Title:

PERCEPTIONS AROUND MANAGED HEALTH CARE SERVICE DELIVERY
IN PRIVATE MEDICAL CARE IN THE REPUBLIC OF SOUTH AFRICA.

By

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Co-supervisor: Professor S.S. Naidoo
Declaration:

I, Dr Mitchell Robert Scott, hereby declare that the work on which this research is based is original (except where acknowledgements indicate otherwise) and that neither the whole work, nor any part of it, has been, is being, or, is to be submitted for another degree at this or any other University.
I want to express my sincere appreciation and most grateful thanks to:-

Professor Morgan Chetty, for his supervision and encouragement during this study. Prof. Chetty, while being a very busy man, you have always been approachable and made yourself available, albeit often burning the midnight oil. You have a wealth of knowledge especially regarding managed health care and ethics. This has made my journey through this study a comfortable one. Thank you, professor.

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1 ABBREVIATIONS:

BHF: Board of Health Care Funders

FFS: Fee-For-Service

GP: General Medical Practitioner

HMO: Health Maintenance Organisation

HPCSA: Health Professions Council of South Africa

IPA: Independent Practice Association

MHC: Managed Health Care

PCP: Primary Care Physician

POS: Point of Service

PPO: Preferred Provider Organisation

RSA: Republic of South Africa

USA: United States of America
2 ABSTRACT:

Introduction:
This study aimed to explore private General Practitioners’ perceptions of Managed Health Care (MHC) for health service delivery in the Republic of South Africa (RSA). The specific objectives were to review perceptions regarding issues in MHC including ethics of care, quality of care, design of MHC programmes and regulation and monitoring of MHC. The study also reviewed demographic profile of respondents and associations between demographic profile and perceptions.

A literature survey indicates that MHC was introduced in a Western context as a means of regulating cost of healthcare. Models of MHC generally involve a need to obtain authorization and a restriction of services available. There are ongoing debates about MHC and in particular the potential conflict between managing healthcare provision using business and profit principles and the principles of other stakeholders in health care. Providers, such as General Practitioners, are concerned that their autonomy and their ability to offer best possible care for their patients may be compromised. Patients feel that their ability to access optimal care is not a primary consideration in a model of MHC. The popularity of MHC in the United States of America is declining and MHC companies have been making financial losses on the Stock Market.

MHC has been introduced in South Africa and there has not been any recent assessment of healthcare provider perceptions of the model. This study aimed to address this gap in literature.
Methods:
The study design was mixed with quantitative and qualitative components. The study population was all private General Practitioners in RSA as this population would have most experience of MHC. The data collection tool was designed by the researcher and comprised closed-ended questions and one open-ended question around perceptions of MHC. Demographic data, and other data relating to experience of MHC, was collected on a separate questionnaire. Questionnaires were posted to a representative sample of private General Practitioners; this constituted 30% of all active private General Practitioners.

Results and discussion:
The response rate was poor at 13.6%. Respondents generally had negative perceptions of MHC. They cited problems with ethics of MHC, quality of service and felt that it affected their ability to act independently. They felt that MHC should be monitored by an independent regulatory body and that there should be more teaching around differing models of healthcare. There were no significant associations between gender, place of work, experience of MHC and perceptions. However, there was a significant correlation between doctors employed by MHC companies and perceptions.

A major limitation of this study was the predominant use of quantitative methodology. A qualitative methodology, using focus group discussion, may have highlighted major issues and following initial qualitative methods a quantitative tool could have been developed. The low response rate is of concern. Respondents may be biased and may have only responded if they felt strongly about the subject.
However, respondents did raise some important issues, especially with regards to ethics which must be explored further. There should be ongoing research into differing models of healthcare provision (for example private-public partnerships). Medical school curricula should include training around models of healthcare. Consideration should be given to monitoring MHC using an independent monitoring authority.

3 BACKGROUND AND LITERATURE REVIEW:

This study explores private General Practitioners’ perceptions of “Managed Health Care” (MHC) in a South African context. This is an important area of study within the context of Family Medicine as it considers firstly, the post-modernism doctor-patient relationship within the micro- and macro-environment of health care service delivery and secondly, the principles of Family Medicine namely: the Family Physician is a) a manager of resources, b) committed to the person and c) views their practice as a population at risk.

As a background it is necessary to provide information on the following:

- Models of MHC
- Models of healthcare delivery in South Africa
- MHC in a South African context
3.1 Managed health care models:

There is no single definition of Managed Health Care. Steinert and Robinson reiterate this by stating that “Managed care is not a single identifiable technique.”

In the 1970's MHC rose to prominence in the United States of America with a realization that health care costs were escalating uncontrollably. Prior to this medical care was offered largely on a fee-for-service basis and following the introduction of MCH there was a reduction of health care costs which resulted in a surge in the MHC industry. In general there are at least two elements common to managed health care systems, a) some type of authorisation system and, b) some level of restriction on a member's choice of providers. The authorization system may be minimal, such as a simple hospital pre-certification requirement, or it may be comprehensive, such as a primary care physician (PCP) "gatekeeper" model.

There may be a restriction of choice of provider, which may be minimal (such "Preferred Provider Organisation" (PPO), or it may be strict, such as a "Health Maintenance Organization" (HMO).

Essentially all MHC models aim to manage the cost of the delivering of health care services and there are many models of MHC such as:

- Fee for Service (FFS)
- Service Plans
There are various opinions, amongst health care practitioners, managed health care organisations, patients and politicians, regarding the advantages and disadvantages to managing health care and this has led to debate, research and criticism in the countries in which MHC is practiced.

Some criticize MHC as not considering the vital role of the doctor in patient care:

"The cornerstone of the doctor-patient relationship is laid in the trust that the doctors are dedicated first and foremost to serving the needs of their patients." 

Without the commitment that doctors will place patients' interests first and will act as agents for their patients, there is no assurance that the patients' health and well-being will be protected.

"Herein arises a dilemma in managed care, since MHC systems restrict both patient and provider choice and could limit the clinical autonomy of providers." 

These concerns around provider autonomy as well as patient autonomy are echoed by several authors. In mitigation of MHC there is the consideration of distributive justice which considers the group or public rather than the individual.

Managed care introduces business considerations into the traditional doctor-patient relationship. Many large MHC companies are traded on the stock exchange in the USA.
This has raised much controversy in the USA, especially from the provider community. It is questioned whether these organisations are truly interested in the patients well-being and whether practitioners will be pressurized to ensure profits for these companies.\textsuperscript{7}

In a study examining the performance of MHC in the USA from 1980 to 1994, the authors concluded that MHC relative to traditional fee-for-service (i.e.: fee-for-service without any MHC component), resulted in a) lower utilization of hospital services, b) lower use of more expensive tests, c) a higher use of preventative services and d) inconclusive results on health outcomes.\textsuperscript{13} Similarly Steiner and Robinson show that, in general MHC seems to reduce hospitalization and the use of high-cost discretionary services, to increase preventative screening and to be neutral in terms of patient outcomes.\textsuperscript{5}

However healthcare providers may not be satisfied with MHC:

"Although most physicians have developed an understanding of the need to be attentive to cost quality and access issues, they often view managed care policies as profit-oriented and the scrutiny over clinical practice as presumptuous."\textsuperscript{8}

There is enormous concern among physicians that patients with a given diagnosis are considered a uniform population rather than a group of unique individuals with specific problems, for which the solutions are often complicated.\textsuperscript{8}

Physicians' clinical judgment appears to be challenged constantly by individuals with less experience and less expertise in the field and physicians' time and effort seem to be undervalued in general.\textsuperscript{8}
A major criticism of MHC by patients is that the model may lead to reduced access to care.\textsuperscript{6,14,15} This is evident in that since the 1990’s there has been a decline in the MHC industry in the USA and the posting of financial losses by MHC companies.\textsuperscript{6}

Barrett concludes that for many people, the connotation of MHC is that of quick and dirty medicine, devoid of quality and perhaps more seriously of dignity and caring.\textsuperscript{4}

3.2 Health care models in South Africa:

In South Africa two systems of health care are in existence:

- The Private Health Care System where an individual carries the responsibility of healthcare with assistance from various medical schemes
- The State Health Care System whereby the state provides health care for those unable to afford adequate medical cover. There is a scarcity of resources and there has been a shift in focus from tertiary health care to primary health care, rationalization of academic institutions and reallocation of human resources to primary health care facilities.

There has been a spiralling of cost in the private sector for many reasons which may include:

- Complications of the fee-for-service system with a lack of control of expenses by both the health care providers and the patient population
• Increasing costs of sophisticated medical technology
• An increasing number of health care providers in the private sector
• Inflation
• The general aging of the population
• HIV and AIDS
• Increasing use of special investigations for fear of malpractice suits.

Because of the spiralling health care costs there must be a need for revision of the health care system. Following the American trend of MHC systems, there has been a rise in South Africa of MHC systems, with the ultimate aim of improving the use of scarce resources, whilst maintaining high quality patient care.

3.3 MHC in South Africa:

Managed Health Care (MHC) was introduced into South Africa in the 1990’s and a common form of MHC is found in a subtype of HMO namely, Independent Practice Associations (IPAs). MHC in South Africa has been largely based on an American model; however there is increasing realization that drawing lessons from overseas is a fashionable activity but also a hazardous one. The export of ideas and evidence regarding managed health care is extremely problematic due to countries having different histories, cultures and socio-economic circumstances.
Some South African doctors felt that MHC companies tried to impose a reduction in fees for service, whilst at the same time imposing administrative restrictions on clinical practice. 6

Some doctors felt that MHC companies threatened to remove a pool of patients available to them. Gotlieb noted that MHC resulted in a climate of suspicion and “resulted in a laager mentality.” 6 He stated that co-operation between MHC companies and doctors was poor and as a result MHC industry failed to meet expectations. 6

4 RATIONALE FOR THIS STUDY:

MHC is relatively new in South Africa and given the background of suspicion around it, there needs to be continuous research to determine how best the needs of patients and healthcare providers are met with regard to delivery of health care. This will enable physicians to better access and manage resources in a more cost-beneficial way while considering the doctor-patient relationship within their micro- and macro-environment which are important aspects of family medicine.

When considering the changing health care delivery system brought about by MHC, a 14-item survey of a clinical faculty 16 found that:

- Physicians have difficulty navigating the changing health care system;
- Physicians have a generally negative view of managed health care (48% of the respondents strongly disagreed and 32.9% disagreed that managed health care
has improved medicine. A total of 80.9% of respondents had a negative view.

The survey also found that 52.5% of the respondents were satisfied with being physicians in this changing system;

- Medical education does little to prepare physicians for the new system.

A literature survey indicates that there are no recent studies reviewing doctors’ perceptions of MHC in South Africa and this study aims to address this gap.

5 AIM AND OBJECTIVES:

The aim of this study is to explore the private General Practitioners’ perceptions around MHC service delivery in South Africa with the following objectives:

- To review the perceptions around ethical clinical care in MHC
- To review the perceptions around the quality of health care delivery in MHC
- To review the perceptions as to who should design MHC programmes
- To review the perceptions as to who should regulate and monitor MHC
- To review if there is any relationship between the demographic characteristics of the practitioners and their perceptions
- To assist with the harvesting of information regarding MHC in a South African context and together with further research enable Family Physicians to better manage resources of health care service delivery
- To obtain information for possible use at a policy level when planning a viable health system in South Africa.
6 METHODS:

6.1 Study design

The study design was quantitative and descriptive.

6.2 Target population

The target population was General Practitioners working in the private sector in South Africa. This population was purposefully selected as it is the General Practitioner who is primarily involved with the introduction of MHC as a form of delivering health care to patients. The target population was sourced from the South African Private General Medical Practitioner Register of the Board of Health Care Funders (BHF).

6.3 Sample

The required size of sample was determined in consultation with a professional statistician and lecturer, Mrs. Tonya Esterhuizen, of the University of KwaZulu Natal and considered that the total number of actively practicing General Practitioners registered with the BHF, in 2007 (the year of the study) was 4121. A sample size of 30% was considered to allow some degree of generalizability and thus the sample size was estimated as 1500. However, it must be considered that this study was an exploratory one and generalizability was not considered to be a priority.
Selection of sample

The sample participants were selected using a stratified random sampling technique which considered probability proportional to size throughout the nine provinces of South Africa as shown below in Table 1.

Table 1: Participant sample proportional to provincial sample size-June 2007

<table>
<thead>
<tr>
<th>Province</th>
<th>Frequency</th>
<th>Percent</th>
<th>Sample</th>
<th>Sample Rounded off</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Gauteng</td>
<td>1530</td>
<td>37.13</td>
<td>556.9</td>
<td>557</td>
</tr>
<tr>
<td>2. Western Cape</td>
<td>673</td>
<td>16.33</td>
<td>244.96</td>
<td>245</td>
</tr>
<tr>
<td>3. Eastern Cape</td>
<td>326</td>
<td>7.91</td>
<td>118.66</td>
<td>118</td>
</tr>
<tr>
<td>4. Northern Cape</td>
<td>81</td>
<td>1.97</td>
<td>29.48</td>
<td>29</td>
</tr>
<tr>
<td>5. KwaZulu-Ntl</td>
<td>766</td>
<td>18.59</td>
<td>278.82</td>
<td>279</td>
</tr>
<tr>
<td>6. Mpumalanga</td>
<td>219</td>
<td>5.31</td>
<td>79.71</td>
<td>80</td>
</tr>
<tr>
<td>7. Limpopo</td>
<td>120</td>
<td>2.91</td>
<td>43.68</td>
<td>44</td>
</tr>
<tr>
<td>8. Free State</td>
<td>209</td>
<td>5.07</td>
<td>76.07</td>
<td>76</td>
</tr>
<tr>
<td>9. North West</td>
<td>197</td>
<td>4.78</td>
<td>71.71</td>
<td>72</td>
</tr>
<tr>
<td>Total</td>
<td>4121</td>
<td>100</td>
<td>1500</td>
<td>1500</td>
</tr>
</tbody>
</table>
6.4 Data collection

Data was collected using two tools, viz. a self-administered questionnaire and a demographic information sheet.

6.4.1 The questionnaire

A literature survey indicated that there were no validated tools to quantify doctors' perceptions of MHC. As such, the researcher designed and piloted a questionnaire in conjunction with a team of General Practitioners. Variables considered were based on information sourced in a literature review. A draft/pilot questionnaire was circulated amongst colleagues within the researchers' practice and colleagues were invited to comment on the content and suitability of the questions. The colleagues were also asked to add any questions they thought pertinent. A final questionnaire was formulated and again circulated amongst the researcher's colleagues for their comment.

The questionnaire consisted of five themes

- General rights and ethical issues
- Quality of health care delivery in MHC
- Design of MHC
- “Policing” of MHC
- Philosophy of MHC
The questionnaire contained thirty five questions and there were five possible answers for each of these questions. The answers were designed using the *Likert Scale* which allowed for scoring of the answers. This scale permitted the questions to be asked in both the positive and negative format and then to reverse the score of relevant questions to enable summation of the scores. The descriptive statistics for the individual questions were summarised and the median and mode was determined for each question in their original scales. The questions which were negatively phrased were re-coded. This resulted in all questions being on the same scale. The total score (the variable “total”) which was the mean of all the questions 1 to 35 was determined. This variable was then summarised overall and the median determined. The median gives an indication of the overall tendency of the respondents’ perceptions of MHC.

An open-ended question was included which allowed participants to add comments.

### 6.4.2 Demographic questionnaire

The demographic questionnaire included variables which considered

- age
- gender
- length of time in private practice
- place of practice
- type of practice
- Membership with IPA
- Consultant within an MHC organization
• Level of experience of MCH

This demographic questionnaire was included for description of the respondents and to determine if there is a relationship between their demographic characteristics and their perceptions.

Questionnaires together with a Study Information Sheet, informed consent and a stamped return envelop were posted to 1500 General Practitioners.

6.5 Reliability and Validity

• Reliability:

Reliability was considered by asking certain questions firstly in a positive format and secondly in a negative format later in the questionnaire. The opposite answer was obtained for questions asked again in the opposite format. When the answer to the negatively formatted question was scored at the opposite end of the Likert Scale i.e.: a negative score was then converted to a positive score, the score would be the same as that of the positively formatted question.

• Validity:

Validity was considered by asking the same question twice but using different wording for each question and maintaining the positive or negative format.
7 DATA ANALYSIS

Data analysis was both quantitative and qualitative.

7.1 Quantitative analysis

A professional statistician, Mrs. Tonya Esterhuizen, was consulted regarding the method of quantitative data analysis and data was initially captured in a *Microsoft excel* spreadsheet by the researcher was forwarded to the professional statistician for analysis.

Thereafter, data was imported into SPSS version 15.0 (SPSS Inc., Chicago, Illinois, USA) for analysis.

The analysis of data made use of descriptive statistics to summarize and present data.

7.2 Qualitative Data Analysis of question 36 (open-ended question)

Respondents’ comments to question 36 were read through several times and themes were identified. Comments were then placed within one of the theme categories and each comment was then scored as ‘for’ managed health care or ‘against’ managed health care.

The scores were then added and the final total scores of ‘for’ and of ‘against’ were determined.
8 RESULTS:

8.1 Response Rate

A total of 204 General Practitioners responded which equates to a national response rate of 13.60% (Table 2).

**Table 2: Response Frequency and Rate for Provinces and National – June 2007**

<table>
<thead>
<tr>
<th>PROVINCE</th>
<th>FREQUENCY</th>
<th>PERCENT</th>
<th>SAMPLE</th>
<th>SAMPLE ROUNDED OFF (N)</th>
<th>RESPONSE FREQUENCY (N)</th>
<th>RESPONSE RATE PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Guangeng</td>
<td>1530</td>
<td>37.13</td>
<td>556.9</td>
<td>557</td>
<td>78</td>
<td>13.60%</td>
</tr>
<tr>
<td>2 Western Cape</td>
<td>673</td>
<td>16.33</td>
<td>244.96</td>
<td>245</td>
<td>10</td>
<td>4.08%</td>
</tr>
<tr>
<td>3 Eastern Cape</td>
<td>326</td>
<td>7.91</td>
<td>118.56</td>
<td>10</td>
<td>8.47%</td>
<td></td>
</tr>
<tr>
<td>4 northern Cape</td>
<td>81</td>
<td>1.97</td>
<td>29.48</td>
<td>29</td>
<td>11</td>
<td>37.93%</td>
</tr>
<tr>
<td>5 KwaZulu-Natal</td>
<td>760</td>
<td>18.59</td>
<td>278.82</td>
<td>279</td>
<td>48</td>
<td>13.2%</td>
</tr>
<tr>
<td>6 Mpumalanga</td>
<td>219</td>
<td>5.31</td>
<td>79.71</td>
<td>80</td>
<td>13</td>
<td>16.25%</td>
</tr>
<tr>
<td>7 Limpopo</td>
<td>120</td>
<td>2.91</td>
<td>43.68</td>
<td>44</td>
<td>4</td>
<td>9.09%</td>
</tr>
<tr>
<td>8 Free State</td>
<td>209</td>
<td>5.07</td>
<td>76.07</td>
<td>76</td>
<td>20</td>
<td>26.32%</td>
</tr>
<tr>
<td>9 North West</td>
<td>197</td>
<td>4.78</td>
<td>71.71</td>
<td>10</td>
<td>33.06%</td>
<td></td>
</tr>
<tr>
<td>Total (National)</td>
<td>4121</td>
<td>100</td>
<td>1500</td>
<td>1500</td>
<td>204</td>
<td>13.6%</td>
</tr>
</tbody>
</table>
The Northern Cape Province had the best response rate (37.9%) and the second best response rate was that of the Free State Province (26.32%). The results are summarized in the graph below.

![Provincial Response Frequency Distribution]

**Figure 1: Provincial Response Frequency Distribution**

### 8.2 Demographic Profile

#### 8.2.1 Age and Gender Distribution of Respondents:

The age of the respondents ranged from a minimum of 30 years to a maximum of 82 years, with an average of 54 years. Most respondents (181; 89.6%) were male (figure 2, below).
8.2.2 Practice Experience of Respondents:

The length of time that the respondents were in practice ranged from a minimum of 1 year to a maximum of 58 years with an average of 25 years. Half of the respondents (106; 52%) reported that they worked in a suburb and the rest were distributed between rural and city practices (figure 3, below).
Figure 3: Place where respondents practice-June 2007

8.2.3 Types of Practice of Respondents:

Half (57, 4%) of the respondents were in solo-practice. This was followed by 26, 2% of the respondents being in partnerships and 16, 3% of respondents were in associated practices (figure 4, below).
8.2.4 IPA Affiliation of Respondents:

Most (71.1%) of the respondents were members of Independent Practice Associations (IPAs). 28.9% of the respondents did not belong to an IPA (figure 5, below).

**Figure 4:** The type of practice of practice of respondents.

---

*N=16 (57.4%)
*N=33 (16.3%)
*N=53 (26.2%)

N=202 (Corrected valid percent= 100)

Before correction:
N=204 (99%) valid + 2 (1%) missing
Figure 5: IPA membership of respondents - June 2007

8.2.5 MHC Consultancy:

Most (83.2%) respondents were not consultants within organisations. It was found that 16.8% of the respondents were consultants within organisations (figure 6, below).
Figure 6: The distribution of respondents being consultants with an organisation—June 2007

8.2.6 MHC Experience of Respondents:

Just under half (42.3%) of the respondents have some experience of managed health care. A third (33.8%) have a lot of experience with managed health care, 12.9% of the respondents did not have much experience and 10.9% had no experience with managed health care (figure 7, below).
Figure 7: Level of MHC experience of respondents - June 2007
8.3 Results of the questionnaire

A total of 204 questionnaires was received and results are annotated and summarized below.

**Table 3: Summary of frequencies for questions 1 to 35 as determined from the response to the 35-Question Survey in the Republic of South Africa - June 2007**

<table>
<thead>
<tr>
<th>Question</th>
<th>Valid</th>
<th>Missing</th>
<th>Total</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Uncertain</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. MHC not impact on FFS</td>
<td>201</td>
<td>3</td>
<td>204</td>
<td>7 [3.5]</td>
<td>21 [10.3]</td>
<td>9 [4.5]</td>
<td>88 [43.8]</td>
<td>76 [37.8]</td>
</tr>
<tr>
<td>4. MHC not influence GP ethics</td>
<td>202</td>
<td>2</td>
<td>204</td>
<td>8 [4]</td>
<td>17 [8.4]</td>
<td>0 [0]</td>
<td>69 [34.2]</td>
<td>10 [5.1]</td>
</tr>
<tr>
<td>7. GP autonomy not reduced by MHC</td>
<td>202</td>
<td>2</td>
<td>204</td>
<td>8 [4]</td>
<td>17 [8.4]</td>
<td>0 [0]</td>
<td>69 [34.2]</td>
<td>10 [5.1]</td>
</tr>
</tbody>
</table>
### Table: 8.3.1 Theme 1: General rights and ethical issues: questions 1-7

<table>
<thead>
<tr>
<th>Question</th>
<th>N</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Uncertain</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>

### 8.3.1 Theme 1: General rights and ethical issues: questions 1-7

**Question 1. MHC does not impact on a patients' right to healthcare**

Three were 201 correctly completed questionnaires. Most respondents (81,6%) disagreed with the statement “Managed health care does not impact on the traditional fee for service patients' rights to access to health care as the patient deems necessary.” Only 13,9% agreed with the statement.

**Question 2. Managed health care does not impact on the private general practitioners' rights to provide health care as the practitioner deems necessary.**

There were 202 valid responses and most (88,7%) disagreed with the statement “Managed health care does not impact on the private general practitioners' rights to provide health care as the practitioner deems necessary.” Only 9,9% agreed.
Question 3. Managed health care organizations have a right to determine the health management decisions of the private general practitioner.

There were 202 valid responses and most (81.7%) disagreed with the statement “Managed Health Care Organizations have a right to determine the health management decisions of the private general practitioner”. Only 13.4% agreed.

Question 4. Managed health care does not influence the private general practitioners' ethical considerations.

There were 202 valid responses and most (83.2%) disagreed with the statement “Managed health care does not influence the private general practitioners' ethical considerations. Only 2.5% agreed.

Question 5. Managed health care may result in unethical action by the general practitioners, such as under-servicing.

There were 202 valid responses and most (78.2%) agreed with the statement “Managed health care may result in unethical action by the general practitioners, such as under-servicing. Only 14.4% disagreed.

Question 6. The patients' autonomy is not reduced by managed health care.

There were 202 valid responses and most (88.6%) disagreed (40.6% strongly disagreed and 48% disagreed) with the statement “The patients' autonomy is not reduced by managed health care.” Only 7.9% agreed (1.5% strongly agreed and 6.4% agreed).
Question 7. The private general practitioners' autonomy is not reduced by managed health care.

There were 202 valid responses and most (93,6%) disagreed (49,5% strongly disagreed and 44,1% disagreed) with the statement “The private general practitioners' autonomy is not reduced by managed health care.” Only 5% agreed.

8.3.2 Theme 2: Quality of health care delivery: questions 8-20

Question 8. Managed health care improves the quality of care provided to the traditional fee for service patient.

A total of 202 valid answers were received and most (81%) disagreed (31,5% strongly disagreed and 49,5% disagreed) with the statement “Managed health care improves the quality of care provided to the traditional fee for service patient.” Only 6,4% agreed.

Question 9. Traditional fee for service health care delivery does not make evidence-based medical care a pre-requisite of health care decisions.

There were 201 valid responses to this question and half (53,7%) disagreed with the statement “Traditional fee for service health care delivery does not make evidence-based medical care a pre-requisite of health care decisions.” Only 24,4% agreed.

Question 10. The managed health care formularies are strictly scientifically based.

There were 202 valid responses and most (66%) disagreed with the statement “The managed health care formularies are strictly scientifically based.” Only 11,9% agreed.
Question 11. The quality of health care is improved by adherence to the managed care formularies.

There were 202 valid responses to this question and most (80.2%) disagreed with the statement “The quality of health care is improved by adherence to the managed care formularies.” Only 5% agreed and none strongly agreed.

Question 12. Managed health care results in under-servicing of patients health needs.

There were 202 valid answers and most (73.6%) agreed with the statement “Managed health care results in under-servicing of patients health needs.” Only 12.4% disagreed.

Question 13. Where risk-sharing occurs in managed health care, under-servicing of patients is a concern.

A total of 202 responses were valid and most (79.2%) agreed with the statement “Where risk-sharing occurs in managed health care, under-servicing of patients is a concern.” Only 6.9% disagreed.

Question 14. The optimal implementation of Managed Health Care programmes results in improved quality of health care delivery.

There were 202 valid responses and most (60.9%) disagreed with the statement “The optimal implementation of Managed Health Care programmes results in improved quality of health care delivery.” Only 18.8% agreed.
Question 15. The concept of risk-pooling, considered in some managed health care programmes, is a perverse incentive to under-service.

There were 201 valid responses and most (71.6%) agreed with the statement “The concept of risk-pooling, considered in some managed health care programmes, is a perverse incentive to under-service.” Only 8.5% disagreed.

Question 16. The restrictions and techniques of managed health care disadvantage the provision of quality care.

There were 202 valid responses and most (88.7%) agreed with the statement “The restrictions and techniques of managed health care disadvantage the provision of quality care.” Only 6.4% disagreed.

Question 17. Traditional fee for service care is superior in quality to that of capitated health care.

There were 200 valid responses and most (81%) agreed with the statement “Traditional fee for service care is superior in quality to that of capitated health care.” Only 10.5% disagreed.

Question 18. Managed health care treatment protocols substantially improve the health care outcome of patients compared to the outcome prior to the advent of managed health care.

There were 202 valid responses and most (77.2%) disagreed with the statement “Managed health care treatment protocols substantially improve the health care outcome
of patients compared to the outcome prior to the advent of managed health care.” Only
5% agreed.

Question 19. Traditional fee for service care encourages over-servicing by way of
recurrent episodic care.

There were 202 valid responses and just over half (55%) disagreed with the statement
“Traditional fee for service care encourages over-servicing by way of recurrent episodic
care.” Almost a third (29.7%) agreed and the remaining respondents (15.3%) were
uncertain.

Question 20. Access to health care in rural areas is improved by managed health
care.

There were 202 valid responses to this question and 41.1% disagreed with the statement
“Access to health in rural areas is improved by managed health care.” Almost a third
(30.7%) agreed and 28.7% of the respondents were uncertain.

8.3.3 Theme 3: Design of MHC: questions 21-30

Question 21. Managed health care is best designed by medical aid organizations.

There were 202 valid responses and most (84.7%) disagreed with the statement
“Managed health care is best designed by medical aid organizations.” A minority (5%)
agreed.
Question 22. Unbiased academics in medical schools should design managed health care structures.

There were 202 valid responses and half (52%) agreed with the statement “Unbiased academics in medical schools should design managed health care structures.” A third (36.7%) disagreed and 11.4% were uncertain.

Question 23. Under-graduate education should include managed health care as a course.

There were 202 valid responses and just over half (59.4%) agreed with the statement “Under-graduate education should include managed health care as a course.” A quarter (21.2%) disagreed and 19.3% were uncertain.

Question 24. If all general practitioners were trained in un-biased managed health care there will be no need for third party interference.

There were 202 valid responses and half (54.4%) agreed with the statement “If all general practitioners were trained in un-biased managed health care there will be no need for third party interference.” A quarter (24.2%) disagreed and almost a quarter (21.3%) were uncertain.
Question 25. If financial consideration was not an issue, there will be no need for managed health care.

There were 202 valid responses and most (80,2%) agreed with the statement “If financial consideration was not an issue, there will be no need for managed health care.” Only 13,4% disagreed.

8.3.4 Theme 4: “Policing” of MHC: question 26-30


There were 202 valid responses and just over half (57%) disagreed with the statement “Managed health care organizations should “police” managed health care.” Almost a third (30,2%) agreed and 12,9% were uncertain.

Question 27. Managed care “policing” is best performed by HPCSA.

There were 202 valid responses and half (51,5%) disagreed with the statement “Managed care “policing” is best performed by HPCSA.” A quarter (27,8%) agreed and 12, 9% were uncertain.

Question 28. There is no need to “police” managed health care providers.

There were 202 valid responses and half (49%) disagreed with the statement “There is no need to “police” managed health care providers.” Almost a third (31,6%) agreed and 19,3% were uncertain.
Question 29. It is correct that general practitioners, as advocates for patients, be held medico-legally accountable for any negative outcome of health management as dictated by medical aid organizations.

There were a total 201 valid responses and most (86.5%) disagreed with the statement “It is correct that general practitioners, as advocates for patients, be held medico-legally accountable for any negative outcome of health management as dictated by medical aid organizations.” Only 9.5% agreed.

Question 30. Medical aid organisations should not be held medico-legally accountable for health management directives they have given to patients and general practitioners.

There were 200 valid responses and most (92%) disagreed with the statement “Medical aid organisations should not be held medico-legally accountable for health management directives they have given to patients and general practitioners.” Only 5.5% agreed.

8.3.5 Theme 5: Philosophy behind MHC: questions 31-35

Question 31. Managed care is structured to be to the patients' benefit.

There were 202 valid responses and most (68.3%) disagreed with the statement “Managed care is structured to be to the patients' benefit.” Only 13.4% agreed and 18.3% were uncertain.
Question 32. Managed care is structured to maximize profitability of the
underwriters.

There were 202 valid responses and most (87,1%) agreed with the statement “Managed
care is structured to maximize profitability of the underwriters.” Only 7,5% disagreed.

Question 33. Managed care is structured to be of maximum advantage to the
general practitioner by guaranteed fee for service.

There were 202 valid responses and most (85,2%) disagreed with the statement
“Managed care is structured to be of maximum advantage to the general practitioner by
guaranteed fee for service.” Only 7,4% agreed.

Question 34. If managed health care principles are applied to general practitioners
then they should be applied to specialists.

There were 202 valid responses and most (81,7%) agreed with the statement “If managed
health care principles are applied to general practitioners then they should be applied to
specialists.” Only 9,9% disagreed.

Question 35. Managed care is structured to be of maximum advantage to the
general practitioner by prescription driven control.

There were 201 valid responses and most (78,1%) disagreed with the statement
“Managed care is structured to be of maximum advantage to the general practitioner by
prescription driven control.” Only 5% agreed and 15,4% were uncertain.
8.4 **Summary Statistics of the Likert Scale variables: questions 1-35 (Appendix H-I)**

The total score (the variable “total” with all questions being on the same scale), was 3,7480. When summarised overall the total score resulted in a median of 3,76 which according to the *Likert* scale indicates an overall tending towards “disagree” with MHC for all perceptions 1-35.

8.5 **Correlation between demography and closed-ended questions**

The correlations between demography and responses to closed-ended questions are summarized below:

- A Levene's Test and T Test for male and female respondents found that gender of respondents did not influence their perception of managed health care (Levene's Test; p=0.433 which is not significant. T Test 2-tailed level of significance was 0.886 which was not significant).

- Similarly there was no significant difference between place of work and perceptions of MHC (p=0.725).

- There was no significant difference between place of practice and perception of MHC (p=0.182).
• There was no significant difference between respondents who were members of IPA and those who were not ($p=0.423$).

• There was a significant difference between whether a GP was a consultant for a MHC organisation and his/her perceptions (Levene's test, $p=0.009$ and T Test $p=0.007$). Being a consultant influenced a respondent's perception of MHC.

• There were no significant differences between level of experience of MHC and perceptions ($p=0.445$).

• There was no significant difference between urban and rural doctors perception of MHC ($p=0.912$).

• There were no significant difference between perceptions of doctors from the various provinces ($p=0.710$).

8.6 Qualitative analysis of question 36: Comments about Managed Health Care.

This question was an open question and considered comments that the respondents gave about managed health care. This was not a “compulsory” question. There were 65 (31%) respondents who completed question 36.

For descriptive purposes, the demographic characteristics of the respondents are summarized (Table 4).
Table 4: Demographics profile of respondents of question 36 in June 2007

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male:</td>
<td>58/65</td>
<td>(89,3%)</td>
</tr>
<tr>
<td>Female</td>
<td>7/65</td>
<td>(10,7%)</td>
</tr>
<tr>
<td>Place:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>City Centre:</td>
<td>8/65</td>
<td>(12,3%)</td>
</tr>
<tr>
<td>Suburb:</td>
<td>33/65</td>
<td>(50,8%)</td>
</tr>
<tr>
<td>Rural:</td>
<td>24/65</td>
<td>(36,9%)</td>
</tr>
<tr>
<td>Type:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solo:</td>
<td>44/65</td>
<td>(67,7%)</td>
</tr>
<tr>
<td>Association:</td>
<td>7/65</td>
<td>(10,8%)</td>
</tr>
<tr>
<td>Partnership:</td>
<td>14/65</td>
<td>(21,5%)</td>
</tr>
<tr>
<td>IPA:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes:</td>
<td>46/65</td>
<td>(70,8%)</td>
</tr>
<tr>
<td>No:</td>
<td>19/65</td>
<td>(29,2%)</td>
</tr>
<tr>
<td>Consultants:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes:</td>
<td>14/65</td>
<td>(21,5%)</td>
</tr>
<tr>
<td>No:</td>
<td>51/65</td>
<td>(78,5%)</td>
</tr>
<tr>
<td>Experience:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lot:</td>
<td>27/65</td>
<td>(41,6%)</td>
</tr>
<tr>
<td>Category</td>
<td>Frequency</td>
<td>Percent</td>
</tr>
<tr>
<td>-----------</td>
<td>-----------</td>
<td>---------</td>
</tr>
<tr>
<td>Some:</td>
<td>26/65</td>
<td>(40%)</td>
</tr>
<tr>
<td>Not much:</td>
<td>6/65</td>
<td>(9.2%)</td>
</tr>
<tr>
<td>None:</td>
<td>6/65</td>
<td>(9.2%)</td>
</tr>
</tbody>
</table>

Themes identified are summarized below:

**Education:** Respondents were of the opinion that there was a need to educate patients about what Managed Health Plans offer. Respondents felt that financial and time consuming burdens were placed on both patients and providers due to poor information.

**Profession:** Respondents felt that the practice of medicine is a profession and as such, should not have outside interference by non-medical professionals, or lay-people. It was felt that third party interference negatively impacted on the cost of health services and the quality thereof. Other respondents felt that managed health care would identify and rectify poor management by practitioners who have not followed evidence based medicine protocols.

**Financial:** It was felt that third party interference resulted in a greater cost to the rendering of services. Managed health care was for the financial benefit, by way of profits, for funders. Respondents felt that due to the increased time spent on managed health care with resultant increased costs, General Practitioners servicing managed health care should be paid more. Some respondents felt that if managed care was managed properly then it would result in financial savings for the members and not be for profit.
making of the administrators. Managed health care would identify those who overserviced.

**Quality:** Respondents felt that fee-for-service care was of better quality than managed health care. Some respondents, however, felt that managed health care was better than no medical aid care at all. Respondents felt that managed health care improved preventative care. It was felt that formularies did not improve the quality of care and may help improve the profit of Managed Health Care organizations.

**Policy:** Comments regarding policy were either general about who manage or police health care or, more specific such as, if certain policies are adopted it would be advantageous for managed health care.

The number of participants expressing a positive or negative view of a theme is summarized below (Table 5).
Table 5: Summary of themes: question 36

<table>
<thead>
<tr>
<th>Theme</th>
<th>For or Against the Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>For</td>
</tr>
<tr>
<td>Education</td>
<td>1</td>
</tr>
<tr>
<td>Financial</td>
<td>1½</td>
</tr>
<tr>
<td>Philosophy</td>
<td>6½</td>
</tr>
<tr>
<td>Policy</td>
<td>1</td>
</tr>
<tr>
<td>Profession</td>
<td>1</td>
</tr>
<tr>
<td>Quality</td>
<td>2</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>13</td>
</tr>
</tbody>
</table>
DISCUSSION:

The objective of this research study was to determine the perceptions that private General Practitioners in the Republic of South Africa have about Managed Health Care (MHC).

A possible shortcoming of the study design was that it was mainly quantitative and the closed-ended questionnaire design anticipated the main themes of doctors' perceptions. A more qualitative preliminary approach may have been more useful and quantitative methods could have arisen from a preliminary qualitative exploration. Focus group discussions with several groups of General Practitioners may have allowed for a more in-depth understanding of themes around MHC. Issues would then arise regarding which General Practitioners to include and how many. However, the use of a qualitative methodology may have allowed for the exploration of a wider range of views and opinions.

There were significantly more male than female respondents. This may reflect a male predominance in the selection of potential participants or may reflect that there are more male than female GPs. Interestingly perceptions were not related to gender.

Most respondents had practiced for at least 25 years so they would have experienced fee-for-service and MHC models. Perhaps older GPs felt more strongly about MHC and felt more motivated to respond to the questionnaires.

A majority of respondents stated that they had some or a lot of experience with MHC. Perhaps GPs who had no experience were reluctant to complete the questionnaire and so results may be biased towards those who were experienced.
There may have been a problem with interpreting some questions on the closed-ended questionnaire and, in particular questions 1, 2 and 8 may be ambiguous as discussed below.

Question one, states: Managed health care does not impact on the traditional fee for service patients' rights to access to health care as the patient deems necessary. What was being asked by the researcher is whether MHC has not impacted on patients who are now part of MHC programmes and were previously members of a traditional fee for service. However the question could also consider patients who are still on a fee for service plan but with some form of management of health care, such as authorization of procedures.

Question two, states: Managed health care does not impact on the private general practitioners' rights to provide health care as the practitioner deems necessary.

Similarly to question one, what the researcher was asking is whether MHC does not influence the general practitioners' rights when the practitioners are managing MHC plan patients.

Question eight, states: Managed health care improves the quality of care provided to the traditional fee for service patient. Again, similarly to questions one and two, the researcher was asking whether MHC has improved the quality of care provided to patients who were on a 'pure' fee for service plan and now have a component of MHC applied to their plans, or, patients that were on a fee for service plan and are now on 'pure' MHC plans.
The sample was selected to be national and the numbers were structured to represent the number of potential participants in each province. There was a poor response rate, but this response rate is expected as postal surveys generally have a low response rate. However, this study was not overly concerned with generalizability from a sample population to a target population. It is, however, interesting to note that there was no significant difference between perceptions of respondents across the provinces no matter the provinces’ response rate.

The researcher was concerned with the low response rate and considered that some of the questionnaires that were mailed in batches had gone missing. When these participants were sent reminders by electronic-mail, it was found that the majority had not up-dated their contact details on the register. Some respondents were telephoned and stated that they had, either, not received the questionnaire and requested that they be re-sent to the new address, or, that they would give it consideration in due course.

Of major concern, is the fact that most participants felt that MHC influences their rights and ethical considerations; an implication was that they felt they had to act against their moral or ethical beliefs. This is of vital concern as studies on Moral Reckoning have indicated that if a healthcare provider has to act against his/her own moral or ethical code then there will be a sense of dissatisfaction which can lead to ill health and lead to a healthcare worker leaving their profession. In a more broad context, ethics is a major consideration as the health profession realizes that ethical codes provide moral platforms on which they can lay claim to the trust of society. A disregard for ethical codes can
act to divide a health care community which has been recognized as requiring more unity.\(^\text{18}\)

The majority of respondents felt that their right to provide services, as they deemed appropriate was reduced, as was the patients' right of access to these services. This finding is similar to that found in a survey conducted by the Commonwealth Fund.\(^\text{14}\)

There is also concern around issues such as autonomy; doctors felt that their own and patients autonomy was reduced by MHC. Autonomy is a fundamental principle of biomedical ethics and if MHC is undermining autonomy then alternate models for health care delivery must be considered. International literature is congruent with the findings regarding autonomy.\(^\text{4,5,7,8,9,10,11,12}\) Steiner and Robinson in their review of 70 articles, found that there were restrictions on providers but especially doctors' autonomy.\(^\text{5}\) This was also confirmed by Weiland who states that, “there is little question that the managed health care overlay presents some real challenges to physician autonomy”.\(^\text{8}\) Similarly, Barrett states that young medical students, willing to work in HMOs, were comfortable with the loss of income and decreased autonomy.\(^\text{4}\)

An outstanding finding is that most doctors felt that MHC did not increase the quality of care being offered to South African patients and felt that it disadvantaged the healthcare provider and the patient. Most felt that MHC was not structured to benefit a patient and was designed to maximize profitability for MHC companies. Doctors felt that MHC was not designed to benefit the healthcare provider. These findings are similar to those of a survey of members' (patients) views of their health care plans; in this survey, members of
MHC plans rated the quality of service less highly than did members of fee-for-service plans.\textsuperscript{14}

Respondents believed that MHC led to under-servicing of patients; an alternative model of care may consider, for example, private-public partnerships. In such a partnership a patient may have access to a public health system when an expensive investigation or treatment is not available to him/her privately.

Respondents felt that MHC negatively impacted on patients' access to health care when compared with traditional fee-for-service models. This finding is vital and must be further explored. A further study should consider reasons why doctors felt that MHC was negative for patient access and there should be a quantitative review to determine if patient access to health care is actually curtailed by MHC systems.

Respondents also felt that their ability to offer service was negatively impacted on by MHC, due to the various restrictions and techniques of MHC, such as treatment protocols and formularies, resulting in under servicing. Again there should be further qualitative exploration- in what way were doctors unable to provide care for their patients within a MHC model? There should be more specific quantitative research- are patients disadvantaged by doctors' limitations within a MHC system?

Doctors felt that MHC formularies were not based on scientific evidence and felt that their patients were disadvantaged when the doctor adhered to such formularies. This
deserves further investigation. How were these formularies developed—was it on an evidence-base? This is of great concern as most doctors felt that MBC treatment protocols did not lead to improved outcomes.

Most doctors felt traditional-fee-for-service care was superior and half felt that patients were not over serviced in this model. Would it be worth re-looking at this model with perhaps more rigid supervision and monitoring the services available?

Of interest was the finding that most respondents considered that access to healthcare in rural areas was not improved by MHC. One may assume that MHC would allow those previously disadvantaged by unaffordable health care options more easier access to care via a more affordable MHC plan.

Most doctors felt that MHC should not be designed by Medical Aids. This finding may allude to the general suspicion around MHC and a perception that such MHC is designed for profit and not for optimal patient care. This perception is echoed by Barret who mentions that for many, HMOs are for “quick and dirty medicine”. Similarly, it has been written that MHC has an inherent incentive to compromise quality in order to reduce costs and thereby increase profits. Perhaps doctors should form cooperation with Medical Aids to develop and implement a model where profit is balanced with care.

Undergraduate training in unbiased MHC structures designed by other than MHC organisations may remove third-party (Medical Aids) interference and thereby address
quality and cost effectiveness. Venter, is of the opinion that GPs should deal directly with their patients and reduce cost while maintaining quality care by excluding third party involvement.19

Respondents were of mixed opinions regarding if MHC should be policed and who should police it. Some felt it should be policed by an independent body such as the Health Professionals Council of South Africa. Interestingly, a third felt it should be policed by the MHC Company. Further statistical analysis of this perception relative to the demographic characteristics of the respondents is required to determine if there is a significant relationship with being or not being a consultant within a MHC organisation.

Most medical school undergraduate programmes do not teach around various models of healthcare delivery. Schools should invite private General Practitioners to present on the advantages and disadvantages of various health care models. Young doctors could then become empowered to understand and change a system if they perceive that it is ineffective or unethical.

The results summarizing all of the perceptions determined from the closed questions quantitatively showed that there is an overall tendency of the perceptions to be in disagreement with MHC. All but one of the demographic characteristics did not significantly influence the perceptions of the respondents.
The results indicated that perceptions were significantly influenced by whether the GP was a consultant in a MHC organisation. It would be interesting to further link positive perceptions of MHC to whether the GP was a consultant or not.

If the current MHC models of care are considered to be unsuccessful then alternative models of care should be developed after considering the outcome of this and further investigations. New models may consider a fee for service plan which has certain restrictions in place with the aim of curbing costs without severely negatively impacting on the rights and ethical considerations of the patients and providers and the quality of delivery of health care service. Such fee for service plans, by entering public-private partnerships, may enable improved access to care for the private patients with limited secondary and tertiary care. Likewise the public health care service may draw on the private sector's advanced technical equipment and procedural skills. Such a partnership will permit various options and levels of care with bridging support allowing for natural selection from a broad base and evolution without the danger of extinction as a result of no variation in the types of health care services delivery.
10 CONCLUSION:

This study concludes that respondents believe that:

- Managed Health Care impacts negatively on the rights of both, private general medical practitioners and patients;
- MHC should not have undue authority over the health management decisions of the general practitioners;
- The autonomy of both, private patients and private general medical practitioners has been reduced by MHC;
- The quality of health care service delivery to patients by the optimal implementation of MHC health care systems is not an improvement relative to traditional fee-for-service models;
- MHC is largely designed to be of benefit to the MHC organizations by profit driven mechanisms;
- MHC should not be designed by MHC organizations;
- MHC courses should be included in the undergraduate medical students' curriculum;
- MHC requires monitoring by an independent body not affiliated to the MHC industry;

There must be further review of MHC especially if it is causing poorer quality care and distress for General Practitioners. There must be research into other models for healthcare services delivery.
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APPLICATION FOR ETHICAL APPROVAL: PART 1
For research on human participants (Medical)

SECTION 1: ADMINISTRATIVE DETAILS

Name: Dr Mitchell Robert Scott

Professional status:
Private general medical practitioner and post-graduate student.
Student: Master of Medicine in Family Medicine. Second year.
Student no.: 781780321.

University Department: Department of Family Medicine.

Where employed: Self employed: Private general medical practitioner.
Medicross Pinetown. 2 Greathead Place, Pinetown.
Part-time student.

HPCSA No. MP 90365211

Correspondence address: P.O.Box 1433, Kloof, KZN, 3640.

1.1 TITLE OF PROJECT: Perceptions around Managed Health Care service delivery in Private Medical Care in the Republic of South Africa.

Where will the research be carried out?: Questionnaires will be forwarded to participating private medical general practitioners in the Republic of South Africa.

1.2 PURPOSE OF RESEARCH:

Postgraduate degree: Master of Medicine in Family Medicine, M.Med.(Fam.Med).

1.3 STUDENT NO.: 781780321

1.4 PRINCIPAL INVESTIGATOR: Dr Mitchell Robert Scott. Postgraduate student.
There are no co-investigators.
Appendix A: Approved Protocol

1.5 FUNDING

No funding has been secured. The researcher will fund the research.

SECTION 2: DISCLOSURES

1. Has this study been or is it likely to be submitted to any other ethics review committee? No.

2. If yes, please name the committee: Not applicable.

3. Has this study been or is it likely to be submitted to any regulatory body? No.

4. If yes, please give outcome. Not applicable.

5. Have you been previously/are you currently being investigated in regard to alleged misconduct relating to research-related activities? No.

6. Are any of your intended research participants in other research trials? I am not aware of any such participation. The research is questionnaire based and not clinical.

7. Are you presently involved in other trial activities? I am not currently involved in any other research activities.

8. There will be no storage of tissue.

9. If tissues are to be exported, please attach permits: Not applicable.

10. Conflict of interest:

I am a consultant and shareholder within the Medicross Medical and Dental Group which is part of Netpartners and the Netcare group. Medicross has interests in managed health care service delivery. The findings of the research may be detrimental to the image of managed health care and hence the views of Medicross, Netpartners, Netcare and the South African Managed Care Coalition. I will not be funded by the group.

Dr Mitchell Robert Scott
SECTION 3: THE PROTOCOL

3.1 THE PROJECT:

3.1.1 Aims (objectives of study)- please list.
3.1.1.1 Determine the perceptions regarding ethical clinical care and the rights of the stakeholders in managed health care.
3.1.1.2 Determine the perceptions regarding the quality of health care delivery in managed health care.
3.1.1.3 Determine the perceptions as to who should be responsible for the design of managed health care programmes.
3.1.1.4 Determine the perceptions as to who should regulate and monitor managed health care.

3.1.2 Hypothesis to be tested.
There is no hypothesis to be tested but a research question to consider:
What are the perceptions around Managed Health Care service delivery in private health care in the Republic of South Africa?

3.1.3 Summary of the proposed research.
Managed Health Care although relatively new to South Africa has existed in the United States of America and the United Kingdom for many years. Managed Health Care has impacted in various ways on the delivery of health care services in these countries and there is on-going research in this regard.

There is a need to determine the perceptions that private general practitioners have of Managed Health Care in the South African context. This will be determined by way of a questionnaire mailed to a national sample of private general practitioners and Independent Practitioner Association co-ordinators. The information gained may be used in the planning of a viable health system for South Africa.

3.1.4 Keywords (for data-base):
"Managed Care Programs", "Quality of Health Care", Perceptions, Ethics.

3.1.5.1 Background and Literature:
Background:
Managed Health Care (MHC) is relatively new to private medical care in the Republic of South Africa. There are various forms of managed health care evolving, some of which include, for example, independent practice associations (IPA's), preferred provider organisations (PPO's) and network model health maintenance organisations (HMO's). These organisations differ from each other with regards to the mode of delivery of service.
Appendix A: Approved Protocol

The South African private health care sector has traditionally been an indemnity health insurance system with reimbursement on a fee for service per episode of care. Over the past ten years there has been a transition towards a managed care system with reimbursement based on capitation or a managed fee for service. Simply stated, Managed Health Care involves a measure of risk-sharing between the medical-aid schemes and the providers of services. There are certain management programmes that managed care employs which can affect both the provider of care and the patient. These management programmes include financial incentives, utilization management reviews, physician profiling and disease management. The management programmes may impact on both the patients' and the providers' constitutional rights and the providers' ethics regarding the delivery of health services.

Literature review:
Health care is a human right. There are several stakeholders in bringing about this basic need, for example, the patient, the health care provider and the health care administrators. There are codes of ethics which provide moral platforms, on which to build standards for the professions, which enable the trust of society. There is a case for a moral framework, conducive to co-operative behavior and mutual respect, amongst the stakeholders (Smith, R; et al., 1999). The differences in stakeholder groups regarding ethics may be evident from their particular background: those focused on providing care to individual patients may have ethical tradition based on principles such as patient autonomy and commitment to individual, those focused on public health and public policy may have ethical tradition based on principles such as balancing the good of the individual against the good of many, those focused on business and the financing of health care may have ethical tradition based on principles such as obligation to fulfill contracts, (Woodstock Report, 1999). The consideration of ethical issues in managed health care is still a work in progress in countries, which have had several years of exposure to managed health care, such as the United States of America.

There are various opinions regarding the problems of the cost of private health care and the varying quality of care that is delivered. These issues need to be addressed. Some attribute these problems to the actions of health care providers. Such actions include: over-servicing, in-appropriate therapy and procedures not following evidence based medicine guidelines, practicing purely curative medicine and not preventative medicine, (The State of Health Care Quality, 2004), and being profit driven. Others attribute these problems to the actions of the administrators of managed health care organisations. Such actions include: raising premiums and reducing services, corporate profits impacting on the medical needs of the patient, allocating significant resources in unproductive utilisation and peer review processes and increasing non clinical costs, (The Burton Report, 2005).
Appendix A: Approved Protocol

Having considered ethical issues and the advantages and disadvantages of managed health care, one must consider as to who is accountable for management decisions that may have a negative impact on the medical care patients receive. There is an ongoing debate as to who should be held responsible for the negative impact that managed health care may have on the health care system.

There is a need to develop guidelines to regulate the implementation of managed health care programmes. Most of the work thus far, has been done in the United States of America. Managed care is evolving in South Africa. There is much foreign literature regarding the advantages and disadvantages of managed health care delivery and the need to refine and re-invent managed care models.

3.1.6 Key References:


Appendix A: Approved Protocol

3.2 PLAN OF INVESTIGATION:

(a) **Proof of concept – justify scientific validity of the research.**

Managed Health Care is relatively new to South Africa when compared to the United Kingdom and the United States of America. Research around Managed Health Care is ongoing in these foreign countries and much needs to be done regarding Managed Health Care in South Africa. There is a need for this research in that information gained may be helpful in bringing about a viable health system for both patients and health care providers in South Africa.

(b) **Design:** Cross-sectional structured questionnaire design.

Prof. M.N. Chetty of the Department of Managed Health Care and also of the Department of Family Medicine, as well as, Prof. S.S. Naidoo Head of the Department of Family Medicine, were consulted regarding the design of this research. The method for determining the perceptions around managed health care delivery will include:

- A literature review of managed health care.
- A structured self-administered questionnaire to be completed by private general medical practitioners in the Republic of South Africa.

(c) **Statistical planning:**

This research has been discussed with a professional statistician, namely:

Mrs. Tonya Esterhuizen—tel. 031 260 4522.

Sample: The sample will be randomly selected from the private general medical practitioners registered with the HPCSA.

Reliability and validity are considered in the design of the questionnaire.

(d) **Participants:**

Private general medical practitioners in the Republic of South Africa.

Source: Volunteers sourced from the Board of Health Care Funders' private general medical practitioner register.

Age: Adults of any age group.

Numbers: This will be determined statistically from a random sample as determined in consultation with Mrs. Tonya Esterhuizen (Professional Statistician), around 200.

There will be no control groups.

Selection and exclusion criteria: The selection criteria will be private general medical practitioners registered with the HPCSA. Exclusion criteria will be non-general medical practitioners and general medical practitioners that are not in private practice.

(e) **The Environment:**

1. Is this a multinational study? No.
2. List all the sites in South Africa in which the project will be carried out. Sites will be determined statistically in order to ensure a sample representative of all private general medical practitioners in South Africa.
3. Can the project have any negative consequences on the physical environment, participants, researchers or members of the public? No.
Appendix A: Approved Protocol

4. How many hours/week can be devoted to this project? At least 14 hours per week over a period of two years.

3.3 ETHICAL ASPECTS:
(a) Responsibility: In respect of any litigation which may result from this research.
   Responsibility: It is not foreseen that any litigation is possible.
   1. Are pharmaceutical manufacturers prepared to take responsibility. Not applicable.
   2. Have you ensured that compensation to participants and investigators is in accordance with Guidelines for Good Practice in the Conduct of Clinical Trials in Human Participants in South Africa: There will be no compensation for respondents to the questionnaires.

(b) Incentives / Reimbursement:
   1. There are no explicit nor implicit incentives offered to respondents of questionnaires to recruit or remain within the study.
   2. There is no reimbursement / compensation for participation in the research.

(c) Potential risk or discomfort:
   There is no potential risk or discomfort foreseen.

(d) Health Service Utilisation: Not applicable.

(e) Management: Not applicable.

(f) Community Consultation: Not applicable.

(g) State the expected benefits arising from this research:
   1. Clinical care: By determining perceptions as to the influence that managed care may have on clinical care one may use this information in designing a system which enables better clinical care for patients.
   2. Public health: Managed health care in the private sector may be the fore-runner of a national health system. Information obtained with this research may assist with problem solving in the designing of a national health system.
   3. Financial: Information gained regarding, e.g.: perverse incentives, will assist in determining factors which influence the cost of health care.
   4. Prospects: If shown to be of benefit the information gained from this research may well be used at a policy level when planning a viable health system in South Africa.
Appendix A: Approved Protocol

SECTION 4: INFORMATION GIVEN TO PARTICIPANTS.

Several copies, therefore, included as an attachment. Information is included in the covering letter which will be attached to the questionnaire.

SECTION 5: INFORMED CONSENT.

Several copies, therefore, included as an attachment.

SECTION 6: QUESTIONNAIRES.

Several copies, therefore, included as an attachment.

SECTION 7: DECLARATION:

CONFLICT OF INTEREST.

I am a consultant and shareholder within the Medicross Medical and Dental Group which is part of Netpartners and the Netcare group. Medicross has interests in managed health care service delivery. The findings of the research may be detrimental to the image of managed health care and hence the views of Medicross, Netpartners and Netcare. I will not be funded by the group.

Oversight of study:

This study will not be overseen by a professional Clinical Research Organisation.

I understand and accept that I will be required to submit annual reports. Where applicable, all reports from the Data Safety Monitoring Boards (or other similar committees) will be provided to the Research Ethics Committee within 7 days.

I agree to provide monitoring data if and when required.

I expect the research to be completed by November 2007.

I agree to abide by the regulations contained in the Guidelines for Good Practice in the Conduct of Clinical Trials in Human Participants in South Africa (Clinical Trials Guidelines 2000) and the Terms of Reference and Operating Procedures of the Research Ethics Committee.

I understand and accept that all the information pertaining to this application is a true reflection of the research proposed and I take full responsibility should there be any transgression.

Signature: ___________________________ Date: 30 August 2005
Appendix A: Approved Protocol

SECTION 8: DECLARATION AND APPROVAL BY HEAD OF DEPARTMENT.

Ethics: Acceptable

Remarks: ACCEPTABLE.

Signature: 

Date: 26/09/2005

Has applicant consulted and informed the Head of Department if different from above.
Yes No Yes.

(Head of Applicant's Department (if different from above):

Name in Block Capitals:

Supervisor recommended:
Name and Department: Prof. M.N. Chetty. Head: Department of Managed Health Care.
Acceptance of nomination as supervisor.

Signature: 

Date: 26/09/2005

Please list details of students already being supervised:

Co-supervisor recommended:
Name and Department: Prof. S.S. Naidoo. Head: Department of Family Medicine.
Acceptance of nomination as co-supervisor.

Signature: 

Date: 26/09/2005
Full name: Mitchell Robert Scott.

Date of birth: 30 August 1959.

Sex: Male.

Telephone (Home): 031-7642221
Telephone (Work): 031-7093070
Telephone (Cell):-
Fax.no.: 031-7642221
E-mail address: mitchscott@cybertrade.co.za
HPCSA No.: MP 00365211

Present position: Self-employed private general medical practitioner.

Institution: University of Kwa Zulu-Natal
Nelson R.Mandela School of Medicine

Department: Family Medicine.
Nationality: South African Citizen.

Previous positions held: Self-employed private general medical practitioner since 1992.

Qualifications: B.Sc., University of Natal, conferred April 1982;
B.Sc.(Hon.),(Bio.Sci.), University of Natal, conferred April 1983;
M.B.Ch.B., University of Pretoria, conferred November 1990;
ACLS(Resuscitation Council of South Africa), October 1998;
ALS(Resuscitation Council of the United Kingdom), November 2002.

Areas of study: Science and medicine.

Postgraduate theses supervised:
Honours level in science.
Title of first thesis: A STUDY OF SOME $^3$H-GLUCOSAMINE-LABELLED MACROMOLECULES WHICH ACCUMULATE IN THE NUCLEI OF THE 16 CELL SEA URCHIN ECHINOMETRA MATHAEI EMBRYO.
Title of second thesis: PURIFICATION OF AN UNKNOWN AVIAN INFECTIOUS BRONCHITIS VIRUS.

Publication list: Nil.
Other current research: Nil.

Appendix B: Letter of Information

SECTION 4: INFORMATION GIVEN TO PARTICIPANTS.

Covering Letter

Dr. Mitchell R. Scott
P.O.Box 1433
Kloof
KZN
3640

Dear Colleague

General Practitioner perceptions around Managed Health Care.

I am writing to request your assistance with researching the perceptions that general practitioners have of managed health care.

Managed health care is relatively new to the traditional fee for service, private general medical practice in the Republic of South Africa. There are other countries such as the United States of America, which have experienced managed health care for several years. There are varied perceptions, regarding the advantages and disadvantages of managed health care, observed in these countries.

I hope to gain information regarding the South African general practitioners perceptions around managed health. This research will be used in two ways. Firstly, towards partial fulfillment of requirements towards the M.Med.(Fam.med.) degree in the University of Kwa Zulu-Natal. Secondly, to make this information available to assist with any problem solving which may be required to bring about a viable health system for both private patients and private general medical practitioners in the Republic of South Africa.

Kindly assist me by completing the attached questionnaire. Simply circle, in pen, one answer per question which most reflects your perception. Please feel free to add any other comments that you feel are important, to the space provided at the end of the questionnaire, or, attach the comments on separate paper. A carefully selected random sample representative of South Africa’s private general practitioners will receive a questionnaire, i.e., not all general practice practitioners will receive a questionnaire.

Once completed kindly return both the questionnaire and the informed consent form, to the above address in the pre-paid envelope.

Confidentiality: Efforts will be made to keep personal information confidential. Absolute confidentiality cannot be guaranteed. Personal information may be disclosed if required by law. Organisations such as the Research Ethics Committee may inspect or copy the research records. If results are published this may lead to individual/cohort identification. Please note that your name will not appear on the questionnaire. The questionnaire will have an identifying number only.
Appendix B: Letter of Information

You may contact the Medical Research Office at the Nelson R Mandela School of Medicine at 031-260 4604 if you have questions about your rights as a research subject.

You may contact Prof. M.N. Chetty, the supervisor of Dr M.R.Scott's research study, at 031-207 8969 if you have any questions about the research.

You may contact Prof. S.S.Naidoo, the co-supervisor of Dr M.R.Scott's research study and Head of the Department of Family Medicine, at 031-260 4485 if you have any questions about the research.

Due to this research being funded by myself, I hope you understand that I will not issue the results to you personally. I can, however, be contacted at the above address, or, via the following address:

Department of Family Medicine
Nelson R. Mandela School of Medicine
University of Kwa Zulu-Natal
Private Bag 7
Congella
4013.

I thank you in advance for your time and trouble taken in completing this questionnaire.

Yours sincerely

Dr M.R.Scott
M.B.Ch.B.(Pret); B.Sc.(Hon.)(Bio.Sci.)(Natal).
Appendix C: Consent Form

SECTION 5: INFORMED CONSENT.

CONSENT DOCUMENT

Consent to Participate in Research

You have been asked to participate in a research study regarding perceptions around managed health care in the Republic of South Africa.

You have been informed about the study by Dr M.R. Scott.

You may contact Dr M.R. Scott at mitchscott@cybertrade.co.za any time if you have questions about the research.

You may contact Prof. M.N. Chetty, the Supervisor of Dr M.R. Scott's research study, at 031-207 8969 if you have any questions about the research.

You may contact Prof. S.S. Naidoo, the Co-supervisor of Dr M.R. Scott's research study and Head of the Department of Family Medicine, at 031-260 4485 if you have any questions about the research.

You may contact the Medical Research Office at the Nelson R Mandela School of Medicine at 031-260 4604 if you have questions about your rights as a research subject.

Your participation in this research is voluntary and you will not be penalised if you refuse to participate.

I have read the above information and the covering letter containing information about the research study. I understand what my involvement in the study means and I voluntary agree to participate.

_________________________________________  ________________
Signature of Participant                              Date

_________________________________________  ________________
Signature of Witness                                Date
SECTION 6: MANAGED HEALTH CARE QUESTIONNAIRE.

Please return to:

Dr M.R.Scott
P.O.Box 1433
Kloof
3640

Instructions:
Kindly read each statement and answer as to how you agree with each statement by circling one answer per question. Kindly, also, complete the demographic questions. Thank you.

**General rights and ethical issues:**

**Question 1.**
Managed health care does not impact on the traditional fee for service patients' rights to access to health care as the patient deems necessary.

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**Question 2.**
Managed health care does not impact on the private general practitioners' rights to provide health care as the practitioner deems necessary.

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**Question 3.**
Managed health care organisations have a right to determine the health management decisions of the private general practitioner.

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**Question 4.**
Managed health care does not influence the private general practitioners' ethical considerations.

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**Question 5.**
Managed health care may result in unethical action by the general practitioners, such as underservicing.

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Appendix D: Questionnaire

Question 6.
The patients' autonomy is not reduced by managed health care.

1 Strongly agree 2 Agree 3 Uncertain 4 Disagree 5 Strongly disagree

Question 7.
The private general practitioners' autonomy is not reduced by managed health care.

1 Strongly agree 2 Agree 3 Uncertain 4 Disagree 5 Strongly disagree

Quality of health care delivery in managed health care:

Question 8.
Managed health care improves the quality of care provided to the traditional fee for service patient.

1 Strongly agree 2 Agree 3 Uncertain 4 Disagree 5 Strongly disagree

Question 9.
Traditional fee for service health care delivery does not make evidence-based medical care a prerequisite of health care decisions.

1 Strongly agree 2 Agree 3 Uncertain 4 Disagree 5 Strongly disagree

Question 10.
The managed health care formularies are strictly scientifically based.

1 Strongly agree 2 Agree 3 Uncertain 4 Disagree 5 Strongly disagree

Question 11.
The quality of health care is improved by adherence to the managed care formularies.

1 Strongly agree 2 Agree 3 Uncertain 4 Disagree 5 Strongly disagree

Question 12.
Managed health care results in under-servicing of patients health needs.

1 Strongly agree 2 Agree 3 Uncertain 4 Disagree 5 Strongly disagree

Question 13.
Where risk-sharing occurs in managed health care, under-servicing of patients is a concern.

1 Strongly agree 2 Agree 3 Uncertain 4 Disagree 5 Strongly disagree

Question 14.
The optimal implementation of Managed Health Care programmes results in improved quality of health care delivery.

1 Strongly agree 2 Agree 3 Uncertain 4 Disagree 5 Strongly disagree
Appendix D: Questionnaire

Question 15.  
The concept of risk-pooling, considered in some managed health care programmes, is a perverse incentive to under-service.

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Question 16.  
The restrictions and techniques of managed health care disadvantage the provision of quality care.

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Question 17.  
Traditional fee for service care is superior in quality to that of capitated health care.

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Question 18.  
Managed health care treatment protocols substantially improve the health care outcome of patients compared to the outcome prior to the advent of managed health care.

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Question 19.  
Traditional fee for service care encourages over-servicing by way of recurrent episodic care.

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Question 20.  
Access to health care in rural areas is improved by managed health care.

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Design of managed health care:

Question 21.  
Managed health care is best designed by medical aid organisations.

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Question 22.  
Unbiased academics in medical schools should design managed health care structures.

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Question 23.  
Under-graduate education should include managed health care as a course.

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Appendix D: Questionnaire

Question 24.
If all general practitioners were trained in un-biased managed health care there will be no need for third party interference.

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Question 25.
If financial consideration was not an issue, there will be no need for managed health care.

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"Policing" managed health care:

Question 26.
Managed health care organisations should "police" managed health care.

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Question 27.
Managed care "policing" is best performed by HPCSA.

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Question 28.
There is no need to "police" managed health care providers.

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Question 29.
It is correct that general practitioners, as advocates for patients, be held medico-legally accountable for any negative outcome of health management as dictated by medical aid organisations.

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Question 30.
Medical aid organisations should not be held medico-legally accountable for health management directives they have given to patients and general practitioners.

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The philosophy behind managed health care:

Question 31.
Managed care is structured to be to the patients' benefit.

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Question 32.
Managed care is structured to maximise profitability of the underwriters.

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Question 33.
Managed care is structured to be of maximum advantage to the general practitioner by guaranteed fee for service.

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Question 34.
If managed health care principles are applied to general practitioners then they should be applied to specialists.

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Question 35.
Managed care is structured to be of maximum advantage to the general practitioner by prescription driven control.

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Question 36.
Are there any other comments you wish to add? Kindly do so below, or attach to this questionnaire.
Once again thank you for your input.

Kindly answer the demographic questions on the next page.
Respondent's demographic information:

Kindly complete the following request for information about yourself by circling one answer per question, or, by inserting your answer in the square provided. Thank you.

A. What is your age in years as of your last birthday?

B. What sex are you?
   Male 10
   Female 11

C. How long have you been in private practice? Please state years or months.

D. Where do you place your practice?
   City Centre 12
   Suburb of city 13
   Rural Town 14
   Rural 15

E. What type of practice are you in?
   Solo 16
   Association 17
   Partnership 18

F. Are you a member of an IPA?
   Yes 19
   No 20

G. Are you a consultant with an organisation?
   Yes 21
   No 22

H. How do you rate your experience of managed health care in your practice?
   A lot of experience 23
   Some experience 24
   Not much experience 25
   No experience at all 26
26 OCTOBER 2005

DR. MR SCOTT (781780321)
FAMILY MEDICINE

Dear Dr. Scott

ETHICAL CLEARANCE APPROVAL NUMBER : HSS/05143A

I wish to confirm that ethical clearance has been granted for the following project:

"Perceptions around managed health care service delivery in Private Medical Care in the Republic of South Africa"

Yours faithfully

Ms. Phumelele Ximba
RESEARCH OFFICE

PS: The following general condition is applicable to all projects that have been granted ethical clearance:


cc. Faculty Officer
cc. Supervisor – Prof. MN Chetty
    - Prof. SS Naidoo
15 November 2005

Dr M R Scott
P O Box 1433
KLOOF
3640

Dear Dr Scott

PROTOCOL: Perceptions around managed health care service delivered in private medical care in the Republic of South Africa. M R Scott, Family Medicine. Ref.: H256/05

The Postgraduate Education Committee considered the abovementioned application and made various recommendations. These recommendations have been addressed and the protocol is approved for your MMed(FamMed) degree.

Please note that you may not begin the study without first obtaining full ethics approval. Please would you submit a copy of the approval to this office for record purposes.

May I take this opportunity to wish you every success with your study.

Yours sincerely

PROFESSOR M ADHIKARI
Chair: Postgraduate Education Committee

C.C. Professor M N Chetty, Managed Health Care, Family Medicine.
Mr S Siboto, Postgraduate Education
Dr M.R. Scott requested information from private general medical practitioners in South Africa, by way of a questionnaire. The information he seeks is their perception of Managed Care.

The information obtained will be used by Dr Scott for his M. Med (Fam. Med.) degree thesis. This information may be published.

This information may possibly be used at a policy level when one is planning a viable health system in South Africa.

The SAMCC has no objections to Dr Scott obtaining information from its National Network of Doctors.

Prof. Morgan Chetty
SAMCC

8 September 2005
Appendix H: Summary statistics of Question 1 to 35-June 2007.

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Multiple modes exist. The highest is shown (a).
Appendix I: Summary statistics of all questions being on the same scale - June 2007.

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