autonomy and ethics is one around which the HPCSA policy was formulated in order to safeguard against breach of these practices (e.g. over-servicing, perverse incentives etc.). Whilst the HPCSA and SAMA saw the employment of doctors as a danger to doctor's autonomy and ethical practice, many stakeholders felt that these unsavoury practices were already evident currently and regulation of doctor's employment does not impede these practices. This idea of employment by a profit-making entity impeding clinical autonomy is also iterated in the American CPM law (21) where it is stated that employment would result in divided loyalty and commercial exploitation of doctors. Regarding this, the California Medical Association States that, "Hospitals and other corporate interests do not have the same ethical and moral obligation to the patient as a physician does; therefore, it is essential to maintain the firewall between medical decisions and the corporate bottom line."

(46). Despite this, the 2016 Physicians Foundation study found that doctors that employed doctors felt less strongly than non-employed doctors (70.5% vs 76%) that their clinical autonomy was impeded by third party factors, possibly pointing to a certain amount of protection of doctor's autonomy conferred by hospitals (43).

Furthermore, despite the consensus that the unethical practices already occur in the present context, largely due to lack of oversight, the stakeholders in this study felt that doctors should be able to manage their behaviour without significant need for outside regulation. This idea is reflected in the survey responses from doctors on whether employment would hinder autonomy and ethical behaviour as doctors were quite even in their agreement/disagreement with these questions. However, in considering international experience (47–49), literature shows a shift from self-regulation towards regulation by professional bodies in order to address the potential conflict of interests and interferences with autonomy. This shift, according to the study in the United Kingdom (49), arose from the need to address the practices of the few "bad apples that were unwilling, incapable or indifferent to delivering on their professional commitments" and arose in both physician owned practices as well as for-profit settings such as private hospitals. It therefore may well be that autonomy and ethical behaviour is a complex interplay between regulation and individual doctor characteristics and therefore strategies to mitigate these risks would need to encompass more than the prohibition of employment.

The final effect discussed was one not raised in the HMI submissions but nevertheless is an important aspect to consider. All the stakeholders that mentioned issues related to quality felt that the lack of employment of doctors led to decreased quality of care. The one way in which quality was impacted was through service gaps left by independent specialists (e.g. after-hours care). It was argued that employment of doctors to fill some of these gaps or permitting doctors to form multidisciplinary practices would allow for continuous, coordinated care as is implemented in the current public service. A further implication to this lack of coordination was a lost opportunity for skills transfer between peers as well as peer review mechanisms and peer-produced protocols to ensure best practice. This links to a 2011 review of malpractice law suits in the United States of America, which showed that solo or

single discipline practices were more likely to be sued than multidisciplinary practice (50).

The opinions of the surveyed doctors regarding quality mirrored that of the cost of care opinions. Whilst the majority of doctors (40.8%) felt that employment of doctors would not directly improve quality, they were of the opinion that protocols and coordinated care would lead to increased quality of care (52.5% and 78.4% respectively). In this respect, one study (51) showed that hospital owned doctors' practices showed increased use of evidenced-based processes to enhance quality of care, as opposed to individually owned practices, thereby indicating the role hospitals may play in optimizing quality care of patients.

Taking into account the implications of the policy listed above, the stakeholders suggested a few ways in which private sector costs could be addressed, including employment of doctors as well as alternative employment practices and strengthening of regulatory mechanisms. For obvious reasons, the HPCSA was opposed to any amendments to the policy and this view was supported by SASA. This was echoed in the survey findings where 53.1% of the anaesthetists responding to the survey did not support the employment of doctors whilst 28.3% did. On the other hand, only one stakeholder held the view that unrestricted employment was the solution but interestingly, 48.8% of doctors were supportive of unrestricted employment.

7 of the 20 stakeholders favoured conditional employment of doctors as opposed to unrestricted employment and this view was held by 20.8% of the doctors surveyed. Predictors of support for conditional employment included female gender, rural employment, private sector employment, awareness of the policy and previous occurrences of the doctor being denied private sector employment by the HPCSA. A significant predictor was found in those that were denied private sector employment by the HPCSA where those denied were 2.7 and 5.5 times more likely to support conditional and unconditional employment respectively, than those not having been denied employment.

When considering predictors of doctors choosing employment over their current practice arrangements, once again, those that were previously prevented from seeking

employment were 2.1 times more likely to opt for employment over their current practices whilst specialists were 50% more likely to disagree to employment by private hospitals over their current practice arrangements. This again may be a reflection of a current private sector that has been unregulated for long enough to deter doctors from choosing new employment arrangements that imply more stringent oversight over doctors' practices.

Additionally, with regard to alternative employment models, most stakeholders viewed multidisciplinary practices with global fee reimbursements as a cost-effective model that would deliver quality of care without impeding autonomy and ethical behaviour. As discussed previously, whilst 48.8% of doctors were unopposed to employment, only 36.7% would consider a multidisciplinary practice over their current practice arrangements. The only predictor was once again those previously being denied employment by the HPCSA with those having been denied employment being 3.0 times more likely to prefer a multidisciplinary practice arrangement than those that did not experience rejection by the HPCSA.

From the above it would appear that those that were previously prevented from seeking employment probably already favoured employment models other than individual solo practice and as such are strong predictors of choosing those employment models. In all the models, doctors that were previously employed in a private sector hospital or had experience working in a multidisciplinary practice were surprisingly shown not to be predictors of future choice of those models.

The last recommendation to note would be that of price regulation. Whilst 15 of the 20 stakeholders supported a reference price list, only two felt that this list should contain a ceiling figure instead of a benchmark. The majority of doctors (44.8%) were opposed to fees regulation but quite a large number were also unopposed (36.3%). Despite this 52,2% still disagreed with price setting of fees as a way to decrease private sector costs. These views are also espoused in an OECD study on pricing in South Africa (40), where it was recommended that in line with common practice in other countries, a reference price schedule be developed. This schedule should be developed by an independent body that takes into account the South African context and as such the schedule can be used as a public good to compare service prices

against a norm and increase transparency in spending by both the public and private sectors.

Finally, in reviewing the results of this study, it is important to reconcile stakeholders views with their interests before drawing conclusions. Of note in this regard would be the polarisation of proponents and opponents to the HPCSA policy, where regulatory bodies and clinician associations were supportive of the policy whilst the medical schemes and hospital groups were opposed. This division would seem natural given the interest of the former would be to protect doctors autonomy whilst the interest of the latter groups would be to ensure profits.

However, this polarisation does not seem to appear when the implications of the policy on quality of patient care is discussed. In this instance, clinician associations, hospital groups and medical schemes were all in agreement that the policy impeded quality care. Given that this aspect was not highlighted strongly in the HMI submissions, this seemingly altruistic motivation on behalf of the hospital groups and medical schemes should be carefully considered. Nonetheless, if the policy truly does impede quality of care, as supported by two clinician associations, then it would be well worth revising the policy to alleviate these issues.

Furthermore, with respect to views on employment by hospitals, SASA and anaesthetists were opposed to this. This is interesting in that amongst different categories of doctors, anaesthetists are amongst the few specialities whose workload relies on the decisions of other specialties and therefore fixed employment may provide a more steady means of income. This trend is seen in American studies where direct employment is favoured by these specialities such as anaesthetics and radiology (52) and given that, similar to anaesthetists, 66.3% of the radiologists interviewed did not support the employment of doctors, it may have been useful to have interviewed the Radiological Society of South Africa in order to explore this dynamic further.

2. Limitations

The policy analysis of the current HPCSA policy was impeded by the lack of response by the Desirable Business Practice Unit as this gap does not allow for a contextualisation of the current mechanisms in place to regulate the policy. It also thus precluded any insight into the number of applications for exemption from the policy as well as amount of and circumstances surrounding the exemptions granted annually. As such it was difficult to reflect on the perceived need by institutions and doctors to be exempted from this rule. Information from the HPCSA Desirable Business Practice Unit would thus provide valuable insights for this study and an interview should be re-attempted.

Another limitation lay in the bias introduced by the survey database, which was sourced from a medical information company as well as SAMA and therefore was only reflective of the population that had signed up for these services. In addition, it was not possible to ascertain the overlap between these two databases and to know how many doctors were not represented in either database. A more comprehensive database would have been the HPCSA database of registered doctors but there was difficulty in obtaining such a database.

Bias may also be present due to both the low response rate as well as due to responder bias. There is always a danger of a low response rate with anonymous self-administered voluntary questionnaires and despite efforts to mitigate this through introductory letters and email reminders, it is likely that those responding may have had more interest in the research question than their counterparts. Therefore the low overall response rate combined with views of those with an interest in this specific issue may have skewed the results.

Due to the keen interest of SASA in the research at hand and subsequent motivation to their members to participate in the survey, there was an over-representation of anaesthetists in the survey sample. Despite this, analyses were done, considering this disparity and there was found to be no significant effect of this larger specialist representation on the overall results.

Despite the limitations, this area of work is relatively unchartered in the South African context and an exploration of this policy may provide useful information for stakeholders in light of efforts to ensure a more efficient and effective South African health system, of which the private sector play a huge role.

3. Conclusion And Recommendations

This study sought to understand the current environment surrounding the HPCSA policy on the employment of doctors and to contrast the opinions of various stakeholders (including doctors) on this issue. Although there is considerable variation on the contributors to private sector costs, stakeholders do acknowledge that the current environment is unsustainable and needs to be addressed.

In this regard, stakeholders including doctors viewed employment as a possible avenue but felt more strongly that it should be restricted to certain types of doctors or services. It is therefore recommended that the HPCSA policy be amended, not only to allow conditional employment but to more broadly allow for more innovative, cost effective, integrated means of delivering patient care. Whether these delivery platforms take the shape of consortiums such as PPO Serve, HMOs or multi-disciplinary group practices will need to be assessed.

This research has implications for the implementation of the NHI policy as it is clear that there is a need to understand the drivers of private sector costs, especially with respect to human resources, which are generally accepted to be the largest recurrent **cost** component of any health system. The NHI aims to institute payment mechanisms that are cost effective, mediate the dangers of over-servicing and account for all costs (including human resources). These alternative reimbursement models (such as case-based payments and capitation) require a baseline knowledge of current costs in order to provide payments that are acceptable to all and moreover, payments that attempt to align the disparities between public and private sector costs.

Furthermore, the NHI in contracting with the private sector will find a significant administrative burden in multiple solo contracts with individual providers and therefore changes to the HPCSA policy to allow for both conditional employment of doctors by hospitals as well as doctor-owned multi-disciplinary practices will decrease the possibilities for maladministration whilst allowing for cost-effective, quality care for patients.

Further research will be needed on the best methods of employment and reimbursement for the South African health sector, in light of the NHI and a start may be to evaluate the outcomes and costs of alternative arrangements.

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APPENDIX A

Questionnaire For Structured Interviews With HPCSA Respondents

1. What is the current policy regarding the employment of doctors?
    - When did the current policy come in effect?
    - What circumstances or events led to the decisions contained within the policy (context)?
    - Which set of stakeholders were involved in the formulation of the policy (actors)?
    - What does the policy stipulate with regards to doctors employment (content)?

2. How is the policy regulated and implemented?
    - Who is responsible for enforcing or monitoring the policy stipulations?
    - What is the procedure followed for requests to deviate from the policy?
    - Is there a standardised method for deciding which requests are granted?
    - How many requests for diversion are received annually?
    - Under which circumstances are requests granted?

3. Any additional comments?

APPENDIX B

Questionnaire For Semi-Structured Interviews With Policy Stakeholders

1) What is your understanding of the policy regulating the employment of doctors?
   - Do you know what the content of the policy is?
   - What do you understand the practical implications of the policy to be?

2) What is your opinion on the current HPCSA policy?
   - How do you counter the arguments of other stakeholders (proponents vs. opponents)?
   - What actions would you undertake in order to ensure that your position is considered?

3) How might the policy be adjusted to ensure efficiency and effectiveness of the private sector?
   - How might the policy be adjusted in light of the new NHI rollout?
   - How might the policy be adjusted in light of the Competition Commission?

4) Any additional comments?

APPENDIX C

Questionnaire: HPCSA Policy on the Employments of Doctors by Private Hospitals

(Please note that this is a reproduction of the online questionnaire)

Section 1: Demographics

1. How old are you?

2. What is your gender?

- Male
- Female

3. In which year did you start practicing as a doctor (i.e. post internship and/or community service)?

Section 2: Current Employment

4. Are you currently working?

- Yes
- No

5. If you are not currently working, are you (PLEASE TICK ALL THAT APPLY):

- Retired
- On Maternity Leave
- On Sabbatical
- Studying Full Time
- Other (PLEASE SPECIFY)

6. Which province are you currently working in?

- Eastern Cape
- Free State
- Gauteng
- KwaZulu Natal
- Limpopo
- Mpumalanga
- Northern Cape
- Northwest
- Western Cape

7. How would you describe the area that you work in?

- Urban
- Peri Urban
- Rural
- Deep Rural

8. In which sector are you working?

- Public Sector
- Private Sector
- Public and Private Sector

9. In the past week, how many working hours have you spent in the private sector (including overtime)?

10. In the past week, how many working hours have you spent in the public sector (including overtime)?

11. Which of the following describes your work?

- General Practitioner - Full Time
- General Practitioner - Part Time
- Specialist - Full Time
- Specialist - Part Time
- Registrar
- Other (PLEASE SPECIFY)

12. If yes, what specialty are you working in?
    - Anaesthetics
    - Family Medicine
    - General Surgery
    - Internal Medicine
    - Medical Specialties (Dermatology etc.)
    - Obstetrics and Gynaecology
    - Orthopaedics
    - Paediatrics
    - Pathology
    - Psychiatry
    - Radiology
    - Surgical Specialties (ENT etc.)
    - Other (PLEASE SPECIFY)

13. Have you ever been employed for any of the following (tick all that apply):
    - Mining companies
    - General Practitioner Network Practices
    - Occupational Health and Safety Practices
    - Health Maintenance Organizations
    - Private Sector Hospitals
    - Multidisciplinary Practices
    - None

Section 3: HPCSA Policy

14. Are you aware of the HPCSA policy that stipulates that private hospitals are not allowed to employ doctors?
    - Yes
    - No

15. Should doctors be allowed to be employed by private hospitals?

- Yes
- Yes (under certain conditions) (PLEASE SPECIFY)
- No

16. Have you ever applied to the HPCSA for a special exemption to the HPCSA policy for employment of doctors?

- Yes
- No

17. Has the HPCSA policy prevented you from pursuing employment within the private sector?

- Yes
- No

18. On a scale of one to ten, how much would you agree with the following statements? (0 = strongly disagree, 10 = strongly agree)

a) Doctors' fees contribute more to high patient care costs than hospital fees.
b) The employment of doctors by private hospitals will lead to reduced cost of care.
c) Better coordination of care by health care providers will lead to increased quality of care.
d) Doctors' fees should be regulated.
e) The use of standardized treatment protocols by health care providers will lead to reduced cost of care.
f) Price setting of doctors' fees is an effective method of reducing patient care costs.
g) The use of standardized treatment protocols by health care providers will lead to increased quality of care.
h) The employment of doctors by private hospitals will interfere with a doctors ethical behaviour.
i) Better coordination of care by health care providers will lead to reduced cost of care through.
j) The employment of doctors by private hospitals will lead to a loss of clinical autonomy.
k) The private market should be regulated by the Department of Health.
l) The employment of doctors by private hospitals will lead to increased quality of care.

19. If you would like to elaborate on your choices in question number 18, please do so below.

20. On a scale of zero to ten, how much would you agree with the following statements? (0 = strongly disagree, 10 = strongly agree)

a) If hospitals were allowed to employ doctors, I would consider working for a hospital over my current practice arrangements.
b) If employment of doctors is allowed, I would consider working in a multidisciplinary group practice over my current practice arrangements.
c) If employment of doctors is allowed, I would consider working in a health maintenance organization over my current practice arrangements.

21. If you would like to elaborate on your choices in question number 20, please do so below.

22. If you have any other information that you would like to add, please do so below.

APPENDIX D

R14/49 Dr Atiya Mosam

HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)

CLEARANCE CERTIFICATE NO. M160259

NAME: (Principal Investigator)	Dr Atiya Mosam
DEPARTMENT:	School of Public Health Centre for Health Policy
PROJECT TITLE:	Regulating the Employment of Doctors within the Private Sector in South Africa: A Policy Analysis
DATE CONSIDERED:	26/02/2016
DECISION:	Approved unconditionally
CONDITIONS:	
SUPERVISOR:	Dr Duane Blaauw
APPROVED BY:	Professor P. Cleaton-Jones,Chairperson, HREC (Medical)
DATE OF APPROVAL:	20/04/2016

This clearance certificate is valid for 5 years from date of approval. Extension may be applied for.

DECLARATION OF INVESTIGATORS

To be completed in duplicate and **ONE COPY** returned to the Research Office Secretary in Room 10004,10th floor, Senate House/2nd floor, Phillip Tobias Building, Parktown, University of the Witwatersrand. I/We fully understand the the conditions under which I am/we are authorised to carry out the above-mentioned research and I/we undertake to ensure compliance with these conditions. Should any departure be contemplated,from the research protocol as approved, I/we undertake to resubmit to the Committee. **I agree to submit a yearly progress report**. The date for annual re-certification will be one year after the date of convened meeting where the study was initially reviewed. in this case, the study was initially review in February and will therefore be due in the month of February each year.

Principal Investigator Signature Date

PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES

APPENDIX E

Information Sheet: Interviews

Dear Sir / Madam

My name is Atiya Mosam and I am a student at the University of Witwatersrand. I am conducting research in partial fulfilment of my Masters of Medicine degree in Public Health. The title of my thesis is ***Regulating The Employment of Doctors Within The Private Sector In South Africa: A Policy Analysis***

I would like to ask your formal permission to participate in an interview that will be held either telephonically or at a convenient venue. The interview will largely deal with your knowledge, views and recommendations for the HPCSA policy on the employments of doctors by private hospitals.

Participation: Your participation in this study is entirely voluntary. You can choose not to be involved and will not be victimised in any way. For the purposes of the analysis and reporting, your real name, identity and affiliated company may be revealed in the dissertation or transcripts. I therefore ask that you only disclose information that may be attributed to you and/or your organisation. If you feel the need to disclose any information that you feel provides context but should not be reported, you are welcome to inform me during or after the interview and this will not be included in the final report. If you agree to participate in this study, I would like to request that you please sign the consent form in the space allocated below. Once the interview is underway, you are under no obligation to continue and you may terminate the session at any time.

Audio Recording: The interview will be recorded using a digital audio recorder. The duration of the recorded interview will be approximately 60 minutes. Only I, as the researcher and my supervisor will have access to the transcripts. The transcripts will be stored on an encrypted storage device for 10 years for legal and ethical purposes. I therefore request your permission for the interview in question to be recorded. Once the interview is underway, you are under no obligation to continue and you may terminate the either the recording and/or the interview at any time.

Dissemination of research results: The results will be used for completion of a Masters degree. Furthermore, the results of this particular study will be disseminated to the Department of Health prior to publication and may be presented at relevant meetings/conferences. The research results could also be published in relevant academic journals. If you wish to receive a copy of the final report, you may at any time contact me to request one.

Permission to conduct this research study has been given by the relevant authorities (HPCSA/BHF) as well as the School of Public Health, University of the Witwatersrand. Ethics permission has been granted by the Human Research Ethics Committee of the University of the Witwatersrand.

Should you have any questions, you may contact the following people:

Researcher
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The University of Witwatersrand Human Research Ethics Committee
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Ms. Z Ndlovu/ Mr. Rhulani Mkansi/ Mr. Lebo Moeng
(C) 011 717 2700/2656/1234/1252
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Thank you for taking the time to assist me in my research.
Yours Sincerely
Dr A Mosam

APPENDIX F

Consent Form: Interviews

By signing below, I acknowledge that the following procedures have been followed:

1) I have read and understood the information sheet provided to me.
2) I have been given the opportunity to clarify any questions I may have and am aware that I may at any point contact the researcher to discuss the study further.
3) I understand that my participation is entirely voluntary and I may terminate my participation at any point.
4) I understand the process of the interview and what is expected of me.
5) I understand that the results of the study will be used as partial completion of a Masters degree and may be disseminated at relevant conferences and meetings.

Formal acknowledgement of consent

I, …… on this day of ……. 2016, agree to participate in the interview for the Masters research project on the HPCSA policy on the employment of doctors by private hospitals.

Signed……. Date……

APPENDIX G

Consent Form: Audio Recording

By signing below, I acknowledge that the following procedures have been followed:

1) I have read and understood the information sheet provided to me.
2) I have been given the opportunity to clarify any questions I may have and am aware that I may at any point contact the researcher to discuss the study further.
3) I understand that the recording of my interview is entirely voluntary and I may terminate the recording at any time.
4) I understand how the information will be stored and subsequently destroyed.

Formal acknowledgement of consent

I, …… on this day of ……. 2016, agree to participate in the interview for the Masters research project on the HPCSA policy on the employment of doctors by private hospitals.

Signed……. Date……

APPENDIX H

Information Sheet: Survey on the HPCSA Policy on the Employments of Doctors by Private Hospitals

Dear Doctor

My name is Atiya Mosam and I am a registrar at the University of Witwatersrand. I am conducting research in partial fulfilment of my Masters of Medicine degree in Public Health. The title of my thesis is Regulating The Employment of Doctors Within The Private Sector In South Africa: A Policy Analysis.

I would like to invite you to participate in a survey that aims to investigate the opinions of doctors regarding the HPCSA Regulations On The Employment Of Doctors. We have already spoken to relevant stakeholders such as the Department of Health, HPCSA and Private Sector regarding this policy and we would like to supplement our findings with the results of this survey, as it will provide valuable information on doctor's views on a policy that directly affects their employment possibilities. The findings of this survey will assist to inform policy makers and relevant stakeholders on issues around the employment of doctors in South Africa, especially in light of the NHI Policy currently being implemented. It is therefore essential that we receive responses from a large and representative sample of doctors and I do hope that you will take a few minutes out of your busy schedule to complete this short survey.

This survey is open to all medical doctors in South Africa that have completed community service and are registered with the HPCSA. Your participation in this study is entirely voluntary. The survey is completely anonymous. Your name cannot be linked to your answers and you will not be identified in the final research report. There will be no consequences if you do not wish to participate in the survey.

The survey will only take 10 minutes of your time and can be answered using your mobile phone. You may also end the survey at any time, should you not wish to continue. Clicking on the "I Agree To Participate" button will constitute informed consent and you will be allowed to proceed with the survey. If you do not wish agree to participate, you may close the survey page without fear of any consequence. Permission to conduct this research study has been given by the School of Public Health, University of the Witwatersrand. Ethics permission has been granted by the Human Research Ethics Committee of the University of the Witwatersrand.

Should you have any questions, you may contact the following people:

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Thank you for taking the time to assist me in my research.

Yours Sincerely

Dr A Mosam