

ACCESS TO PUBLIC HEALTHCARE IN SOUTH AFRICA

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ABSTRACT

Access to healthcare is considered to be a basic human right. This paper explores the concept of access to public healthcare, with a particular focus on affordability, accessibility and accommodation. Furthermore, it highlights certain issues around the concept of access in the South African setting, by analysing the results from the General Household Surveys (2002–2009). Affordability of healthcare services and the positioning of the facilities were not identified as being key barriers to access. Instead, other aspects, such as accommodation to the patients' needs and acceptability of services received had greater significance and should be prioritised in terms of any proposed healthcare reforms.

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KEYWORDS

Access; healthcare; public sector; South Africa, National Health Insurance

1. INTRODUCTION

1.1 Access to healthcare is a right protected by the Constitution of the Republic of South Africa¹ and is implicit in the National Health Act² and three of the eight Millennium Development Goals.³ Effective access to healthcare can also improve levels of health (Andersen, 1995). Initiatives to improve the health of a country's citizens are ineffective if they do not reach those in greatest need, for example the poor (Obrist et al., 2007) and those in rural areas (Aday & Andersen, 1974).

1.2 Given the importance of healthcare, as explained above, it is of interest to identify barriers to access in the current health systems. These barriers will need to be addressed by policymakers as increased expenditure by itself does not eliminate barriers to healthcare access (Rose, unpublished).

1.3 Access itself is a complex (Gulliford et al., 2002; Andersen, op. cit.) and commonly ill-defined idea (Aday & Andersen, op. cit.; Penchansky & Thomas, 1981).

1.4 Access can be defined in terms of areas of congruence between patient and provider (Penchansky & Thomas, op. cit.: 128). These areas are affordability, accessibility, accommodation, availability, and acceptability. Penchansky & Thomas (op. cit.) go on to define these five areas, the "five As of access" (McLaughlin & Wyszewianski (2002: 1441), as follows.

1.5 The connection between the cost of services and the patient's ability to pay for these services either through insurance arrangements or personal savings is termed 'affordability'. Some authors widen this definition to include the patient's "willingness to pay for [healthcare] services" (McLaughlin & Wyszewianski, op. cit.: 1441). Gulliford et al. (op. cit.) believe that such costs include travel and inconvenience or opportunity costs, over and above the direct costs of obtaining the care.

1.6 'Accessibility' can include geographic proximity (Iecovich & Carmel, 2009; Rutherford et al., 2009; Becher et al., 2004), transport time, which in turn can include time waiting for the transport (Tanser, Gijsbertsen & Herbst, 2006; Aday & Andersen, op. cit.) and the ease or convenience with which a patient can reach the healthcare provider (McLaughlin & Wyszewianski, op. cit.; Iecovich & Carmel, op. cit.; Bice, Eichhorn & Fox, 1972; Rose, op. cit.; Klemick, Leonard & Masatu, 2009; Mattson, unpublished). The latter includes travel time although Tanser, Gijsbertsen & Herbst (op. cit.) have suggested that this may be subject to under-reporting.

1 Act no.108 of 1996 as amended, Republic of South Africa

2 National Health Act Act, no. 61 of 2003 as amended, Republic of South Africa

3 United Nations Organization. Millennium development goals, 2000 Accessed from www.un.org/millenniumgoals/bkgd.shtml, 13/4/201

1.7 ‘Accommodation’ refers to the manner in which healthcare facilities meet the patient’s need for care and the patient’s satisfaction with the facilities’ management, including the way in which healthcare providers arrange their organisation in order to accommodate the patient’s preferences and constraints (McLaughlin & Wyszewianski, *op. cit.*).

1.8 The supply of healthcare facilities as well as healthcare providers (Penchansky & Thomas, *op. cit.*) can be termed ‘availability’. It is also concerned with the “adequacy of the supply of ... specialized programs and services” aimed at emergency care and mental health (Penchansky & Thomas, *op. cit.*: 128). McLaughlin & Wyszewianski (*op. cit.*: 1441) further define ‘availability’ as a measurement of the degree to which the healthcare provider can meet the patient’s needs with “resources, such as personnel and technology”.

1.9 ‘Acceptability’ relates to whether the client is content with certain features of the healthcare provider (McLaughlin & Wyszewianski, *op. cit.*). Such features include the provider’s race, culture, age and gender (Penchansky & Thomas, *op. cit.*; McLaughlin & Wyszewianski, *op. cit.*). It also relates to whether the provider is comfortable with such characteristics of the client as well as the client’s method of payment (Penchansky & Thomas, *op. cit.*). Acceptability also relates to the competence of medical staff as well as the interaction between the various levels of care (Goudge et al., 2009). Lurie & Dubowitz (2007) claim that an important part of acceptability is language. Specifically, the patient should be able to communicate with the provider in her or his own tongue and vice versa.

1.10 Various authors believe that the five As “are not easily separated” (Penchansky & Thomas, *op. cit.*: 129). For example, Tanser, Gijsbertsen & Herbst (*op. cit.*) conclude that people living in the poorer rural communities are more constrained by affordability than accessibility as they cannot afford to travel longer distances, whereas better, cheaper transport allows urban dwellers to prioritise acceptability of care over accessibility. Doherty, Rispel & Webb (1996) also noted that patients will balance affordability with acceptability.

1.11 It is suggested that, in order to improve access to healthcare, each dimension must be considered (Penchansky & Thomas, *op. cit.*; Puentes-Markides, 1992; Lurie & Dubowitz, *op. cit.*; Iecovich & Carmel, *op. cit.*; McLaughlin & Wyszewianski, *op. cit.*). The list is also not exhaustive and can be expanded to include recognition and identification of the available healthcare services (Dixon-Woods et al., 2006) and the need to seek professional health services (Obrist et al., *op. cit.*; Andersen, *op. cit.*; Gulliford et al., *op. cit.*; Dixon-Woods et al., *op. cit.*) and preference for specific service providers (Gulliford et al., *op. cit.*, Berry, Seiders & Wilder, 2003). These additional dimensions of access are, however, not as common or as important as the five As mentioned above.

1.12 The aim of this research was to consider how affordability, accessibility, accommodation, availability and acceptability influence the utilisation of public health services in South Africa and to consider the possible reasons for the findings and their implications. General Household Survey (GHS) data were used for this purpose.

1.13 The following five sections explore the concepts of affordability, accessibility, accommodation, availability and acceptability from the literature respectively. Section 7 gives a brief description of the public healthcare sector in South Africa as well as a discussion of the National Health Insurance (NHI) programme. Sections 8 and 9 describe the data used for the analysis of the five As in South Africa and the methods employed in analysing the data, as well as the limitations of the data. The results of this analysis are presented and discussed in section 10. The paper ends with a conclusion and further findings in section 11.

2. AFFORDABILITY

2.1 Generally, the international literature does not indicate that affordability is a barrier to accessing public healthcare. The papers cited below use healthcare utilisation rates as proxies for access. Access—in particular affordability—was considered to be a dependent variable in these studies.

2.2 In the United States, most people are covered by individual private health insurance or employer-sponsored insurance (DeNavas-Walt, Proctor & Smith, 2011). These could involve significant co-payments, depending on the type of plan (Chua, 2006). Taylor, Scoyoc & Hawley (2002) conducted research in the US on mammography rates of women aged 50 to 62 in 1994. They found that 72,7% of women received a mammogram during their period of investigation from 1994 to 1996. Taylor, Scoyoc & Hawley (op. cit.: 1470) wanted “to determine whether a Medicare buy-in would be likely to increase mammography screening among women aged 50–64.” Medicare is a US-government-provided health insurance that provides cover to individuals aged over 65, as well as some disabled people (Chua, op. cit.). After simulating universal healthcare coverage, they concluded that mammography rates would increase by a mere 2,3% to 6,3%. The World Health Organization defines universal healthcare coverage as the interrelation of three goals. These goals are as follows:

- any person who is in need of healthcare should receive the services;
- the healthcare services received should be of good quality to ensure that the person’s health is improved; and
- the person should not experience any kind of financial hardship as a result of receiving the healthcare services.⁴

4 World Health Organization. What is universal coverage? www.who.int/health_financing/universal_coverage_definition/en/index.html, 27/04/2012

Thus, although affordability improved significantly in the study conducted by Taylor, Scoyoc & Hawley (op. cit.), the utilisation of mammograms did not. This is consistent with the fact that only a small percentage of the American population receive government-provided health insurance (DeNavas-Walt, Proctor & Smith, op. cit.).

2.3 In contrast, all Israeli citizens are covered by one of the four national health insurance funds.⁵ Nevertheless, there is still a co-payment system in place whereby patients are required to contribute “small amounts for medicines and for certain medical exams ... and visits to specialists” (Iecovich & Carmel, op. cit.: 781). Iecovich & Carmel (op. cit.) conducted research on access to specialist healthcare of people aged 65 and over in Israel. They examined the effects of availability, accommodation, accessibility and affordability on access to these health services. They found that over these age groups, availability and accessibility proved most significant in analysing the patient’s use of specialist healthcare services. Affordability of specialist healthcare was not found to have a considerable effect in determining access. However, this may be due to the fact that Israel has had a national health insurance since 1994 (Iecovich & Carmel, op. cit.).

2.4 Other studies conducted in the USA found that demographic factors such as race (Bice, Eichhorn & Fox, op. cit.; Lurie & Dubowitz, op. cit.) and education level (Bice, Eichhorn & Fox, op. cit.) may have a much greater influence on physician utilisation rates than family income. However, such factors tend to be highly correlated with income (Da Silva & Wayburne, 2008; Argent et al., 2009; Mayer, 2010). It may therefore be suggested that affordability has an indirect effect on healthcare utilisation.

2.5 However, the literature did indicate that the costs associated with travelling to the healthcare centre were a significant barrier to access. Penchansky & Thomas (op. cit.) found that a longer travel time was associated with a lower satisfaction with affordability. In South Africa, the costs associated with travelling to the healthcare centre were found to be problematic for the poor population, more than the actual costs of care (Goudge et al., op. cit.).

3. ACCESSIBILITY

3.1 Geographic proximity was shown to improve access to specialist healthcare in Israel for persons 65 and over (Iecovich & Carmel, op. cit.) and to chronic and routine care in the USA for persons over the age of 60 (Mattson, op. cit.). However, Mattson (op. cit.) found no effect on access to emergency care. Shorter travel time may improve access to clinics in urban and semi-rural parts of the USA (Bice, Eichhorn & Fox, op. cit.).

5 Israel Ministry of Foreign Affairs. The Health Care System in Israel – An Historical Perspective. <http://www.mfa.gov.il/MFA/History/Modern+History/Israel+at+50/The+Health+Care+System+in+Israel+An+Historical+Pe.htm>, 03/09/2012

3.2 In South Africa it was found that distance to healthcare facilities has a significant effect on health outcomes (Doherty, Rispel & Webb, *op. cit.*; Tanser, Gijsbertsen & Herbst, *op. cit.*). Tanser, Gijsbertsen & Herbst (*op. cit.*: 692) state that, from a South African perspective, “geographic accessibility [to healthcare facilities] is likely to be a crucial determinant” in the “take-up of and adherence to anti-retroviral drugs for HIV therapy”. Tanser, Gijsbertsen & Herbst’s (*op. cit.*) results showed that up to and including one-hour travelling time to particular clinics, did not affect usage of those clinics. The utilisation of these clinics was found to decline rapidly with a travel time of more than one hour. Furthermore, they found that, for travel times of 90 to 135 minutes, use of any clinic starts to reduce. There are currently no guidelines for the distance to healthcare facilities in South Africa.⁶ Certain authors have suggested standards based on walking distances to clinics of 2 kilometres (Doherty, Rispel & Webb, *op. cit.*) 5,5 kilometres (Tanser, Gijsbertsen & Herbst, *op. cit.*) or 8 kilometres.⁷

3.3 However, many researchers conclude that the relationship between access and accessibility is complex and depends on a variety of other factors. Studies conducted in the USA, Israel, Europe and Tanzania conclude that access to transport influences accessibility (Bice, Eichhorn & Fox, *op. cit.*; Mattson, *op. cit.*; Iecovich & Carmel, *op. cit.*; Rose, *op. cit.*; Klemick, Leonard & Masatu, *op. cit.*). In Gambia, it was found that socio-economic factors affect the relationship between access and accessibility (Rutherford et al., *op. cit.*).

3.4 In the US the integration of the public transport system with the healthcare system was found to be important (Mattson, *op. cit.*). A study conducted in Europe found that perceptions of safety while travelling affected accessibility (Rose, *op. cit.*). In Burkina Faso, the age of the patient (Becher et al., *op. cit.*) and the concentration of healthcare facilities (Schoeps et al., 2011) influenced accessibility, while in Tanzania, quality of healthcare services was an important factor (Klemick, Leonard & Masatu, *op. cit.*). It is hypothesised by Klemick, Leonard & Masatu (*op. cit.*)⁸ that better transport networks reduce accessibility problems in Tanzania and South Africa.

4. ACCOMMODATION

4.1 Research conducted in the US and Europe indicates that long waiting times for appointments (Penchansky & Thomas, *op. cit.*; Rose, *op. cit.*; Guttman, Zimmerman & Nelson, 2003; Redstone et al., 2008), long waits at the facility (Penchansky & Thomas, *op. cit.*; Rose, *op. cit.*; Guttman, Zimmerman & Nelson; *op. cit.*) and inconvenient

6 Department of Public Service and Administration. Extensive provisions of primary health care facilities in ISRD nodes, 2009. Accessed from www.dpsa.gov.za/batho-pele/docs/Information%20Briefs/Health.pdf, 27/6/2011

7 Department of Public Service and Administration, *supra*

8 *cf. also* Department of Public Service and Administration, *supra*

opening times (Guttman, Zimmerman & Nelson, *op. cit.*; Redstone et al., *op. cit.*) were the three most important accommodation problems.

4.2 Studies based in the US conclude that accommodation can be a significant barrier to access and administration problems at primary health care level can result in the utilisation by patients of hospitals and higher-order health facilities instead (Guttman, Zimmerman & Nelson, *op. cit.*; Redstone et al., *op. cit.*). This is problematic as it leads to overcrowding, which in turn leads to shortages of healthcare resources and “delays in service provided by radiology, laboratory, and ancillary services,” as well as administration problems (Derlet & Richards, 2000: 65). In particular, emergency medical staff may be unable “to provide quality care” due to the increasing number of patients seeking medical assistance “as a result of regional population growth and decreased access to office and clinic physicians” (*ibid.*: 64).

4.3 Although shorter appointments may result in shorter waiting times, quality of care may be compromised. Dugdale, Epstein & Pantilat (1999) found that in the US, consultations shorter than 15 minutes were associated with greater patient dissatisfaction, an increase in the amount of medical prescriptions, a larger number of malpractice claims and a greater number of unnecessary referrals to specialists and higher-order health facilities.

4.4 In addition, variation in the appointment length for patients with different characteristics may improve efficiency and reduce accommodation problems (Cayirli, Veral & Rosen, 2008).

4.5 Similarly, Dugdale, Epstein & Pantilat (*op. cit.*) suggested that telephone-based consultations may accommodate chronic patients better. The study conducted in the UK by McKinstry et al. (2002: 308) found that “the use of telephone consultations did not appear to be at the cost of either the content of the consultation in terms of the number of problems addressed, or ... the way the problem was investigated.” However, it was also suggested that any efficiencies may be lost because of face-to-face follow-up consultations (McKinstry et al., *op. cit.*). A larger proportion of patients who consulted with a physician over the telephone were asked to make a face-to-face appointment later that day. This resulted in a greater amount of time spent with the physician than by patients who had initial face-to-face consultations (McKinstry et al., *op. cit.*). Berry, Seiders & Wilder (*op. cit.*) state that telephone appointments are appropriate only when a physical examination is not required and when there is an existing relationship between the physician and the patient.

5. AVAILABILITY

5.1 In the US, Penchansky & Thomas (*op. cit.*) found a positive correlation between satisfaction with availability and the number of years with the physician. A greater

number of visits in the six months leading up to the survey was also found to be positively correlated with satisfaction with availability. Longer waiting times in the reception were found to decrease satisfaction with availability.

5.2 Gulliford et al. (op. cit.) state that in order to measure availability of healthcare services, traditional indicators such as number of hospital beds or doctors per capita are often used. The Department of Labour found that medical doctors are in short supply in South Africa.⁹ According to data from the Health Professions Council of South Africa (HPCSA), there were 38 236 registered medical practitioners at the end of March 2012.¹⁰ However, this figure is likely to be overstated since it includes those practitioners who are “retired, out of the country or just inactive”.¹¹ The above figure, combined with the midyear population estimates for 2011, translates into an average of 7,56 doctors per 10 000 population. The corresponding figure for the African region was 2,2 per 10 000 population, whilst the global average was 14,2 per 10 000 population.¹² In addition, the density of doctors per 10 000 population ranks South Africa among the ‘lower middle income’ countries of the world.¹³ Deumert (2010: 53) states that public healthcare facilities in South Africa are plagued with both staff and ‘drug and equipment shortages’.

5.3 In rural parts of South Africa, the lack of available supplies and medical services was found to hinder the health-seeking behaviour of chronic patients (Goudge et al., op. cit.). Goudge et al. (op. cit.: 10) state that although some patients possessed the required resources to seek regular care, such action was not taken, because of “health system weaknesses and the unavailability of inputs and services required for chronic care.” That is, clinics in the public sector “repeatedly ran out of drugs” (ibid.: 11). This led to chronic patients’ having to spend their resources on finding alternate treatment options. Because of lack of funds, some patients were forced to leave their illnesses untreated until a time when the local clinic restocked its medication supplies (ibid., 2009).

6. ACCEPTABILITY

6.1 Penchansky & Thomas (op. cit.: 138) found that in the US, “a longer relationship” with the healthcare provider resulted in “greater satisfaction with the acceptability of the provider”. The education level of the patient was found to be negatively correlated with satisfaction with acceptability.

9 Department of Labour, South Africa (2008). The Shortage of Medical Doctors in South Africa, 2008. Accessed from www.labour.gov.za/downloads/documents/research-documents/Medical%20Doctors_DoL_Report.pdf, 12/06/2012

10 HPCSA. Number of Registered Healthcare Practitioners 31 March 2012. Accessed from www.hpcsa.co.za/statistics.php, 12/06/2012

11 Department of Labour, South Africa, supra: 8

12 World Health Organization (WHO). World Health Statistics 2012. Accessed from www.who.int/gho/publications/world_health_statistics/2012/en/index.html, 12/06/2012

13 WHO, supra: 129

6.2 Goudge et al. (op. cit.: 11) discovered that, because of “clinical weaknesses in diagnosing and prescribing at [South African public] clinics,” some patients had to return to the medical centre several times, thus incurring additional costs, which were often unaffordable. However, the interactions between the various levels of care in the public healthcare sector were found to be successful in general. Most patients who moved through the various levels from initial diagnosis to continual treatment experienced few obstacles (ibid., 2009).

6.3 Communication poses a particular problem in South Africa because South Africa has 11 official languages and “the vast majority of public sector health professionals ... cannot speak the languages of their African patients” (Deumert, op. cit.: 54). Effective communication between patient and provider were found to be of absolute importance in improving access to healthcare in the public sector (Goudge et al., op. cit.). Patients who were able to effectively explain their symptoms to healthcare workers received better treatment and were also able to use their resources more effectively (Goudge et al., op. cit.; Deumert, op. cit.). Patients who understood their healthcare workers properly “were able to explain and justify their need for financial support ... enabling access to care” and “became a community resource that the health system could draw on to assist other patients” (Goudge et al., op. cit.: 13). In addition, communication problems can lead to some patients’ seeking medical assistance only in the advanced stages of their illness, when survival rates are low (Deumert, op. cit.).

6.4 Race (Mercado et al., 2012), gender (ibid.; Lee et al., 2010) and age (Lee et al., op. cit.) were not identified as significant factors by patients in their choice of a primary care physician in overseas healthcare sectors. In contrast, a study conducted on a hospital in Nigeria found that more than half of the patients were concerned with the gender of the healthcare provider (Adudu & Adudu, 2007). The participants in the study considered male doctors to be more competent and knowledgeable than female doctors and were therefore preferred in areas such as surgery and anaesthetics; female doctors were preferred for obstetrics and gynaecology as well as paediatrics.

7. HEALTHCARE IN SOUTH AFRICA

7.1 The majority of the South African population “depend[s] entirely on public health facilities”;¹⁴ however, only 35,0% of South African healthcare professionals work in the public sector. Pregnant women and children under the age of 6 can access free healthcare in public facilities.¹⁵ The public healthcare sector is however severely under-

14 Department of Health, South Africa. National Health Insurance. Healthcare for all South Africans, 2011: 16. Accessed from www.doh.gov.za/list.php?type=National Health Insurance, 03/09/2012

15 National Health Act, supra

resourced¹⁶ as it has fewer health professionals than the private sector to serve a larger proportion of the population. The South African government has introduced legislation to try and meet the high demand of healthcare in the public sector. For example, all graduating medical students are required to fulfil one year of community service in a public healthcare facility (Harrison, unpublished).

7.2 The burden of disease in South Africa has changed since the late 1990s, a greater proportion of the South African population being diagnosed with HIV/AIDS (Harrison, op. cit.). There are four health problems that are prominent in the South African population: “HIV/AIDS, maternal, infant and child mortality, non-communicable diseases [and] injury and violence”.¹⁷ This in turn influences the types of services and treatments that patients seek. In addition, the public health system needs to adapt to the changes in the burden of disease.

7.3 As a result, in 2003 the South African Government passed the National Health Act, 2003,¹⁸ which proposes¹⁹ to “regulate national health and to provide uniformity in respect of health services across the nation”. That is, NHI is intended to provide all South Africans with equitable access to acceptable levels of health care and “minimize the burden carried by individuals of paying directly out of pocket for healthcare services”.²⁰ Through the implementation of NHI, the South African government wishes to “eradicate barriers limiting access to health care”.²¹ The benefits received will be based on severity of illness, rather than on ability to pay.²² Under NHI, primary healthcare will be redefined to include community-based initiatives, such as community healthcare workers who will “conduct health promotion, disease prevention and ensure appropriate referral of community members to higher levels of care or to social services”.²³

7.4 The initial phase of the NHI implementation has identified “six areas ... for immediate improvement”.²⁴ These areas are as follows:

- improving staff attitude;
- reducing the time it takes to consult with a healthcare worker;
- making sure that facilities are clean;

16 Department of Health, South Africa. Healthcare for all South Africans, supra: 16

17 Department of Health, South Africa. NHI in South Africa. Policy Paper, 2011. Accessed from www.info.gov.za/view/DownloadFileAction?id=148470, 03/09/2012

18 supra

19 supra: 16

20 Department of Health, South Africa. NHI in South Africa, 2011, supra: 5

21 Department of Health South Africa. Progress report on the implementation of the 10 point plan of the health sector 2009-2014, 2011: 9. Accessed from www.doh.gov.za/docs/reports/2011/midtermreview.pdf, 03/09/2012

22 Department of Health, South Africa. Healthcare for all South Africans, supra

23 Department of Health, South Africa. NHI in South Africa, 2011, supra: 13

24 Department of Health South Africa. Progress report, supra: 11

- ensuring the safety of staff and patients;
- reducing infection at healthcare facilities; and
- providing facilities with sufficient amounts of medication to treat patients.

7.5 As part of the implementation of NHI, the South African government has begun to focus its efforts on HIV prevention campaigns as well as “increasing access to HIV Counselling and Testing in community settings”.²⁵ The South African government also established “79 [primary healthcare] teams ... consisting of Professional Nurses; Enrolled Nurses and Community Health Workers” around the country in an attempt to meet the varying healthcare demand patterns.²⁶ The government also recognises that the renovation of existing healthcare facilities will improve “communities’ perspective on the quality of care” and enhance “the morale of health workers”.²⁷

7.6 Some of the achievements of NHI thus far include increased interest by healthcare professionals to work in the public sector, a greater intake of medical students at South African universities and an increase in the number of clinical technicians who possess the knowledge and skills to repair medical equipment. This will lead to major cost savings as there will no longer be a need to purchase expensive equipment. A number of new hospitals are also being constructed around the country. Furthermore, the number of patients on antiretroviral therapy (ART) has increased, while the transmission rates of HIV from mother to child have reduced. There has also been an improvement in the number of infants immunised against diseases like pneumonia and diarrhoea.²⁸

8. DATA AND METHOD

8.1 In order to assess barriers to access relating to affordability, accessibility, accommodation, availability and acceptability in South Africa, the GHS was analysed. The GHS is an annual survey that has been conducted by Statistics South Africa since 2002 with the purpose of exploring the living conditions of South African households. The survey covers six topics, two of which relate to healthcare, namely “health” and “household access to services and facilities”.²⁹ These datasets were selected because of the large sample sizes and the implications that this has for statistical significance, the eight-year survey history and the fact that the samples were randomly drawn.

25 Department of Health South Africa. Progress report, supra: 22

26 Department of Health South Africa. Progress report, supra: 13

27 Department of Health South Africa. Progress report, supra: 18

28 Department of Health South Africa. Progress report, supra

29 Statistics South Africa. General household survey 2009. Statistical release, 2010: 1. Accessed from www.statssa.gov.za/, 13/12/2011

8.2 GHS data sets³⁰ from 2002 to 2009 were obtained from the National Research Foundation. These surveys were conducted by Statistics South Africa. The sample sizes are shown in Table 1.

Table 1. Sample size per survey

Survey	Number of respondents interviewed	Number of households interviewed
2002	102 462	26 244
2003	99 428	26 398
2004	97 197	26 214
2005	107 987	28 129
2006	105 727	28 002
2007	109 976	29 280
2008	94 097	24 222
2009	94 263	25 303

8.3 The GHS datasets, particularly the ‘person’ and ‘house’ files, contain a number of demographic variables describing the households as well as responses to questions about healthcare utilisation patterns, which have been used to measure access. The list of variables used in the analysis is given in Table 2. This table includes the factors that have been used for certain analyses. Table 3 details the health questions analysed and how they relate to access, affordability, accessibility and accommodation. It is important to note that because access is a complex concept and its constituents are difficult to separate, some of the questions cover a range of topics. These questions have been included under the general access section. The options available to answer each question are presented in Appendix A.

Table 2. Explanatory variables

Variable
Race (African or black; white; Indian or Asian; coloured)
Type of settlement (rural; urban)
Medical-scheme coverage or medical insurance (yes; no)

8.4 The data were analysed by means of basic descriptive statistics techniques.

30 Statistics South Africa. General Household Surveys 2002–2009. Accessed from sada.nrf.ac.za

Table 3. Health responses analysed

Question	Source
General access	
If anyone in this household gets ill and decides to seek medical help, where do they usually go first?	GHS 2004–2009
During the past month, did consult a health worker such as a nurse, doctor or traditional healer as a result of illness or injury?	GHS 2002–2009
IF YES:	
What kind of health worker did he/she consult?	GHS 2002–2008
<i>This question was further analysed with respect to setting</i>	GHS 2002–2004
Where did the consultation take place?	GHS 2002–2008
Did ... experience any of the following during this particular visit to the health worker?	GHS 2002–2009
IF NO:	
Why did not consult any health worker during the past month?	GHS 2002–2009
Affordability	
Is covered by a medical aid or medical benefit scheme or other private health insurance?	GHS 2002–2009
If no-one in this household is covered by a medical aid scheme, what is the main reason why not?	GHS 2009
Did have to pay for this service? (If consulted a health worker during the past month)	GHS 2002–2009
Accessibility	
What means of transport are usually, or would usually be used by members of this household to get to the nearest [health facility]?	GHS 2002–2008
How long in minutes does it take or would it take, from here to reach the nearest... [health facility] using the usual means of transport?	GHS 2002–2008
<i>This question was further analysed with respect to setting</i>	GHS 2002–2004
Is this facility the nearest of its kind (clinic/hospital/health centre etc.) to your dwelling?	GHS 2009
If not the nearest, why is the household normally not using the nearest facility?	GHS 2009
Accommodation	
Is the facility you/this household consult(s) open 24 hours?	GHS 2004–2008
From what time does the facility you/this household consult(s) open?	GHS 2004–2008
From what time does the facility you/this household consult(s) close?	GHS 2004–2008

9. DATA LIMITATIONS

9.1 The analysis of the data was limited in that the authors had to rely on data obtained from Statistics South Africa. The authors had no control over what questions were asked or the layout of the questionnaire. Furthermore, data on whether respondents were in

rural or urban areas were not available after 2004. We know from Wilson et al. (2009) that this might influence access because problems around access may be more profound in rural areas than at health facilities situated in the bigger cities. An investigation into this aspect is therefore left for future research.

9.2 The layout and wording of the surveys were relatively consistent over the years of observation. The 2009 survey was, however, presented in a slightly different form than in previous years and therefore certain information was grouped. This was done in order to obtain the data in a form consistent with the data from the prior surveys. For example, although the same question was asked, more options were provided for the respondent to answer the question in the 2009 survey.

9.3 The surveys were completed by Statistics South Africa staff who conducted face-to-face interviews with the respondents.³¹ The statistical releases published by Statistics South Africa, which summarise the results of the surveys, do not indicate a possible misinterpretation of the questions concerned with access to healthcare.

9.4 Despite the focus of this paper on access to public healthcare facilities, the authors did not exclude the medical-scheme members from the analysis, even though this may have distorted some of the results. The reason was that the authors wanted to conduct the analysis consistently. That is, it was difficult to split the sample into insured and uninsured respondents for a number of the questions, especially those that related to entire households, rather than individuals.

10. RESULTS AND DISCUSSION

10.1 DEMOGRAPHIC BREAKDOWN AND COMPARISON WITH SOUTH AFRICAN POPULATION DATA

10.1.1 The split of the GHS sample by province, race and gender has been included in Appendix B. For comparison, the corresponding data pertaining to the entire population of South Africa have also been included. The GHS data appear to be a reasonable representation of the entire South African population. However, slight misrepresentations are present.

10.1.2 Over all the years, the proportion of respondents sampled from Gauteng is under-estimated by an average of 7,9%. The proportion sampled from the Northern Cape is over-estimated over all years by an average of 3,7%. Furthermore, the population data depict the trend in migration patterns. In particular, the South African population appeared to be moving to Gauteng and the Western Cape from the Eastern Cape, North West and Mpumalanga. This trend is not represented in the GHS data. In fact, over the years 2005 to 2007, the proportion of the population sampled from Kwazulu-Natal is much higher than in the other years. As a result, the proportions sampled from the other provinces in 2005 to 2007 are lower than the equivalent population distributions.

31 Statistics South Africa. GHS 2009: 1

10.1.3 It appears that the proportion of the GHS sample that was coloured was slightly over-stated, generally at the expense of the white population.

10.1.4 Over all the years, the population data showed that the distribution by gender was slightly skewed towards females. The GHS data showed the same pattern; however, the bias was more profound, an average of 53,0% of the GHS sample being female, compared with an average of 51,3% obtained from the population data.

10.2 MEDICAL-SCHEME MEMBERSHIP

10.2.1 An analysis of the medical-scheme membership and race composition of the GHS data can provide some insight into the accessibility patterns observed from the data and the applicability to the broader population.

10.2.2 In medical schemes, regular contributions are made in exchange for some pooling of healthcare costs. No person may be refused membership to a medical scheme, unless such a scheme is restricted. This means that the scheme exists to provide benefits only to those people who meet a certain requirement; for example, being an employee of a specific firm or having a specific trade.³² However, membership of medical schemes usually applies to higher income earners (Da Silva & Wayburne, op. cit.). A discussion of the affordability of medical-scheme membership is dealt with in section 10.5.

10.2.3 The proportion of the sample that was covered by a medical scheme or other private health insurance appears to have dropped in 2005. However, this proportion seems to have been increasing each year since 2005. Furthermore, the proportion of the sample covered by some type of medical insurance has been consistently between 10,0% and 15,0%. When these figures are compared to those for the entire South African population, based on data from the Council for Medical Schemes (CMS)³³ in South

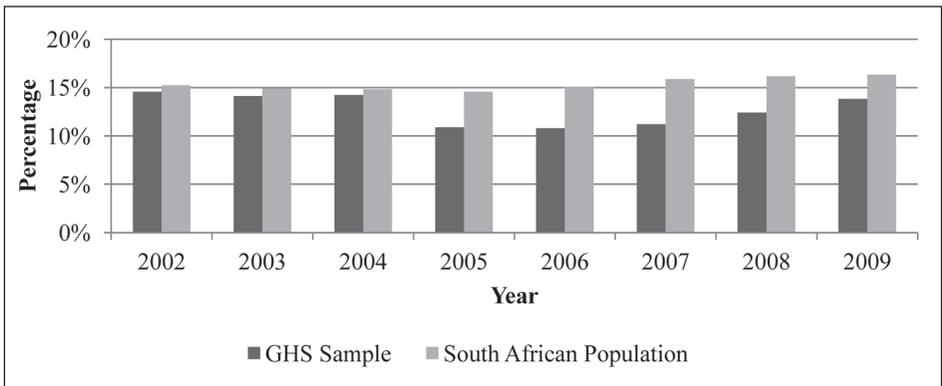


Figure 1. Proportion of the sample and South African population covered by a medical scheme

32 Medical Schemes Act, 1998, Act no. 131 of 1998 as amended, Republic of South Africa

33 CSM. Annual reports, 2003–04 to 2009–10. Accessed from www.medicalschemes.com/Publications.aspx

Africa and mid-year population estimates from Statistics South Africa, a similar pattern is observed. However, the population data appear to fluctuate only over a small range around 15,0%. The GHS estimates are very similar to the population estimates for 2002–2004, but thereafter the results differ by about 2,5% to 4,7%. These results are displayed in Figure 1. The apparent anomaly could be due to sampling bias and possible provincial bias. In particular, in 2005–2007, the proportion of the sample from KwaZulu-Natal was about 26,0%, whilst in all other years it was approximately 17,0%.

10.3 GENERAL ACCESS AND UTILISATION PATTERNS

10.3.1 When asked which medical facility the household first visits when ill, approximately three-quarters of the households interviewed stated that they visit a facility in the public sector. During the period from 2004 to 2009, it appears that utilisation of public clinics increased at the expense of public hospitals. This indicates that the sample, and perhaps the South African population as a whole, is starting to make more efficient use of healthcare facilities, by first consulting at the primary-care level.

10.3.2 In addition, for those respondents who suffered from illness or injury in the past month and sought medical advice, 60,7% sought assistance from the public sector. Most respondents (67,0%) who visited a public sector facility visited a clinic.

10.3.3 Thus, the proportion of respondents who actually needed to seek medical help in the month prior to the survey and visited a public facility is significantly less than 75,0%. In other words, there appears to be a noteworthy gap between the respondents' intentions and their observed behaviour. It would therefore appear that when medical help is actually needed, respondents may prefer to go to a facility in the private sector. It would be beneficial to investigate the reasons for a change in preference at the point when the respondent seeks medical advice. Such an investigation is left for future research.

10.3.4 In 2009 66,4% of respondents who were ill or injured in the month preceding the survey consulted healthcare workers. During the period from 2002 to 2006 this figure remained consistently between 80,0% and 85,0%. Thus the proportion of respondents who visited a healthcare worker appears to have decreased substantially since 2002, when 80,8% of respondents who suffered from some type of injury or illness consulted a healthcare worker. These results are displayed in Figure 2.

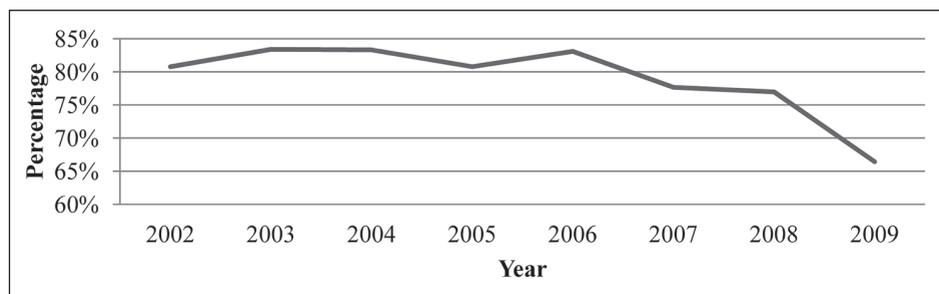


Figure 2. Proportion of the sample who visited a healthcare worker due to accident/illness

10.3.5 This decline in the percentage of respondents visiting healthcare workers may have been attributable to lower education and awareness levels. Habtom & Ruys (2007) found that respondents who are more educated are more inclined to consult a healthcare provider, rather than self-medicate. For example, greater emphasis on HIV awareness programmes would lead to an increase in the number of people being tested for the virus and hence receiving medical treatment if required (Da Silva & Wayburne, *op. cit.*). Thus the significant reduction in visits to a healthcare worker could be indicative of a decline in the education levels of the samples.

10.3.6 Alternatively, as suggested by Gulliford et al. (*op. cit.*) and Berry, Seiders & Wilder (*op. cit.*), the drop in the proportion of respondents visiting a medical facility may have been influenced by perceptions of quality of care due to previous experience. Nevertheless, better health education may reduce the burden on public healthcare facilities. However, the reasons for the observed reduction in the proportion are not specified and further research would be required to support such arguments.

10.3.7 When the respondents who suffered from illness or injury were questioned about the type of healthcare worker with whom they consulted, over 90,0% indicated that their most recent consultation had taken place with either a nurse or a doctor. Less than 3,0% of respondents answered that they had visited a medical specialist. The proportion of respondents that visited a traditional or spiritual healer was approximately 1,0%. When split by setting, consistent results were obtained for the proportion of respondents that had visited a nurse or a doctor. However, more than 3,0% of respondents living in an urban area had visited a medical specialist, while a greater proportion of respondents living in non-urban areas visited a traditional or spiritual healer. Specialist visits in urban areas and visits to traditional or spiritual healers in non-urban areas are still low, despite being slightly higher than the combined results. The average results for 2002 to 2004 are summarised in Table 4 and the trend over the period from 2002 to 2008 is displayed in Figure 3.

10.3.8 The fact that on average only 2,4% of respondents' most recent consultations took place with a specialist perhaps is an indication that many ailments are not serious. However, there is a possibility that there was confusion among some respondents as to the difference between medical specialist and doctor. This proportion may therefore be under-estimated. The distribution between medical specialist and traditional or spiritual healer for people living in urban and non-urban areas is not surprising. Culture may be expected to play an influential part in persuading patients to pursue a certain course of treatment (Habtom & Ruys, *op. cit.*). A greater proportion of health personnel (including medical specialists) practise in "urban and wealthier areas" than in other areas (Dussault & Franceschini, 2006: 1). This may persuade patients to forgo the earlier stages of treatment and go straight to the specialist. Cultural pressures (Habtom & Ruys, *op. cit.*) as well as a likely scarcity of healthcare professionals in non-urban areas (Wilson et al., *op. cit.*) will result in patients seeking alternative methods of treatment. However, even when split by setting, over 90,0% of the respondents living in either an urban or non-urban setting had visited a nurse or doctor for their most recent medical consultation. Furthermore, there appears to be a shift from consulting doctors to

Table 4. Distribution of type of healthcare worker visited, split by setting (2002–2004)

Healthcare worker	Setting		
	Urban	Non-Urban	Overall
Nurse	29,9%	50,5%	38,2%
Doctor	63,4%	44,4%	55,8%
Medical specialist	3,2%	1,7%	2,6%
Traditional/spiritual healer	0,3%	1,5%	0,8%
Other	2,5%	1,2%	2,0%

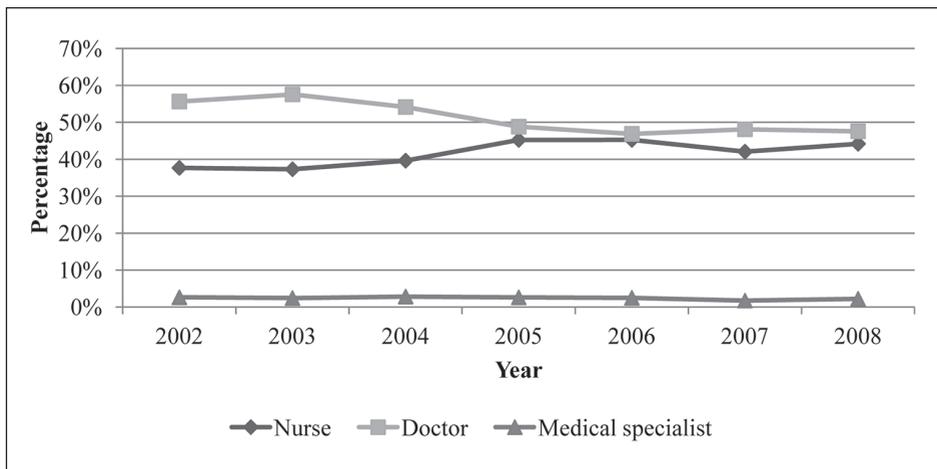


Figure 3. Type of healthcare worker visited

consulting nurses, as can be seen from Figure 3. This may be indicative of the delivery of primary care by nurses, as suggested by Laurent et al. (2009). This has the benefits of reducing the workload of doctors as well as potential cost saving (Laurent et al., op. cit.). Although the data were obtained before the South African government began the implementation of the NHI, the phenomenon explained above is in line with the goals and accomplishments of NHI as discussed in ¶7.5.

10.4 GENERAL BARRIERS TO ACCESS

10.4.1 In all the years of observation, almost 90,0% of respondents who sought medical assistance from the public sector did not find any problems with the healthcare facility that they visited. Of the respondents that did experience problems, long waiting times (accommodation), unavailable drugs (availability) and rude staff (acceptability) were identified as the first, second and third biggest problems respectively over all the years of observation. The proportion of patients who experienced these particular problems as one of their three most pressing concerns as a proportion of those experiencing any problems is given in Figure 4. The proportions have been relatively

stable, which indicates that these may be persistent problems. The two least worrying problems over all the years were expensive care and incorrect diagnosis. However, a patient is unlikely to know if they have been incorrectly diagnosed, so this figure is probably under-reported. Opening times and cleanliness were ranked fourth and fifth, but there was no distinct pattern over the period of observation. The distribution of the problems faced is displayed in Figure 5.

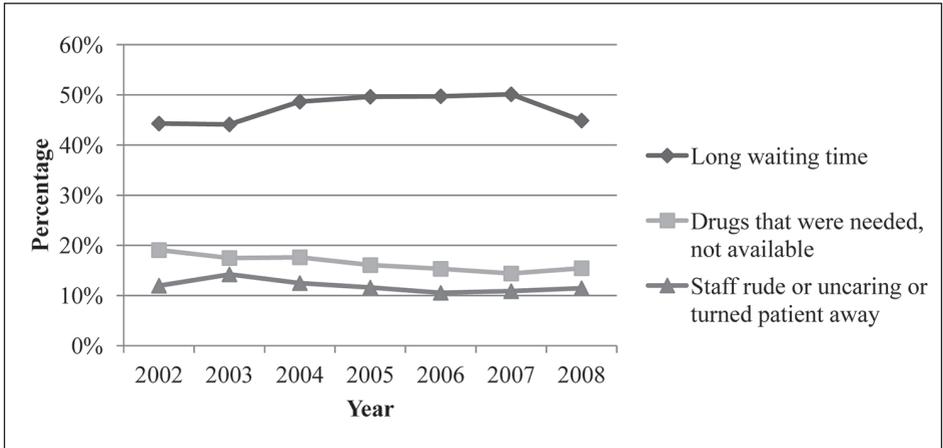


Figure 4. Proportion of patients who reported problems of accommodation, availability and acceptability

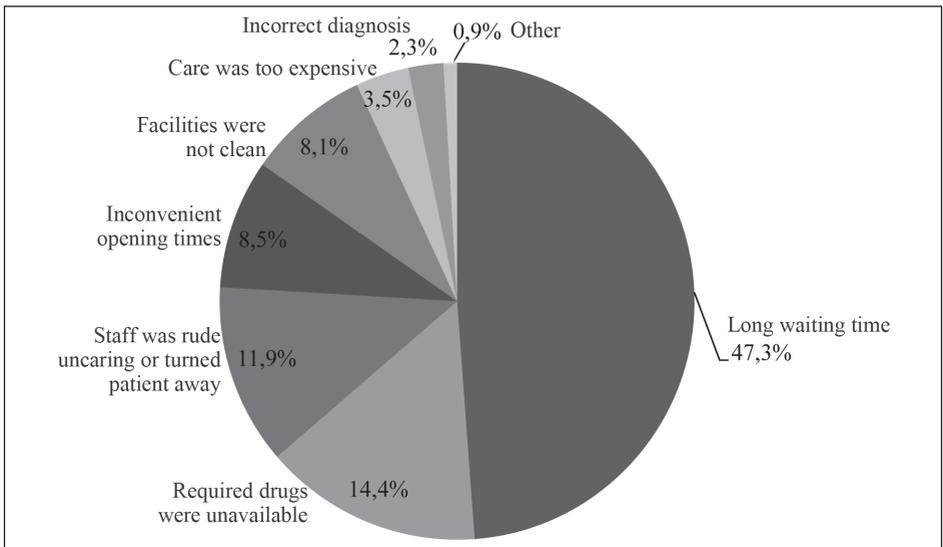


Figure 5. Proportion of respondents that experienced problems with public healthcare facilities

10.4.2 The above figure shows that almost half of the respondents were unhappy about the time that was required to consult with a healthcare provider. This result is consistent with the authors cited above (section 4). Although health facilities may also lack theatres or medical equipment, the GHS data suggest that medicine shortages in themselves are a major barrier to access. With regard to the improvement of access to public health facilities, this suggests that more attention is required to ensuring that clinics and hospitals are adequately stocked and that they have proper internal processes to assess the amount and types of medication. Medical staff's interaction with the patients was also identified as one of the top three barriers to access in public facilities. Habtom & Ruys (op. cit.: 212) identified these as significant concerns as they lead to an inefficient use of healthcare resources. Patients would "frequently bypass lower level health care facilities seeking treatment at higher-level because they perceive that quality of care [in terms of availability of drugs and staff and staff-patient interaction] is better at higher level health care facilities" (ibid.: 212). These issues were also identified by the Department of Health³⁴ as requiring immediate attention (¶7.4).

10.4.3 Those respondents who did not seek medical help, despite being injured or ill, were asked the reasons for their inaction. The most common reason over the eight years of investigation was that it was not necessary to seek medical help. The percentage of such responses increased from 47,6% in 2002 to 59,3% in 2009. Over the years, the proportion of respondents who claimed that the reason for their not seeking medical assistance was due to its being too expensive appears to have reduced considerably: from 31,9% in 2002 to 2,5% in 2009. Also, the proportion of respondents citing that the medical centre was "too far" ranges from 6,1% in 2002 to 10,0% in 2008, with no distinct trend. In 2009, however, this percentage was as low as 0,8%. These results are displayed in Figure 6.

10.4.4 These findings are consistent with the finding in Figure 2 that the proportion of respondents who consulted a healthcare worker decreased substantially. Once

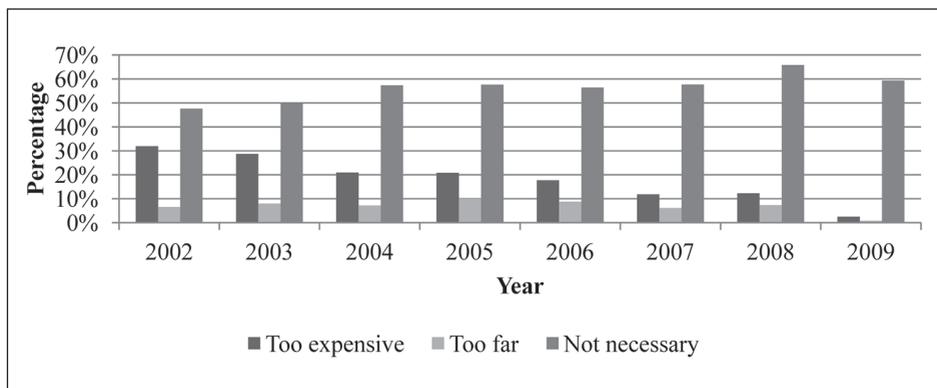


Figure 6. Reasons for not consulting a health worker, if applicable

34 Department of Health South Africa. Progress report, supra

again, affordability was not identified as a considerable barrier to access, and accessibility was an even less significant problem.

10.5 AFFORDABILITY

10.5.1 As indicated above, the GHS data suggest that affordability does not act as a barrier to access for a large proportion of the population. This makes sense since healthcare is free in public facilities for pregnant women and young children³⁵ and charges are means-tested. In the context of the public healthcare sector, affordability may refer to bribes that have to be paid to avoid long waiting times or get the required medicines.

10.5.2 Race has traditionally been used as a proxy for income (Da Silva & Wayburne, *op. cit.*; Argent *et al.*, *op. cit.*). It is similarly used as a proxy for ability to afford healthcare. The results show that the percentage of each race that has medical-aid cover is highly skewed towards the white population, an average of 65,6% of that population having medical-aid coverage. The African or black population has the lowest proportion of respondents with medical-aid coverage (7,5%). Over all the racial groups, medical-aid coverage was relatively constant during the period from 2002 to 2004. In 2005 the percentages of respondents covered by a medical aid dropped quite considerably, but have been increasing steadily thereafter. These results are displayed in Figure 7. These figures could not be verified against CMS data since they are not given by race. The reason is that “medical schemes ... are not permitted to underwrite new applicants on the basis of this risk factor and thus do not maintain accurate records” (Da Silva & Wayburne, *op. cit.*: 53). However, a similar general pattern in medical-aid coverage was observed from the CMS data, as can be seen in Figure 8.

10.5.3 The GHS data appear to be representative of the population in that a similar trend was obtained over the years of observation. In addition, the findings are

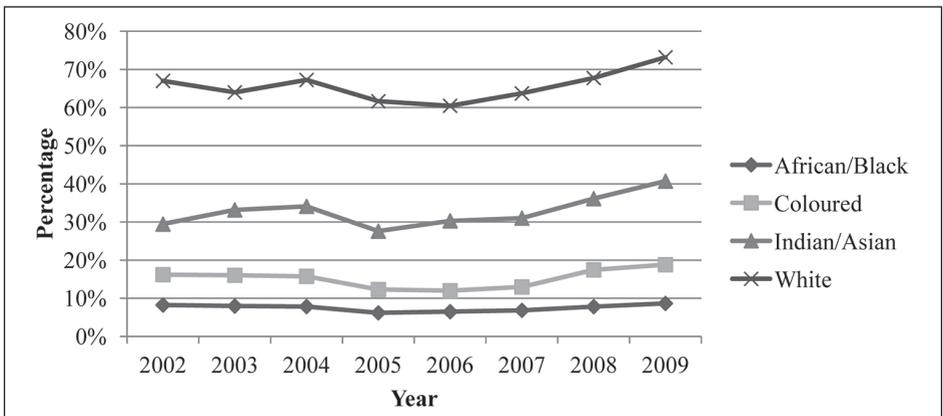


Figure 7. Proportion of each race that is covered by a medical scheme

35 National Health Act, *supra*

consistent with those of Argent et al. (op. cit.) where the majority of the population living in poverty is African or black, while the white population accounts for less than 0,5% of the South African population living below the poverty line. In the 2009 survey, an additional question was asked about why the respondent did not have medical aid cover; 90,4% of respondents without medical cover answered that they cannot afford the membership fees. Of these respondents, 88,2% were African or black.

10.5.4 Affordability did not rank highly as a barrier to access in the public sector. This is consistent with the authors cited in section 2 who stated that affordability is not necessarily a significant barrier to access. Furthermore, it is interesting to note that the proportion of respondents who referred to medical-care costs when giving reasons why they had not consulted a health worker decreased from 2002 to 2009 (Figure 6). These results combined the public and private sectors. This may have been driven by medical-scheme coverage as medical-scheme coverage did increase from 2005 to 2009.

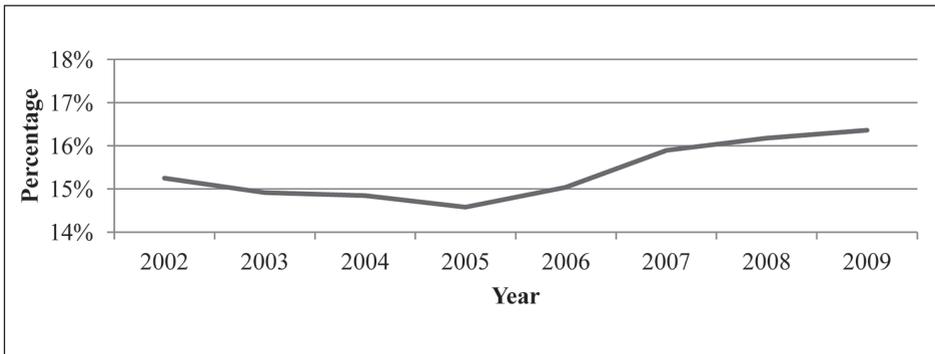


Figure 8. Trend in medical aid membership over from 2002–2009, based on CMS data

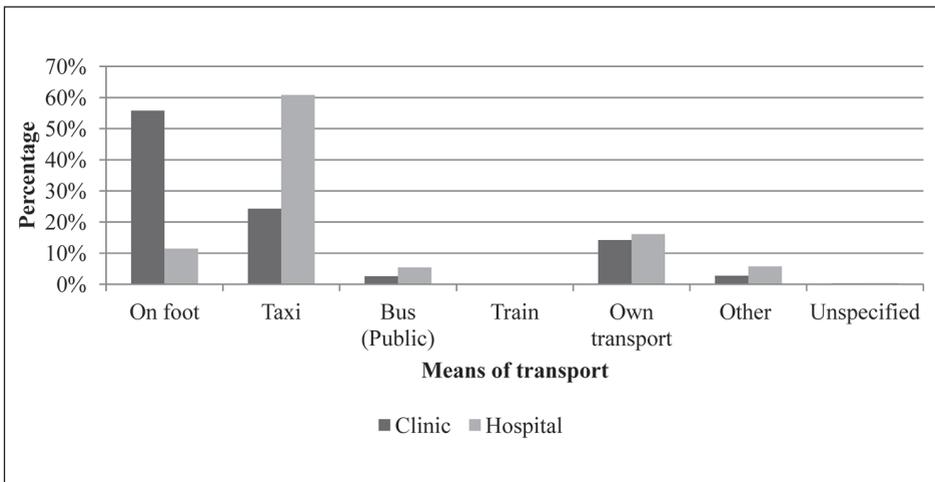


Figure 9. Means of transport usually used to access the nearest clinic and hospital

However, before 2005, medical-scheme membership was relatively stable. This suggests that, before 2005, the improved affordability occurred independently of medical-scheme coverage, while after 2005 medical-scheme coverage is likely to have positively influenced affordability. This may require further research about the reasons why medical care costs have become less problematic.

10.6 ACCESSIBILITY

10.6.1 An average of 55,8% of respondents walk by foot to the nearest clinic. The second most common means of transport to access the nearest clinic is by taxi (24,3%), followed by the use of the respondents' own cars (14,2%). From 2002 to 2008 60,8% of respondents indicated that they used a taxi to access the nearest hospital. This was followed by the use of the respondents' own cars (16,1%) and by foot (11,4%). The results are displayed in Figure 9.

10.6.2 During the period 2002 to 2008 about two-thirds of the respondents had a travel time of within 30 minutes to the nearest clinic, using their usual mode of transport. This translates into a travel distance of approximately 2,5 kilometres by foot. In terms of travel time to the nearest hospital, 44,0% of respondents live within 30 minutes from the nearest hospital, using their usual mode of transport. The proportion of respondents living more than an hour from the nearest clinic ranged from 6,0% to 8,7%. Similarly, the proportion of respondents having to travel more than one hour to the nearest hospital ranged from 14,0% to 19,8%.

10.6.3 When calculating the weighted average travel time using various modes of transport, the fastest travel time during the period from 2002 to 2008 was achieved by using the respondents' own transport to travel to both the clinic and hospital. The average times were 18,5 minutes to the clinic and 24,6 minutes to the hospital. This was followed by travelling on foot. The greatest variability in travel time was achieved when respondents were required to wait for the transport (train and bus). This is consistent with Tanser, Gijsbertsen & Herbst (op. cit.), who stated that travel time is often subject to under-reporting. These results have been summarised in Table 5.

Table 5. Average (standard deviation) travel time in minutes to clinic and hospital, using various means of transport

Mode of transport	Clinic	Hospital
Own transport	18,4 (1,6)	24,6 (2,0)
On foot	24,0 (1,1)	29,4 (1,6)
Taxi	34,7 (2,1)	42,8 (1,9)
Train	32,1 (4,6)	46,6 (7,7)
Bus (public)	48,2 (3,3)	58,8 (3,2)

10.6.4 When travel time is split by respondents living in urban and non-urban areas, the following average proportions (from 2002 to 2004) are obtained:

Table 6. Travel time to nearest clinic and hospital, split by area

Travel time (minutes)	Clinic		Hospital	
	urban	non-urban	urban	non-urban
0–14	42,8%	19,3%	21,3%	5,0%
15–29	41,4%	30,2%	41,9%	21,5%
30–44	12,2%	26,2%	24,7%	29,4%
45–59	1,9%	10,0%	6,1%	16,6%
60	1,0%	13,5%	5,4%	25,5%

10.6.5 Over 84,0% of respondents living in urban areas live within half an hour from the nearest clinic and within 45 minutes from the nearest hospital. In contrast, just under half of respondents living in non-urban areas live within half an hour of the nearest clinic. Similarly, the proportion of respondents living within 45 minutes from the nearest hospital is approximately 56,0%.

10.6.6 According to data from the 2009 GHS, over 90,0% of respondents made use of their nearest healthcare facility. In other words, respondents' usual or normal medical facility was the nearest to their home. Almost a third of the respondents who did not make use of the nearest healthcare facility claimed that they preferred to utilise a private facility. The second most cited reason was that the respondents had to wait long times to consult the healthcare worker at the nearest facility.

10.6.7 A relatively small proportion of respondents claimed that the distance to the healthcare facility was the reason for not visiting the facility. Thus, better distribution of healthcare facilities can be considered to have a small influence on access. That is, the results of the data analysed in this paper support those authors who claimed that distance to a healthcare facility does not affect access to healthcare (¶3.3; ¶3.4).

10.6.8 It is difficult to assess whether the travel times obtained above are appropriate as South Africa has not established standards against which to measure this. Similarly, as mentioned in ¶1.6, it may be misleading to use travel time as a proxy for accessibility. However, using a one-hour travel time (Tanser, Gijbetsen & Herbst, op. cit.) as discussed in ¶3.2 and the average walking speed of 3 to 4 kilometres an hour implied by Doherty, Rispel & Webb (op. cit.), a travel distance of 2,5 kilometres to the nearest clinic by foot may be appropriate. Furthermore, a small proportion of respondents lived more than one hour from their nearest clinic. However, up to 20,0% of respondents lived more than one hour from the nearest hospital. This proportion will have to be compared with accepted benchmarks and standards for distance to nearest hospital. That is, in order to assess the accessibility aspect of access, it would be necessary to compare these results with those obtained from other countries.

10.6.9 However, physical access to healthcare might be greatly enhanced if people have access to their own cars, since travel time using own transport was found

to be the quickest. Similarly, Rose (op. cit.: 3) stated that physical accessibility is not a significant problem in Europe as most people either have their own cars, or “have friends that will drive them to a doctor.”

10.6.10 Despite this, only 10,0% of respondents answered that they do not make use of their nearest healthcare facility when they seek medical care. However, distance was not cited as a reason for their actions. Instead, these respondents claimed that the acceptability and accommodation aspects were the biggest deterrents. However, since this analysis is based on data from 2009 only, limited conclusions can be drawn.

10.6.11 Because of the shortage of healthcare providers in non-urban areas it is unsurprising that respondents living in non-urban areas have longer travel times than those in urban areas (Wilson et al., op. cit.). However, the proportions of non-urban respondents that live within 30 minutes and 45 minutes to the nearest clinic and hospital respectively may be worrying as they could signal potential accessibility problems. Tanser, Gijsbertsen & Herbst (op. cit.) noted that urban dwellers do not necessarily use their closest healthcare facility because more facilities are available in a reasonable proximity and private facilities are used more. This may provide justification for having fewer healthcare facilities for a given population in an urban area than in a rural area. The extent of this adjustment would be determined by a number of factors including the number of alternative treatment options available to an individual (private care or traditional healers).

10.7 ACCOMMODATION

10.7.1 The biggest problem experienced by households trying to access healthcare was long waiting times. This problem is consistent with the other authors cited in section 4 who found that many patients are not content with having to wait long times in doctors’ waiting rooms. Therefore, it appears that the healthcare facilities, in general, are not accommodating patients’ needs because demand for healthcare is greater than its supply.

10.7.2 The proportion of healthcare facilities open 24 hours a day appears to have decreased from 2004 to 2006. Thereafter, the proportion rose to just over 44,0%. These results are displayed in Figure 10. The data give no reason for this pattern. Some of the variation could be explained by random error. However, these results need to be investigated further in order to provide a clear explanation.

10.7.3 Approximately 95,6% of those facilities that were not open 24 hours a day, had opening times of between 06:01 and 09:00. Furthermore, an average of 86,6% of facilities was open for durations of between seven and ten hours a day. An average of 4,6% of facilities opened between 08:01 and 09:00 for eight to ten hours. Also, 11,9% of facilities, on average, closed after 17:00. These results are summarised in Table 7.

10.7.4 Approximately 40,0% of facilities are open 24 hours. However, the split between primary healthcare facilities and hospitals is not clear. It is suspected that a large proportion of these facilities are hospitals, but further investigation is needed to validate this.

Table 7. Average proportion of healthcare facilities not open 24 hours a day, split by opening time and duration

Opening time	Duration open (hours)				Total
	seven	seven–eight	eight–ten	ten	
Before 6:00	0,0%	0,0%	0,3%	0,6%	0,9%
6:01–8:00	2,5%	32,9%	42,9%	3,4%	81,7%
8:01–9:00	3,7%	5,4%	4,7%	0,6%	14,4%
After 9:00	2,2%	0,4%	0,4%	0,0%	3,0%
Total	8,4%	38,7%	48,3%	4,6%	100,0%

10.7.5 In order to increase access to healthcare facilities, it is important to develop plans to address the issue of long waiting times. For example, it would be beneficial to adopt a flexible appointment system, whereby the length of time spent with each patient is dependent on factors such as age, whether the patient is new or returning and previous consultation lengths (Cayirli, Veral & Rosen, op. cit.). Alternative solutions include team-based approaches and task shifting (Berry, Seiders & Wilder, op. cit.). A longer-term solution to the improvement of access through improvement of the accommodation aspect would be to increase the number of graduates from medical schools and nurse colleges.³⁶ This approach has been adopted by the South African government in its development of NHI. Other proposals include the provision of economic incentives to persuade medical practitioners to practise in the public sector or

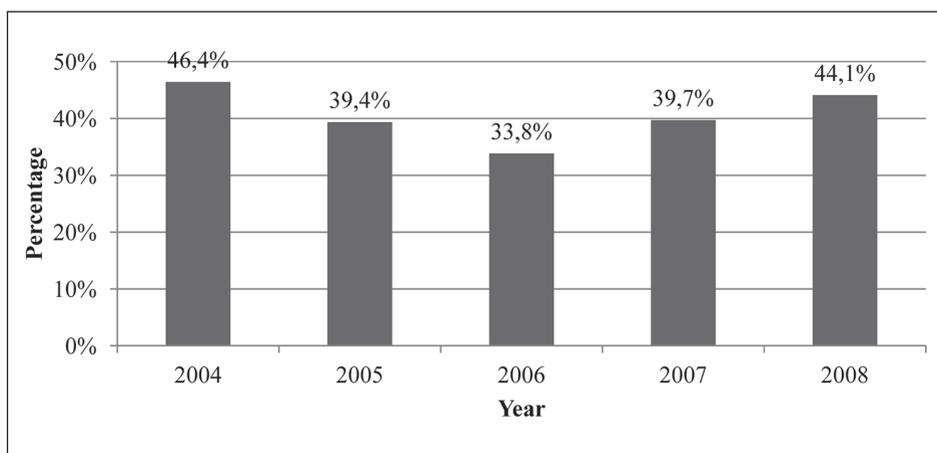


Figure 10. Proportion of healthcare facilities open 24 hours a day

³⁶ Department of Labour, South Africa. The Shortage of Medical Doctors in South Africa, supra

in rural areas, where “shortage is particularly acute”.³⁷ This will have the combined effect of improving accommodation as well as availability as discussed in section 5 above.

11. CONCLUSION

11.1 Access to healthcare is a complex concept that comprises five interrelated factors. These factors are affordability, accessibility, accommodation, availability and acceptability. In order to improve access to healthcare services, each of these factors needs to be addressed, both independently and simultaneously. The introduction of an NHI policy should better enable South Africans to afford the healthcare services that they need; however, this alone will not improve access sufficiently to enable South Africa to meet its healthcare goals. In addition, affordability was not identified as a barrier to access in the public sector. A focus on the affordability of healthcare will do little to improve access.

11.2 According to the data obtained from the GHS, the positioning of healthcare facilities and how much they charge for their services are not the factors preventing people from accessing healthcare. In fact, certain components of the accommodation aspect of access were identified as being problematic. Respondents were dissatisfied with having to wait a long time to consult a healthcare worker. Availability and acceptability were also considered to be significant issues affecting access, but a detailed analysis of these factors is left for future research. The analysis showed that affordability and accessibility are not major barriers to access in the South African public healthcare sector. Thus, in implementing NHI, the South African government should focus more on accommodation, availability and acceptability.

11.3 This suggests that certain interventions unrelated to healthcare funding could prove just as vital as making healthcare affordable. These interventions could include:

- restructuring the appointment system to achieve shorter waiting times;
- ensuring that the required drugs to treat conditions effectively are always available;
- improving roads and transport systems especially in rural areas;
- ensuring that referral systems are implemented appropriately; and
- utilising community healthcare workers who engage with community members and identify, advise and direct patients to the appropriate facilities.

Since many of the above suggestions are already contained in the goals of NHI, the data suggest that South Africa is on course to ensuring access to healthcare to all South Africans.

37 *ibid.*: 51

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APPENDIX A**OPTIONS GIVEN TO ANSWER THE QUESTIONS POSED IN THE GHSs**

The options given to respondents to answer the questions posed in the GHSs were as follows:

If anyone in this household gets ill and decides to seek medical help, where do they usually go first?

- | | |
|----------------|--|
| Public sector | Hospital
Clinic
Other |
| Private sector | Hospital
Clinic
Private doctor/specialist
Traditional healer
Pharmacist/chemist
Health facility provided by employer
Alternative medicine, e.g. homoeopathist
Other |

During the past month, did ... consult a health worker such as a nurse, doctor or traditional healer as a result of illness or injury?

- Yes
- No
- Don't know

IF YES:

What kind of health worker was it?

- Nurse
- Doctor
- Medical specialist
- Pharmacist/chemist
- Dentist
- Spiritual healer (church related)
- Traditional healer
- Any other healthcare provider (including psychologist, physiotherapist, chiropractor, homeopath, optometrist)
- Don't know

Where did the consultation take place

Public sector	Hospital
	Clinic
	Other
Private sector	Hospital
	Clinic
	Private doctor/specialist
	Traditional healer
	Pharmacy/chemist
	Health facility provided by employer
	Alternative medicine, e.g. homoeopathist
	Other
Don't know	

Did ... experience any of the following during this particular visit to the health worker?

- Facilities not clean
- Long waiting times
- Opening times not convenient
- Too expensive
- Drugs that were needed, not available
- Staff rude or uncaring or turned patient away
- Incorrect diagnosis
- Other

Did ... have to pay for this service?

- Yes
- No
- Unspecified

IF NO:

Why did ... not consult any health worker during the past month?

- Too expensive
- Too far
- Not necessary
- Don't know
- Other

What means of transport are usually, or would usually be used by members of this household to get to the nearest [clinic and hospital]?

- On foot
- Taxi
- Bus (Public)
- Train
- Own transport
- Other

How long in minutes does it take or would it take, from here to reach the nearest [clinic and hospital] using the usual means of transport?

- 0–14
- 15–29
- 30–44
- 45–59
- 60 minutes or more
- Don't know

Is this facility the nearest of its kind (clinic/hospital/health centre etc.) to your dwelling?

- Yes
- No

IF NO:

Why is the household normally not using the nearest facility?

- Facilities not clean
- Long waiting time
- Opening times not convenient
- Too expensive
- Drugs that were needed, not available
- Staff rude or uncaring or turned patient away
- Incorrect diagnosis
- Not on medical aid scheme list of facilities
- Prefer to use a State/Provincial health institution
- Prefer to use a private health institution
- Other

Is the facility you/this household consult(s) open 24 hours?

- Yes
- No

IF NO:

From what time does the facility you/this household consult(s) open?

From what time does the facility you/this household consult(s) close?

APPENDIX B**DEMOGRAPHIC BREAKDOWN OF THE GHS DATA AND SOUTH AFRICAN POPULATION**

B.1 Table B.1 shows the GHS data by province. Table B.2 shows those data by race and Table B.3 shows them by sex.

Table B.1 GHS Data by province

Province	Year							
	2002	2003	2004	2005	2006	2007	2008	2009
Western Cape	10,3%	10,5%	10,5%	10,6%	10,6%	10,7%	10,0%	9,6%
Eastern Cape	14,1%	14,3%	14,6%	13,4%	13,5%	13,2%	12,3%	11,9%
Northern Cape	4,7%	5,0%	4,8%	6,4%	6,5%	6,4%	6,2%	6,1%
Free State	7,9%	8,0%	7,8%	7,3%	7,2%	7,2%	8,3%	8,8%
KwaZulu-Natal	17,5%	17,5%	17,5%	26,1%	26,5%	26,7%	18,3%	17,4%
North West	10,0%	10,1%	9,7%	8,5%	8,5%	8,4%	8,8%	8,8%
Gauteng	13,6%	12,5%	13,2%	9,7%	9,5%	9,5%	13,7%	15,0%
Mpumalanga	9,3%	9,3%	9,3%	7,6%	7,5%	7,8%	10,1%	10,0%
Limpopo	12,7%	12,8%	12,6%	10,3%	10,2%	10,3%	12,3%	12,4%
Total	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

Table B.2 GHS data by race

Race	Year							
	2002	2003	2004	2005	2006	2007	2008	2009
African or black	77,8%	77,7%	77,8%	78,3%	78,9%	79,2%	82,1%	82,2%
Coloured	11,3%	11,8%	11,7%	13,5%	13,5%	13,4%	10,7%	10,3%
Indian or Asian	2,4%	2,3%	2,2%	1,7%	1,8%	1,8%	2,4%	2,2%
White	8,3%	8,2%	8,2%	6,3%	5,8%	5,5%	4,9%	5,3%
Other or unspecified	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,0%	0,0%
Total	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

Table B.3 GHS data by sex

Sex	Year							
	2002	2003	2004	2005	2006	2007	2008	2009
Male	47,5%	47,5%	47,4%	46,9%	46,8%	46,7%	46,9%	46,7%
Female	52,5%	52,5%	52,6%	53,1%	53,2%	53,3%	53,1%	53,3%
Total	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

B.2 Table B.4 shows the population data by province, Table B.5 shows those data by race and Table B.6 shows them by sex.³⁸

Table B.4 Population Data by province

Province	Year							
	2002	2003	2004	2005	2006	2007	2008	2009
Western Cape	9,5%	10,2%	9,8%	9,9%	10,0%	10,1%	10,8%	10,9%
Eastern Cape	15,7%	14,0%	15,2%	15,0%	14,5%	14,4%	13,5%	13,5%
Northern Cape	2,0%	1,8%	1,9%	1,9%	2,3%	2,3%	2,3%	2,3%
Free State	6,3%	5,9%	6,3%	6,3%	6,2%	6,2%	5,9%	5,9%
KwaZulu-Natal	20,5%	21,0%	20,7%	20,6%	20,9%	20,9%	20,8%	21,2%
North West	8,1%	8,2%	8,2%	8,2%	7,1%	7,1%	7,0%	7,0%
Gauteng	18,0%	20,3%	19,0%	19,2%	20,1%	20,2%	21,5%	21,4%
Mpumalanga	7,0%	7,0%	7,0%	6,9%	7,4%	7,4%	7,4%	7,3%
Limpopo	12,9%	11,7%	11,8%	12,0%	11,3%	11,3%	10,8%	10,6%
Total	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

Table B.5 Population data by race

Race	Year							
	2002	2003	2004	2005	2006	2007	2008	2009
African or black	78,0%	79,5%	79,3%	79,3%	79,5%	79,6%	79,2%	79,4%
Coloured	8,6%	8,9%	8,8%	8,8%	8,9%	8,9%	9,0%	9,0%
Indian or Asian	2,5%	2,5%	2,4%	2,5%	2,5%	2,5%	2,6%	2,6%
White	10,0%	9,1%	9,5%	9,3%	9,2%	9,1%	9,2%	9,1%
Other or unspecified	0,8%	–	–	–	–	–	–	–
Total	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

38 Statistics South Africa. Mid-year estimates 2002–2009. Statistical releases. Accessed from www.statssa.gov.za/

Table B.6 Population data by sex

Sex	Year							
	2002	2003	2004	2005	2006	2007	2008	2009
Male	48,1%	47,7%	49,3%	49,2%	49,2%	49,2%	48,2%	48,4%
Female	51,9%	52,3%	50,7%	50,8%	50,8%	50,8%	51,8%	51,6%
Total	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%