

PB094003



182968968F



PB94003



**HSRC Library and Information
Service**

RGN-Biblioteek en Inligtingsdiens

DATE DUE - VERVALDATUM

--	--

Financing health care: Experiences and opinions of some South Africans

Ina Snyman, HSRC

**Co-operative Research Programme: Affordable Material Provision
Human Sciences Research Council**

Series editor: Ina Snyman, HSRC

**Printed by HSRC Printers
Human Sciences Research Council
134 Pretorius Street
Pretoria 0002**

1994

The Co-operative Research Programme: Affordable Material Provision is situated within the Group: Social Dynamics of the Human Sciences Research Council, and is managed by a committee of experts drawn from the public and private sectors in South Africa.

The emphasis in the programme is on discovering affordable alternatives in the main fields of social policy - income maintenance, health, human settlement, employment, development and social welfare. In this report the focus is more specifically on financing health care, including such features as the acceptability, accessibility and affordability of the current health-care system.

Committee chairman: Prof. J. L. Sadie

Programme manager: Dr Ina Snyman

Programme secretary: Mrs Adelina Tucci

ISBN 0-7969-1573-3

© Human Sciences Research Council, 1994

This report is available at:
The Secretariat (Mrs A. Tucci)
Social Co-operative Programmes
HSRC
Private Bag X41
Pretoria 0001

Tel.: (012) 202 2247/2435
Fax: (012) 326 5362/202 2149

RGN BIBLIOTEEK	
1994 3. 23.	
HSRC LIBRARY	
STANDKODE	AANWINSNOMMER
001-3072068 HSRC PSS 41	RB 094003

EKSERP

Hierdie verslag is gebaseer op 'n landswye opname onder ongeveer 2 000 Suid-Afrikaners. Hulle menings oor, ervaring van en deelname aan die Suid-Afrikaanse gesondheidsorgstelsel is ondersoek met spesiale verwysing na hul finansiële betrokkenheid daarby.

Die response het getoon dat Suid-Afrikaners redelike toegang tot gesondheidsdienste het, maar dat, veral onder die swart respondente, daar beperkte voorsiening vir mediese uitgawes is. Sekere streke, veral landelike gebiede, is ook betekenisvol swakker daaraan toe as ander.

Die aanbevelings handel veral oor die uitbreiding van mediese voorsiening, die verbetering van die beeld van die openbare gesondheidstelsel en, in mindere mate, die strukturering van gesondheidsdienste op grond van gedifferensieerde streek-behoefte.

ABSTRACT

This report is based on a countrywide survey among 2 000 South Africans. Their opinions on, experience of and participation in the South African health care system were investigated with special reference to their financial involvement in it.

The responses revealed that South Africans had fairly good access to health services but that, particularly among black respondents, provision for medical expenditure was limited. Some regions in the country, particularly rural ones, were also less well provided for than others.

The recommendations deal particularly with the expansion of medical provision, improving the image of the public health system and, to a lesser extent, structuring the health services on the basis of differentiated regional needs.

CONTENTS

	Page
1. INTRODUCTION	1
2. BACKGROUND AND OBJECTIVES OF THE STUDY	1
2.1 Background: basis of the study	1
2.2 Objectives of the study	1
3. STUDY DESIGN AND DATA GATHERING	2
3.1 Design and data sources	2
3.2 Data-gathering process	3
3.3 Definitions	3
4. FINDINGS	3
4.1 Summary of responses (frequencies)	3
4.2 Overview of tables on frequencies	9
4.3 Relations between criterion and other variables	12
4.3.1 Multiple regression analysis, including population group	12
4.3.2 Multiple regression analysis, including region	20
4.3.3 Multiple regression analysis: population groups separately	32
4.4 Relations among dependent variables	34
4.4.1 Cross tabulations - response categories remain as in the questionnaire	35
4.4.2 Cross tabulations - data from some questions treated as dichotomous	36
4.4.3 Pearsonian coefficient	39
4.4.4 ANOVA (analysis of variance)	41
4.5 Resumé of findings	49

	Page
5. FINDINGS IN RELATION TO LITERATURE AND OTHER STUDIES	50
6. CONCLUSIVE COMMENTS AND SOME RECOMMENDATIONS	57
6.1 Targeting interventive programmes	57
6.2 A national health insurance system	58
6.3 Structuring of health services	58
6.4 Relationship between suppliers, consumers and financiers	59
6.5 Relationship between public and private health	59
6.6 Closing remark	59
NOTES	60
REFERENCES	62
ANNEXURE 1	65
ANNEXURE 2	67

1. INTRODUCTION

The questionnaire survey on which this report is based was authorized by the Management Committee of the *Co-operative HSRC Programme: Affordable Material Provision*, and forms the quantitative part of a broader study on health-care financing which is expected to include *inter alia* a documentary overview of the health financing systems of countries comparable to South Africa.

2. BACKGROUND AND OBJECTIVES OF THE STUDY

2.1 Background: basis of the study

The cost of health care has increased considerably over the past 20 to 30 years, particularly for sophisticated surgery and long-term care connected with such "catastrophic events" as organ failure, serious accidents, occupation-related illness, etc. (Fokus op ... 1993:S12-13).

At the same time several million people in South Africa do not have access to basic health-sustaining or health-promoting facilities, such as sanitation and clean water, sufficient food or a healthy work environment, or to such illness-preventing services as essential inoculations, regular medical examinations or basic dental or eye care (cf. Executive ... 1993:4; Fourie & Van Rensburg 1993:13).

However, because the more expensive type of medical intervention is usually directed at more acute, definable or visibly serious conditions, it seems to be the branch of health care that attracts the major part of the financial health-care allocation, both in the public and the private spheres (Spier 1993:18-19; Te veel geld ... 1993:S5).

The private sphere entails both out-of-pocket payments and health cost support schemes such as medical aid and medical insurance. Few people really pay the full cost of their health care and those who can, join medical aid schemes, and/or take out hospital or medical insurance for exceptional expenditure. The inability of many people to join a medical aid scheme and of many medical aid societies to cope with the high demands of their members are two of the main reasons for this research (cf. Spier 1993:18-24; Bilateralism project 1993:23).

2.2 Objectives of the study

The objectives of the questionnaire survey, were to determine

- (i) the opinions and experiences of a cross section of the South African population in relation to South African health services and the cost thereof,
- (ii) the extent of the provision made by or on behalf of the sample population for paying for health services themselves,
- (iii) the relations, if any, between these opinions, experiences and provisions on the one hand and the sociobiographic characteristics of the group studied on the other, and

- (iv) the associations, if any, among the opinions, experiences and provision - in other words the dependent variables - themselves.

More broadly, the objectives of the study were to obtain data that would render information that would contribute to three important aims of affordable health care:

- Containment of state expenditure on health services and a greater devolution of public revenue to hitherto unmet or poorly met needs, particularly in primary and environmental care.
- A reasonable level of public satisfaction with the South African health-care system.
- A broadened base for sharing health costs, partly through more planning and advanced provision for health expenditure related to an increase in family size, suspected vulnerabilities and old age, and partly through greater discipline in the use and pricing of health-care services.

3. STUDY DESIGN AND DATA GATHERING

3.1 Design and data sources

The design is mainly descriptive although some exploration was possible owing to the inclusion of "open" questions, or of "open" categories in questions with prestructured (multiple) response choices.

The sample, designed by the Centre for Statistics at the HSRC, was drawn by means of a complex (multistated, stratified, clustered) sampling procedure according to which households were systematically selected in proportion to the size of the population in a particular census enumerator district. All four main population groups were included in the total number of 2 000, namely blacks (1 100 or 55 %), coloureds (300 or 15 %), Indians (200 or 10 %) and whites (400 or 20 %).

In all four cases respondents were drawn from both metropolitan and non-metropolitan regions, and in each case rural respondents from smallholdings and farms were also included. Only for the black subsample were respondents drawn from informal settlements also (104 of the 1 100 blacks, or 9,5 %). The six black national states (408 respondents), as well as Ciskei (40 respondents) and Venda (32 respondents) were included for sampling purposes (black sample only).

Once the selected households had been identified, a respondent of 18 years or older was selected randomly from each household.

Because of the provision made in the sampling procedure for substitution in the field, a 100 % response rate was obtained for the respondents, although the non-responses to individual

questions meant that a full response was not obtained for all of the questions asked.

To compensate for skewness in the realized sample, weighting was done on the basis of the unadjusted 1991 census population. Finally two sets of weights were calculated, namely for the population in general and for the age group 18 years and older.

3.2 Data-gathering process

An omnibus questionnaire in which different clients participated was administered by trained fieldworkers employed by MarkData, HSRC. Nine of the ten questions included with a view to this report had a prestructured choice of responses requiring the selection of only one of the response options. However, where appropriate, a category for other possibilities was included. One was an "open" question (see Table 6).

The interviews were conducted between 29 June and 10 July 1992, and a certain percentage of the completed questionnaires were checked by fieldwork organizers who had also taken responsibility for the training of the fieldworkers.

3.3 Definitions

The following descriptions were included in parentheses as part of the relevant questions in the questionnaire:

- **Access** (to medical and health care): "'Access' does refer to physical availability, but more particularly to the fact that it (medical and health care) is either available at no cost, or it can/will be paid for from some specific source (your employer, relatives, medical aid, insurance, etc.) or that your own income is adequate." (Question 2)
- **Exceptional** (medical needs): "'Exceptional' refers to more than the common or ordinary needs in respect of dental care, the occasional cold, influenza, regular maternity care, etc." (Question 9)
- **Medical expenditure** (monthly): "Include over-the-counter purchases, and (additional) payments to doctors, clinics or hospitals not covered by medical insurance of any kind; also medical aid premiums, and other health-related insurance premiums." (Question 10)

4. FINDINGS

4.1 Summary of responses (frequencies)

The specific dimensions surveyed were the following:

- Views on the availability, accessibility, affordability and quality of health services in general or available to the respondents themselves;

- Preferences regarding the location or setting where certain categories of services should be available;
- The nature and extent of respondents' own provision for health care, and exceptional needs for health care in their household.

The next ten tables represent the questions asked and the responses obtained in this respect. "Weighted response" refers to weighting with age.

TABLE 1

"Do you think the present health-care system in South Africa is: excellent, good, average, poor or very poor?"	Excellent	Good	Average	Poor	Very poor
	(%)	(%)	(%)	(%)	(%)
Unweighted response	3,1	34,6	35,2	21,6	5,5
Weighted response	3,3	33,7	33,4	24,1	5,5

TABLE 2

"How do you feel about the access you have to medical and health care within the present health-care system?"	Unweighted response (%)	Weighted response (%)
I have access to all possible services and care, whatever happens	63,4	58,2
In case of serious illness or catastrophic events regarding my health, I would not have access to the necessary services	19,9	21,3
I lack access to even the most basic services	16,8	20,5

TABLE 3

"If you are hesitant to seek medical assistance, what is the most important reason for this?"	Unweighted response (%)	Weighted response (%)
(a) N.a.; I do not hesitate to seek medical assistance	65,5	62,7
(b) Cost too high	19,8	20,3
(c) The fact that I have to pay immediately or shortly afterwards	4,1	4,3
(d) Transport or distance from the medical/ health facility	5,1	6,7
(e) The quality of the care/services	2,1	2,1
(f) Problems at home/work/school/university	1,8	2,1
(g) Fear of doctors or of the health-care system in general	1,3	1,6
Other (specify): Prefers own traditional healer	0,3	0,3

TABLE 4

"How do you feel about the cost of private medical and health-care services?"	Too low (%)	Reasonable (%)	Too high (%)	Dishonest-ly high (%)
Unweighted response	1,5	19,2	61,7	17,6
Weighted response	2,0	19,0	63,1	16,0

TABLE 5

"Where would you prefer to obtain medicine for the most common illnesses such as colds, influenza, an upset stomach, etc.?"

	Unweighted response (%)	Weighted response (%)
Public (general) clinic	27,5	32,6
Day hospital	15,9	17,5
General (provincial) hospital	7,4	5,6
Private pharmacist	26,9	24,2
Municipal/Provincial/State pharmacist	3,0	3,4
District surgeon	3,3	3,6
Private general practitioner (family doctor)	14,1	11,2
Other (specify): Herbalist, mobile clinic	1,9	1,9

TABLE 6

"If you consider health care in South Africa expensive and scarce, please suggest alternatives (for example community health workers, medical or doctors' aides ("barefoot doctors"), community clinics with low-level staff, etc.)." ("Open" question)

	Unweighted response (%)	Weighted response (%)
N.a.; I have no opinion on the matter	59,9	62,5
N.a.; I do not consider it expensive and scarce	12,6	11,4
Decentralization of clinics/hospitals	12,6	11,9
"Barefoot doctors"; mobile clinics	4,0	3,1
Increase wages (blacks); fewer prescriptions (whites)	0,8	0,7
Remove VAT on medicine	0,5	1,0
Government should subsidize more	2,6	2,4
Charge according to income	1,8	1,7
Decrease price of surgery	4,0	4,1
Improve existing services	1,2	1,1

TABLE 7

"What is the most important type of medical provision for the household of which you are a member? (Only mark (e) or (f) if you receive assistance for health problems from that particular source, and only if it is the most important such provision available to the household.)"	Unweighted response (%)	Weighted response (%)
(a) N.a.; there is no such provision	60,0	65,4
(b) A medical aid scheme at work	24,5	18,8
(c) A private medical aid scheme	4,0	3,0
(d) Insurance against serious diseases, catastrophic events regarding health and/or surgical or hospital costs	4,1	4,1
(e) Rotating credit association, e.g. a "stokvel" or other mutual help association such as a burial aid society	7,0	8,0
(f) Other (specify): Community medical scheme; medical association as part of pension	0,6	0,7

TABLE 8

"What type of death benefit is included in the service/provision you have just mentioned? (Mark only the most important in monetary value if more than one type of death benefit is included.)"	Unweighted response (%)	Weighted response (%)
None (no death benefit included)	48,7	45,3
Assistance with burial costs (not grave or tombstone)	30,2	35,2
Assistance with grave and tombstone	3,3	3,1
Assistance to the survivors	17,3	16,0
Other (specify): Full cost of burial	0,6	0,4

TABLE 9

"Is there a person in the household of which you are a member who has exceptional medical needs? (In case of more than one such person, mark only the category representing the person requiring the most expensive care.)"

		Unweighted response (%)	Weighted response (%)
N = 672			
Child under	10 years	20,2	18,8
Child	10-19 years	9,4	8,2
Young adult	20-29 years	9,1	7,5
Adult	30-39 years	10,0	10,5
Older adult	40-49 years	11,5	10,9
Middle-aged person	50-59 years	15,0	13,8
Elderly person	60-69 years	14,6	16,9
The very elderly	70 years and older	10,3	13,5

TABLE 10

"On average, how much does the head of your household spend a month on medical/hospital expenditure and medical insurance? (Please ensure that no form of expenditure is counted more than once.)"

	Unweighted response (%)	Weighted response (%)
Less than R50 per month (including nothing at all)	54,8	58,1
R51-R150 per month	17,6	15,9
R151-R300 per month	8,4	6,7
R301-R500 per month	4,7	3,8
R501-R750 per month	1,5	1,1
R751-R1 000 per month	0,6	0,5
More than R1 000 a month	0,4	0,3
Don't know	12,0	13,5

4.2 Overview of tables on frequencies

Without further analyses the data provided in the foregoing ten tables offer a simple response to the first two objectives of the study: Opinions and experiences of people in relation to the South African health services and the financing thereof (Par. 2.2(i)), and the extent of provision made by/for the respondents' households to pay for health services (Par. 2.2(ii)).

Objective (i): Opinions and experiences

This objective also includes respondents' preferences and therefore relates to the data in seven of the ten tables.

- (a) Very few respondents thought that the South African health system was excellent, but only a few more thought it very poor (Table 1). A third found it good, and another third average, but a substantial proportion, just more than one in five, found it poor. However, good to excellent won out over poor to very poor by just more than 10 % (37,7 % as against 27,1 %).
- (b) However, this difference in perception (Table 1) is rather small when respondents' experience of the accessibility of health and medical services is observed: More than 60 % were of the opinion that they had access to every kind of care for any kind of medical eventuality. However, this percentage dropped somewhat when the figures were weighted for age (see Table 2), perhaps indicating that older people were less well provided for or had less access (since weighting for age increased the proportion of persons older than 44 years from about 31 % to 39 % of the response group).
- (c) Almost two-thirds of the response group (66 %) would not hesitate to seek medical assistance - a percentage that would again drop slightly when weighted for age (Table 3). For those who would hesitate, the high cost of medical assistance was an important factor (mentioned by about one in five of the response group), followed by distance from a facility and insistence on swift payment. However, the latter two together with other reasons such as the quality of care/services, a fear of doctors, problems at home and a preference for a person or service outside the formal health service (traditional healer) accounted for not more than 15 % of the response group.

Perceptions of limited access, and hesitation to use a service may stem from similar considerations, namely cost, distance, and insistence on swift payment. Without further analyses one cannot conclude that these were obstacles mainly for the aged, but Table 3 does show that when the response is weighted for age, there is a very slight increase in the importance of these three reasons for hesitation.

- (d) The respondents very clearly found the cost of private medical and health services too high - nearly 80 % (Table 4) - with about 18 % of the total group considering these services "dishonestly high".
- (e) Although a similar question was not asked about the public health services, the question on alternatives for or in the current health-care system indicates that less than 15 % of the group **did not** consider South African health care in general expensive or scarce. On the other hand, if all of the rest **did** consider it expensive and scarce, the relatively few suggestions for alternatives are surprising, as is the large proportion who had no opinion at all - 60 % and even more when the results are weighted for age (Table 6). However, while a service may be viewed as expensive or scarce, the man in the street may not be sufficiently familiar with the way health services are structured to know whether an alternative would be cheaper or bring a service closer. The fact that 12 % suggested the decentralization of hospitals or clinics may indicate that proximity rather than, or over and above, the cost was an important factor - or was important because of the usual association between distance on the one hand and transport and accommodation costs on the other. This percentage (12 %), although not very large in itself, gains in significance if one keeps in mind that only 27,5 % of the group had any opinion on possible alternatives.
- (f) One form of cost containment proposed for the health services is the provision of an instant, inexpensive medication package, at a great variety of outlets, for illnesses such as the common cold. The question on where respondents would prefer to obtain medicine for the most common illnesses touched on this point, and revealed that just over a quarter of the respondents would prefer a public (general) clinic, and a similar proportion a private pharmacist.
- When weighted for age almost a third of the respondents would prefer to receive the type of medicine described above at a public clinic. Table 5 further reveals that when weighted for age, there was a rise in the proportion preferring a day hospital and a drop in the figures of those preferring a provincial hospital, a private pharmacist and a private general practitioner. Again, this seems to be an indication that when the older age category carries more weight, the preference for services at which payment is mandatory or the cost higher than elsewhere, diminishes.
- (g) Moving from ordinary or common illnesses to unusual health needs (Table 9), it was found that the distribution was more even, with no age category receiving less than 9 % or more than 20 % of the responses. Some concentration of responses can be observed at the lowest - under ten years - and the young elderly age category. Weighted for age the

concentration at the two top age categories increases. It should however be noted that only about a third (N = 672, unweighted response) of the response group mentioned someone with exceptional medical needs.

Objective (ii): Provision for and expenditure on health care

This objective relates to the data in three of the ten tables.

- (h) The preference for a medicine delivery point (Objective (i), Paragraph (f)) may also have to do with the extent of coverage for medical expenditure. Table 7 shows that 60 % had no provision (65 % when weighted for age). Barely a quarter had a work-related medical aid scheme, and this proportion decreased when weighted for age.

The difference in response patterns among the four main population groups will be referred to separately later where relevant, but it should be mentioned here that the coverage reported for the black (African) and the white group differs spectacularly, both in the unweighted data and those weighted for age.

- (i) It has been found that many people insist on the inclusion of some or other death benefit in any pension or medical scheme negotiated on their behalf (Snyman 1988:25-26).

Table 8 shows the extent of this kind of provision for that part of the response group who indicated that they had some kind of health provision, in other words about 40 % of the total group (N = ± 800, unweighted response). Of this group nearly 50 % would receive no death benefit of any kind from the medical provision available to them, while just under a third would receive assistance with burial costs. In close to 20 % of the cases, survivors' benefits were included in the available health provision.

The general impression is one of skimpy provision, but it should be kept in mind that many people have straightforward funeral policies that are not tied to any kind of health or medical provision (*cf.* Snyman 1988:26-28, 44-45). Moreover, if respondents' most important type of provision did not include a death benefit, they would have reported "None" at Question 8, even if a minor scheme to which they belonged, did indeed include such a benefit.

- (j) Table 10 reveals that just over half of the respondents' households spent less than R50 a month on medical/health premiums and direct expenditure for services. This proportion increases when the results are weighted for age.

However, a third of the group spent more than R50 a month, and nearly 16 % spent more than R150 a month on health care and health care premiums. The latter

proportions are perhaps rather high if one considers that in nearly 50 % of the responding households the monthly income (husband and wife) was less than R1 000 a month.

4.3 Relations between criterion and other variables

Objective (iii): Influence of sociobiographic characteristics

Weighting for age gives some idea of the influence of age on the responses (although in later analyses it did not appear to be very significant), but a series of cross tabulations show associations between response and population group, income, language, etc.

Chi-square tests further indicated that region was significantly associated with population group but even more so with language, although these associations applied mostly to the blacks.

Three sets of multiple regression¹ analyses were subsequently run:

- (i) The results of the total response group, with the questions acting as dependent or criterion variables, and **population group**, instead of region and language, included among the predictor or independent variables. (See Table (11)(a-j) and Table 11(a-j).)
- (ii) The results of the total response group, with the questions acting as dependent or criterion variables, and **region**, instead of population group and language, included among the predictor or independent variables. (See Table (12)(a-j) and Table 12(a-j).)
- (iii) The results of the four main **population groups separately**, with the questions as dependent variables. Neither language nor region was included in the predictor variables, leaving only sex, age, marital status, level of qualification, income, occupational category, reading of a daily newspaper and watching TV on a regular basis as predictor variables. (See Table 13.)

4.3.1 Multiple regression analysis, including population group

Predictors: age, marital status, educational level, income, occupational level, reading a daily newspaper, watching TV and **population group**.

Where the answer structures of the predictors could not be treated as scaled, dummy variables were created which meant that answers were converted to more manageable systems of dichotomous (yes/no, present/absent) responses. Generally only significant relations will be presented here (where the probability of incorrectly assuming an association is smaller than 5 %). It should be kept in mind that these are partial relations, representing the association between the dependent and a particular independent variable when the variations in all the other independent variables that entered into the regression are eliminated.

TABLE (11): SUMMARY OF RESPONSES AND SOCIODEMOGRAPHIC PREDICTORS (Including population group)

Response	Predictors							
	Gender	Age	Mar. status	Qualification	Income	Occupation	TV	Population group
(a) Views on the health-care system	/		(/)*				/	/
(b) Access to medical and health care			/		/		/	/
(i) "Access" - continuous					/		/	/
(ii) "Access" - dichotomous					/		/	/
(c) Hesitation to seek medical assistance			/		/		/	(/)
(d) Views on cost of private medical/health care	(/)						/	/
(e) Prefer receiving medicine at private/public facility			/	/	/		/	/
(f) Alternatives to scarce and expensive health care							/	/
(g) Most important type of medical provision	(/)				/	/	/	/
(h) Death benefit included in (11)(g)				/			/	/
(i) Exceptional medical needs (age category)	/	/	/				(/)	/
(j) Monthly medical expenditure	/	/	/		/		/	/

* (/) Borderline significance

TABLE 11: RESPONSES AND SOCIODEMOGRAPHIC PREDICTORS (also population group)

Response variables	Independent variables (predictors)	Estimated regression coefficient	PR > ITI *
(a) Views on the health-care system in SA (Excellent = 1 Very poor = 5)	Gender: Male Pop. group: Black Asian White	0,055 0,134 0,095 -0,214	0,016 0,002 0,093**
(b) Access to medical and health care (i) "Access" - continuous (To all = 1 Limited = 2 None = 3) (ii) "Access" - dichotomous (Access to all = 1 Access limited = 0)	Mar. status: Legally married Divorced Income: Less than R400 R400-R999 TV: 2-4 hrs More than 4 hrs Don't have TV Pop. group: Black White Income: Less than R400 R5 000 + TV: 2-4 hrs More than 4 hrs Don't watch TV Don't have TV Pop. group: Black White	-0,070 0,172 0,173 -0,105 -0,110 -0,133 0,199 0,188 -0,183 -0,092 0,061 0,067 0,084 -0,067 -0,108 -0,114 0,121	0,047 0,042 0,000 0,005 0,001 0,001 0,000 0,000 0,001 0,152** 0,001 0,001 0,029 0,000
(c) Hesitation to seek medical assistance (Don't hesitate = 0 Hesitate for some reason = 1)	Mar. status: Legally married Income: Less than R400 R5 000 + TV: Max. 2 hrs 2-4 hrs Don't watch TV Don't have TV Pop. group: Asian White	-0,063 0,060 -0,084 -0,047 -0,065 0,058 0,065 0,045 -0,056	0,006 0,036 0,057** 0,028 0,002 0,065 0,110
(d) Views on cost of private medical/health care (Too low = 1 Dishonestly high = 4)	Gender: Male TV: Max. 2 hrs 2-4 hrs More than 4 hrs Don't watch TV Don't have TV Pop. group: Black Asian White	0,029 -0,011 -0,053 0,076 0,024 -0,036 -0,251 0,117 0,118	0,068** 0,072** 0,067** 0,034 0,589** 0,000 0,002

Response variables	Independent variables (predictors)	Estimated regression coefficient	PR > ITI	
(e) Prefer receiving medicine at private/ public body (At private body = 1 At public body = 0)	Mar. status:	Ceremonially married	-0,071	0,014
		Never married	-0,047	0,054**
		Living together	-0,057	
		Legally married	0,027	0,208**
	Qualification		0,013	0,001
		Income:		
	None	Less than R400	-0,068	0,029
		R400-R999	-0,078	0,004
		R5 000 +	-0,085	0,000
		Don't know	0,090	0,029
		TV:		
	2-4 hrs	More than 4 hrs	0,060	
		More than 4 hrs	0,044	0,026
		More than 4 hrs	0,049	0,043
		More than 4 hrs	0,049	0,043
Don't watch TV	Don't watch TV	-0,047	0,113**	
	Don't have TV	-0,044		
	Pop. group:			
Black	Black	-0,176	0,000	
	Coloured	-0,065	0,005	
	White	0,201		
	Asian	0,040	0,130**	
(f) Alternatives to scarce and expensive health care (No opinion = 0 Some opinion = 1)	TV:	More than 4 hrs	0,099	0,000
		Don't watch TV	-0,060	0,071**
		Don't have TV	-0,043	
	Pop. group:	Black	-0,047	0,036
		Coloured	-0,148	0,000
		Asian	0,186	0,000
White	0,009			
(g) Most important type of medical provision (No provision = 0 Some provision = 1)	Gender:	Male	-0,019	0,056**
		Qualification	0,012	0,003
	Income:	Less than R400	-0,122	0,000
		R400-R999	-0,072	0,001
		R1 000-R4 999	0,067	0,000
		R5 000 +	0,116	0,003
		Occupation:	Working	0,051
	TV:	2-4 hrs	0,062	0,001
		Don't watch TV	-0,090	0,001
		Don't have TV	-0,040	
	Pop. group:	Black	-0,107	0,001
		Coloured	-0,051	0,019
		Asian	-0,102	0,000
White		0,261		

Response variables	Independent variables (predictors)	Estimated regression coefficient	PR > ITI
(h) Death benefit included in 11(g) (None = 1 Some = 0)	Qualification TV: More than 4 hrs Pop. group: Black Asian White	0,018 0,099 -0,185 0,102 0,116	0,023 0,017 0,000 0,027
(i) Exceptional medical needs (age category) (9 yrs or younger = 1 70 yrs or older = 8 N = 672)	Gender: Male Age Mar. status: Legally married Never married TV: Max. 2 hrs Don't have TV Pop. group: Black Asian White Coloured	0,214 0,067 -0,573 0,844 -0,332 0,353 -0,919 0,702 0,481 -0,263	0,015 0,000 0,001 0,000 0,046 0,000 0,003 0,196**
(j) Monthly medical expenditure (Less than R50 = 1 More than R1 000 = 7)	Gender: Male Age Mar. status: Legally married Qualification Income: Less than R400 R400-R999 R5 000 + TV: Max. 2 hrs More than 4 hrs Don't have TV Pop. group: Black Coloured Asian White	-0,051 -0,004 0,209 0,016 -0,117 -0,217 0,338 0,210 -0,139 -0,083 -0,249 -0,333 -0,189 0,771	0,033 0,042 0,000 0,082** 0,056** 0,000 0,000 0,000 0,011 0,000 0,000 0,000 0,000

* Only the categories with extreme values of the estimated regression coefficient and/or with very low probabilities of a chance association (PR > ITI) are displayed in the table.

** Where the above rule has not been followed, figures have been included for the sake of showing a trend, or for showing a category that deviated from the trend revealed by that particular variable.

Table 11(a-j) shows the significant relations between the responses and certain socio-demographic characteristics of the respondents. Table (11) is a checklist and summary of these associations.

The summary of responses in Table (11) indicates the importance of watching TV and of population group as significant predictors for all the responses. Watching TV is not only an indication of socio-economic standards but also of familiarity with and knowledgeability about the matters raised in the questions. This generally distinguished respondents who had an opinion from those who did not, or those who had cultivated negative views from those who had acquired positive ones. Population group either differentiates between the whites and the other groups, or the whites and the Asians on the one hand and the black and coloured groups on the other, or just between the blacks and the whites as lying at opposite ends of a continuum.

Table (11) is a summary of the responses and their significant predictors, while Table 11 shows how the responses varied for different categories of the predictors, and also the significance of this variation. In the following discussion the predictors will be described in terms of their influence on the total response, i.e. all ten questions.

Population group

Whites generally had the most positive views on and experiences of South African medical and health care: They have better access, they would not easily hesitate to seek medical assistance, they are more likely to wish to collect common or standard medicine from a private than from a public facility and they are far more likely than any of the other groups to have some kind of medical aid or insurance or private (non-insurance type) provision. (According to cross tabulations 85 % of them had such provision compared with 24 % of the black respondents.) However, they - and the Asian response group - are more inclined to find private medical and health care dishonestly high (nearly 30 % of them compared with 10 % of the blacks), they are unlikely - as are the Asians - to have a death benefit included in their medical provision, and they spend a great deal more than the other groups on medical and health care (with their better provision for health care, they are more likely to pay high premiums). If they had household members with exceptional (costly) medical needs, these were more likely to be older people while the blacks were far more likely to mention a person in the younger age groups, especially children under ten. While the Asian and black respondents seemed furthest away from the group average towards no provision for health care (Table 11(g)), the coloured respondents were furthest removed from the group average towards low actual expenditure on health care (Table 11(j)). The latter is one of the few dimensions (questions) where the response of the coloured group differed very significantly from those of the other groups; at the other questions the coloured response was mostly positioned between the extreme patterns displayed by the other groups.

TV

Assuming that the population (universe) from which the response group was selected has not changed a great deal since the time of the survey, people without TV can be said to be more likely to have restricted access to health and medical services than those who watch TV several hours a day; they will be more inclined to hesitate to use a medical service when they need one, and are somewhat less inclined than those who watch TV for more than four hours a day to consider private health services high to dishonestly high.

Compared with those who watch TV for two or more hours per day, the respondents without TV tend to prefer obtaining medicine for common illnesses at a public facility rather than at a private facility. They, and those who do not watch TV, are less inclined to have an opinion on alternatives with regard to scarce and expensive health care, and are in this respect clearly juxtaposed to those who watch TV for more than four hours a day and who tend very clearly (significantly more than the rest of the response group) to have some opinion on the matter.

However, the latter category - those having an opinion - included many whites of whom 14,5 % did not think that health care in South Africa was scarce and expensive, but also many Asians of whom only 3 % did not think that South African health care was scarce and expensive. In other words it was mostly the Asian respondents who had alternatives to offer in respect of scarce and expensive health care. (They emphasized the decentralization of health services.)

Income

Income recurred as a significant predictor particularly with regard to access to health services, preference for a private or public service, provision for medical expenditure and monthly expenses on health and medical services. In other words those with less income are less likely than those with higher incomes to have access, more likely to prefer obtaining common medicine at a public rather than a private body, less likely to have medical aid or health insurance and more likely to have low monthly medical expenses - although the latter may constitute a sizable proportion of their low income.

The turning point between high and low income seemed to be the income interval R1 000 to R4 999, and the true difference therefore was mostly between those receiving less than R400 a month and those receiving R5 000 or more a month. Respondents with no income at all did not necessarily behave like (other) low-income respondents, most likely because the majority of them might have belonged to households where they were cared for, in other words they did not really belong to "no income" households.

Marital status

Marital status also recurred as a predictor, the legally married tending to be better off (access to health services, for example) or to hold more positive or favourable views than all the other groups in some cases, or just the divorced or the never married in other cases (see also Table 13 in

Paragraph 4.3.3). The legally married were also more inclined to mention young family members as having exceptional (expensive) medical needs compared with the never married who mentioned elderly persons more often, and spent more than the other categories on health services.

The more negative responses therefore pertained to the divorced (less access to health services) or to the ceremonially married, the never married or those living together (more dependent on public health services) or to all of these other groups simultaneously (they would hesitate to seek medical assistance even though they might need it to a far greater extent than the legally married).

Gender

Men were somewhat more inclined than women to consider the South African health system poor and to consider private medical care high-to-dishonestly high. They would be somewhat **less** inclined than women to report having made medical provision or having health insurance (borderline significance), and significantly more inclined to mention an older person as having the most exceptional (expensive) medical needs in the household. Men tended to report spending less on medical care than women did.

Some of these findings may appear unusual if one assumes that working men usually have a good pension and medical coverage owing to their closer ties with the formal job market as well as their superior position in this market. However, this may not be true for respondents other than the whites. Table 11(g) for example shows very limited medical aid and/or health insurance for blacks, coloureds and Asians (compared with that for whites), and other questionnaire data show that they were also heavily represented among the non-working respondents. On the other hand, the relevant questions (Table 11(g) and 11(j)) referred to the provision for and expenditure of the household and it is possible that women are more familiar with the extent of medical coverage and particularly with the amounts spent and would therefore report comparatively higher amounts.

Magnitude of possible influence

To determine which of the significant independent variables were the best predictors of a particular response (dependent variable), an index of maximum difference or maximum possible influence is calculated for each predictor.²

In almost all cases **population group** was the best predictor (Annexure 1) although it did not always have a great deal of influence on the variation in the response. For example its maximum influence was less than 15 % for views on the South African health-care system, hesitation to seek medical assistance, and views on the cost of private medical and health care. The population group's maximum influence was between 16 % and 30 % for access to health services, a death benefit included (or not) in medical provision made (30 %), the age category of the household member with exceptional (most expensive) health needs, and the amounts spent by the household on health care and medical provision.

On the other hand the maximum potential difference made by population group was close to 40 % for the response on the choice of a private or public health facility for obtaining common medicines, and on provision made (or not) for medical expenditure. On the matter of an opinion on alternatives to health care (Annexure 1(f)), population group could account for a maximum of 33 % of the variation in the response (opinion/no opinion) as compared with 16 % in the case of the predictor Watching TV.

All the predictors together explain r^2 (the coefficient of determination) of the total variance in the dependent variable. The values for r^2 - also expressed as a percentage - are listed in the second column of Annexure 1. The values are low, and only for the choice between a private or a public facility, medical provision (or not), the age category of the household member with exceptional medical needs, and the household's monthly expenditure on medical and health services is r^2 above 25 % (maximum = 100 %). The low r^2 for access to health services (16 % and 14 %) most probably arises from the fact that there are extensive free or low-cost public medical services available in South Africa so that the variables income and population group do not play as big a role as for example in the availability of medical aid or health insurance which depends on income and personal desire to make this kind of provision. Moreover, other factors which may help define people's definitions of access were not measured in this study, notably distance from the type of service facility mentioned - if available in the region - and familiarity with facilities of the type mentioned and with the funding structures and procedures prevailing at such facilities. However, later in Section 4.4.3 (Pearsonian coefficient) and more particularly in Section 4.4.4 (ANOVA) the association between the degree of access to health services enjoyed by respondents and their opinion of the South African health system is shown.

Age did not rise as a significant predictor very often, nor did it explain much of the difference in the dependent variable where it was significant. This relative insignificance is contrary to what one would have believed from the information on weighted data in Tables 1 to 6, but it should be kept in mind that original, unweighted data have been used for the multiple regression analyses. Moreover, the age of the selected respondent might have a bearing on views and perceptions but not necessarily on such realities as amounts spent on health care or on the most important type of medical provision made for the household.

4.3.2 Multiple regression analysis; including region

Predictors: Gender, age, marital status, educational qualification, income, occupational level, reading a daily newspaper, watching TV and region³.

The same procedure was followed here as for the analyses shown in Table 11(a-j). Table (12)(a-j) provides a checklist, summarizing the associations between the predictors and the question variables.

TABLE (12): SUMMARY OF RESPONSES AND SOCIODEMOGRAPHIC PREDICTORS (Including region)

Response	Predictors								Region
	Gender	Age	Mar. status	Qualification	Income	Occupation	TV	Newspaper	
(a) Views on the health-care system	/				/		(/)*		/
(b) Access to medical and health care			/	/	/		/		/
(i) "Access" - continuous				/	/		/		/
(ii) "Access" - dichotomous				/	/		/		/
(c) Hesitation to seek medical assistance			/	/	/		/		/
(d) Views on cost of private medical/health care	/	/			/		(/)	/	/
(e) Prefer receiving medicine at private/public facility			/	/	/	/	/		/
(f) Alternatives to scarce and expensive health care				/			/		/
(g) Most important type of medical provision		/	/	/	/	/	/		/
(h) Death benefit included in (12)(g)				/	/	(/)		(/)	/
(i) Exceptional medical needs (Yes/No)		/	/	/	/	/			/
(j) Monthly medical expenditure			/	/	/		/	/	/

* (/) Borderline significance

TABLE 12: RESPONSES AND SOCIODEMOGRAPHIC PREDICTORS (also region)

Response variables	Independent variables (predictors)	Estimated regression coefficient	PR > ITI *
<p>(a) Views on the health-care system in SA</p> <p>(Excellent = 1 Very poor = 5)</p>	<p>Gender: Male</p> <p>Income: Less than R400 R5 000+</p> <p>TV: Max. 2 hrs Don't watch TV</p> <p>Region:</p> <p>1. North. & Central Cape</p> <p>3. West. & Southern Cape</p> <p>4. Cape Peninsula</p> <p>9. Eastern & N-E. Tvl</p> <p>12. KwaZulu</p>	<p>0,051</p> <p>0,128</p> <p>-0,162</p> <p>-0,079</p> <p>0,048</p> <p>0,229</p> <p>-0,160</p> <p>-0,145</p> <p>-0,251</p> <p>0,174</p>	<p>0,027</p> <p>0,028</p> <p>0,048</p> <p>0,063**</p> <p>0,452**</p> <p>0,042</p> <p>0,072**</p> <p>0,036</p> <p>0,001</p>
<p>(b) Access to medical and health care</p> <p>(i) "Access" - continuous</p> <p>(To all = 1 Limited = 2 None = 3)</p>	<p>Mar. status: Legally married Divorced Living together</p> <p>Qualification</p> <p>Income: None Less than R400 R400-R999 R1 000-R4 999 R5 000+</p> <p>TV: 2-4 hrs More than 4 hrs Don't have TV</p> <p>Region:</p> <p>3. West. & Southern Cape</p> <p>4. Cape Peninsula</p> <p>8. PWV & KwaNdebele</p> <p>10. N. Tvl & Lebowa</p> <p>11. Western Tvl</p> <p>12. KwaZulu</p>	<p>-0,072</p> <p>0,218</p> <p>-0,103</p> <p>-0,019</p> <p>0,108</p> <p>0,185</p> <p>-0,092</p> <p>-0,063</p> <p>-0,203</p> <p>-0,104</p> <p>-0,100</p> <p>0,182</p> <p>-0,187</p> <p>-0,211</p> <p>-0,159</p> <p>0,223</p> <p>0,259</p> <p>0,315</p>	<p>0,036</p> <p>0,009</p> <p>0,003</p> <p>0,036</p> <p>0,000</p> <p>0,011</p> <p>0,067**</p> <p>0,001</p> <p>0,001</p> <p>0,011</p> <p>0,005</p> <p>0,000</p> <p>0,000</p> <p>0,000</p> <p>0,010</p>
<p>(ii) "Access" - dichotomous</p> <p>(Access to all = 1 Access limited = 0)</p>	<p>Qualification</p> <p>Income: Less than R400 R5 000 +</p> <p>TV: 2-4 hrs More than 4 hrs Don't watch TV Don't have TV</p>	<p>0,013</p> <p>-0,105</p> <p>0,146</p> <p>0,067</p> <p>0,071</p> <p>-0,060</p> <p>-0,092</p>	<p>0,002</p> <p>0,000</p> <p>0,000</p> <p>0,001</p> <p>0,005</p> <p>0,053**</p>

Response variables	Independent variables (predictors)	Estimated regression coefficient	PR > ITI
	Region: 3. West. & Southern Cape 4. Cape Peninsula 8. PWV & KwaNdebele 10. N. Tvl & Lebowa 12. KwaZulu	0,117 0,125 0,070 -0,114 -0,159	0,007 0,000 0,004 0,004
(c) Hesitation to seek medical assistance (Don't hesitate = 0 Hesitate for some reason = 1)	Mar. status: Legally married Living together Qualification Income: Less than R400 R5 000 + TV: 2-4 hrs Don't watch TV Don't have TV Region: 1. North. & Central Cape 2. OFS & QwaQwa 3. West. & Southern Cape 4. Cape Peninsula 6. Greater Durban & envir. 7. Natal: N. & S. Coast 8. PWV & KwaNdebele 10. N. Tvl & Lebowa	-0,057 0,070 -0,008 0,062 -0,112 -0,052 0,048 0,046 0,181 -0,137 -0,170 -0,101 0,086 -0,146 -0,055 0,179	0,011 0,200** 0,040 0,030 0,005 0,012 0,125** 0,000 0,000 0,000 0,003 0,012 0,012 0,022 0,000
(d) Views on cost of private medical/health care (Too low = 1 Dishonestly high = 4)	Gender: Male Age Income: R5 000 + Don't know Less than R400 Reading a newspaper: Yes TV: More than 4 hrs Don't have TV Region: 2. OFS & QwaQwa 3. West. & Southern Cape 4. Cape Peninsula 6. Greater Durban & envir. 9. Eastern & N-E. Tvl 10. N: Tvl & Lebowa 11. Western Tvl	0,035 0,003 0,115 -0,095 -0,068 -0,034 0,062 -0,057 0,131 0,229 0,118 0,105 -0,194 -0,154 -0,244	0,027 0,043 0,040 0,090** 0,043 0,085** 0,014 0,000 0,013 0,027 0,000 0,007 0,008

Response variables	Independent variables (predictors)	Estimated regression coefficient	PR > ITI
<p>(e) Prefer receiving medicine at private/public body</p> <p>(At private body = 1 At public body = 0)</p>	<p>Mar. status: Never married Legally married</p> <p>Qualification</p> <p>Income: None Less than R400 R400-R999 R1 000-R4 999 R5 000 +</p> <p>Occupation</p> <p>TV: 2-4 hrs Don't have TV</p> <p>Region:</p> <p>2. OFS & QwaQwa 3. West. & Southern Cape 4. Cape Peninsula 5. East. Cape & Ciskei 6. Greater Durban & envir. 7. Natal: N. & S. Coast 8. PWV & KwaNdebele 10. N. Tvl & Lebowa 11. Western Tvl 12. KwaZulu</p>	<p>-0,054 0,031 0,025 -0,106 -0,092 -0,103 0,058 0,218 0,023 0,052 -0,049</p> <p>0,151 -0,099 0,130 -0,072 0,066 -0,098 0,145 -0,155 0,118 -0,197</p>	<p>0,027 0,143** 0,000 0,001 0,001 0,000 0,005 0,000 0,042 0,008</p> <p>0,000 0,015 0,000 0,032 0,039 0,071** 0,000 0,000 0,056</p>
<p>(f) Alternatives to scarce and expensive health care</p> <p>(No opinion = 0 Some opinion = 1)</p>	<p>Qualification</p> <p>TV: More than 4 hrs Don't watch TV</p> <p>Region:</p> <p>1. North. & Central Cape 3. West. & Southern Cape 5. East. Cape & Ciskei 6. Greater Durban & envir. 9. Eastern & N-E. Tvl 12. KwaZulu</p>	<p>0,010 0,067 -0,040</p> <p>-0,120 0,097 -0,100 0,236 -0,066 -0,108</p>	<p>0,021 0,013 0,228**</p> <p>0,038 0,034 0,009 0,000 0,079**</p>

Response variables	Independent variables (predictors)	Estimated regression coefficient	PR > ITI
<p>(g) Most important type of medical provision</p> <p>(No provision = 0 Some provision = 1)</p>	<p>Age</p> <p>Mar. status: Legally married Widowed Ceremonially married Living together</p> <p>Qualification</p> <p>Income: None Less than R400 R400-R999 R1 000-R4 999 R5 000 +</p> <p>Occupation</p> <p>TV: Max. 2 hrs 2-4 hrs Don't watch TV</p> <p>Region: 2. OFS & QwaQwa 4. Cape Peninsula 7. Natal N. & S. Coast 8. PWV & KwaNdebele 10. N. Tvl. & Lebowa 11. Western Tvl 12. KwaZulu</p>	<p>0,003 0,042 0,051 -0,031 -0,032 0,024 -0,125 -0,157 -0,106 0,088 0,296 0,044 0,040 0,064 -0,094 0,123 0,062 -0,148 0,079 0,112 -0,166 -0,095</p>	<p>0,002 0,041 0,144** 0,275** 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,037 0,001 0,001 0,001 0,049 0,006 0,000 0,003 0,007</p>
<p>(h) Death benefit included in 12(g)</p> <p>(None = 1 Some = 0)</p>	<p>Qualification</p> <p>Income: R5 000 + Don't know Less than R400 R1 000-R4 999</p> <p>Occupation</p> <p>Reading a newspaper: Yes</p> <p>Region: 2. OFS & QwaQwa 3. West. & Southern Cape 4. Cape Peninsula 5. East. Cape & Ciskei 6. Greater Durban & envir. 7. Natal N. & S. Coast 8. PWV & KwaNdebele</p>	<p>0,031 0,136 -0,155 -0,068 0,054 -0,033 -0,033 0,132 0,290 0,092 0,111 0,232 0,198 0,072</p>	<p>0,000 0,006 0,278** 0,108** 0,086** 0,062** 0,017 0,000 0,071** 0,061** 0,000 0,076** 0,048</p>

Response variables	Independent variables (predictors)	Estimated regression coefficient	PR > ITI
	9. East. & N-E. Tvl 10. N. Tvl & Lebowa 11. Western Tvl 12. KwaZulu	-0,212 -0,311 -0,536 -0,039	0,000 0,000 0,000
(i) Exceptional medical needs (No-one = 0 Someone = 1 N = 1 998)	Age Mar. status: Never married Divorced Living together Qualification Income: R400-R999 R5 000 + Refuse to answer Occupation Region: 1. North. & Central Cape 8. PWV & KwaNdebele 10. N. Tvl & Lebowa	0,004 0,091 -0,048 -0,038 -0,010 0,069 -0,073 -0,078 -0,024 -0,186 -0,103 0,422	0,000 0,000 0,185** 0,017 0,003 0,061** 0,075** 0,043 0,001 0,000 0,000
(j) Monthly medical expenditure (Less than R50 = 1 R301 or more = 4)	Mar. stat.: Legally married Divorced Qualification Income: None Less than R400 R400-R999 R1 000-R4 999 R5 000+ Don't know Reading a newspaper: Yes TV: Max. 2 hrs 2-4 hrs More than 4 hrs Don't have TV Region: 2. OFS & QwaQwa 4. Cape Peninsula 6. Greater Durban & envir. 7. Natal N. & S. Coast 8. PWV & KwaNdebele 9. Eastern & N-E. Tvl 10. N. Tvl & Lebowa 11. Western Tvl 12. KwaZulu	0,244 -0,144 0,055 -0,369 -0,254 -0,338 0,158 0,837 0,186 -0,055 0,268 0,086 -0,177 -0,116 0,243 -0,274 -0,309 -0,553 0,280 0,335 0,140 0,202 -0,167	0,000 0,231** 0,000 0,000 0,000 0,000 0,001 0,000 0,032 0,000 0,058 0,002 0,004 0,000 0,000 0,000 0,000 0,098** 0,159**

* See Table 11

** See Table 11

The summary of responses in Table (12) indicates the importance of educational qualification, income, watching TV and particularly of region as significant predictors for the responses, while Table 12 shows how the responses varied for different categories of the predictors and also the significance of the predictors.

As far as the direction of associations was concerned, the findings did not differ a great deal between the two sets of analyses (Tables 11 and 12). Therefore only the new predictor, region, and the influence of newspaper reading and of educational qualification will be discussed here - the latter two because of the appearance in this set of analyses of newspaper reading as a significant predictor, and educational qualification because of its recurrence (compared to its relative insignificance in Table 11 - compare Tables (11) and (12)).

Education

The better qualified respondents had somewhat better access to medical and health services than those less qualified (the better the qualification the better the access). The better qualified would also be more likely to wish to acquire their medicine for common illnesses at a private body, they were more inclined to have an opinion on alternatives to the current expensive health-care system, they were very likely to have made some kind of medical provision or to have health insurance, and they were inclined to spend larger amounts on medical bills and health insurance.

On the other hand the better the education, the less likely were respondents to have had a death benefit included in their medical provision, but also the less likely they would be to hesitate to avail themselves of a health service (most probably because of the better provision they had made for health care). A higher educational qualification was also associated with a smaller likelihood of reporting someone in the household with exceptional (expensive) medical needs.

However, the magnitude of possible influence in the case of education was relatively low, except with regard to preference for a private (or public) health facility, availability of a medical scheme or insurance, having a death benefit included in the provision for medical expenses, and the size of monthly expenditure on health care. And even in the latter two cases education was either less important than region (death benefit included) or than income (amount spent monthly on health care)(see Annexure 2).

Reading a daily paper

The regular reading of a daily paper was a significant predictor for the responses on the cost of private medical and health care, on whether a death benefit was included in respondents' medical scheme, and on the average amount spent on health care. For example those who regularly read a daily paper were less inclined than the non-readers to describe private health services as high or dishonestly high (of course keeping in mind that more than 75 % of the total response group considered private health services high or dishonestly high (see Table 4)); the regular readers were more likely to have a death benefit included in their health-care provision although this was not

really a significant association ($PR > ITI = 0,062$), and on average they spent less than the non-readers on health care.

However, the magnitude of possible influence of this predictor was small even in the few cases where it was significant (see Annexure 2). No doubt with the presence of TV in many homes, an unwillingness - usually - on the part of questionnaire respondents to admit that they do not read a daily paper at least four times a week, and the fact that "reading" does not indicate any specific contents of the paper - cartoons or editorials - the reading of a daily paper has become too complex a variable to act as a good predictor of the type of responses called for here.

Region

In spite of its recurrence and consistently large potential influence (see Tables (12) and 12, and Annexure 2), region is less easy to explain because of the many region categories involved. Therefore, only some regions are discussed here. Further details can be read from Table 12(a-j).

The regions chosen are those from which fairly large subsamples were drawn, namely Greater Durban and surrounding areas (196 respondents), KwaZulu (280), the PWV area and KwaNdebele (472) and the Cape Peninsula (194), as well as three regions which, according to the Development Bank of Southern Africa, rate below 0,70 on a human development index (1,00 = optimal development; the PWV area (Region H) rates 0,80). The three regions concerned are the Northern and Central Cape (64), Northern Transvaal including Lebowa (130) and the Eastern Cape including Ciskei (158). Gazankulu and Venda which form part of Development Region G (Northern Transvaal) were included in Region F (Eastern and North-Eastern Transvaal) in order to obtain a workable subsample for Region F. However, this might have been the cause of the relative insignificance of Region F in relation to the response on most of the questions: By itself it only seemed to show a clear regional pattern or direction at the questions on views on the South African health-care system, views on private medical and health care, and whether or not a death benefit was included in a medical aid/insurance - where the latter was available.

KwaZulu. Although KwaZulu was the reference category and its regression coefficients and their significance were therefore not shown on the computer printout, the regression coefficient was calculated for each of the questions or dependent variables (see Note 1); and where KwaZulu proved to be one of the regions with extreme values with regard to the particular response, it was included in Table 12. According to these calculations, respondents from KwaZulu were more inclined than the average respondent in the total sample to view the health-care system in South Africa as poor, more likely to report limited or no access to (even basic) health care, and more likely to prefer a public to a private body from which to obtain medicine for common illnesses. The respondents from KwaZulu were more likely to have no opinion on alternatives to scarce and expensive health care, and more likely to have made no provision themselves for medical or health care (although the value of the regression coefficient was not very large here). Although not more

so than the respondents in the Northern and Eastern or those in the Western Transvaal, the respondents from KwaZulu tended to report a death benefit as part of their medical benefit - where they had such provision. Being less likely than the average to have any health-care provision, they also tended to report lower average amounts spent monthly on health care than the group in general - although the rest of Natal seemed in this respect to be much further to the negative side of the average for the group (see Table 12(j), Regions 6 and 7).

When Table 11 and Table 12 are compared, it becomes noticeable that at those questions where the subsample from KwaZulu differed significantly from those in the other regions (Table 12), its response resembled that of the black subsample in Table 11.

Greater Durban and surrounding areas. This region differed significantly from the others at six of the ten questions. Table 12(a-j) shows that the respondents from here would be more inclined than most of the others to hesitate to use a health service for one reason or another (although not to the extent of the Northern and Central Cape or Northern Transvaal); they tended to consider private health service costs high or dishonestly high and they tended to express a preference for a private body for obtaining standard medicine; they definitely had an opinion on alternatives to scarce and expensive health care, they were unlikely to have a death benefit included in their medical provision, and they were inclined to spend far less than the group average on health care.

When Table 12 is compared with Table 11, it appears that at those questions where this region differed significantly from the others (Table 12), the response resembled that of the Asians and in some cases that of the whites (Table 11). (The whites differed from the other groups particularly in their tendency towards non-hesitation in using a health service when needed, and their relatively large expenditure on health care.)

PWV area and KwaNdebele. Respondents from this region had a response pattern that differed significantly from that of the other areas at seven of the ten questions. According to Table 12(a-j) these respondents more readily reported unlimited (or less limited) access to health services, they would not easily hesitate to use a health service for whatever reason, and they were more inclined to prefer obtaining their standard medicines at a private health body. They were more likely than the group average to have made some provision for health care, and they generally also spent more than the group average on health care. They were less likely to have a death benefit as a component of their health insurance or medical aid scheme, and they were less likely to have someone with exceptional health needs in their household.

When compared with Table 11(a-j) the response from the PWV area and KwaNdebele resembles that of the whites more closely - that is, at the seven questions where the response from this area differed significantly from those of the other regional subsamples. However, exactly half of the respondents from this area were black (236, compared with a total of 236 coloureds, Indians and whites from this area), and the response therefore most probably has to do more with

the availability of services in the metropolis, the types of systems in operation there, and connectedness with the work market in which many of the schemes and systems are managed, than it has to do with connectedness to a particular population group.

Cape Peninsula. Respondents from this region differed significantly in their response at eight of the ten questions. They were more inclined than the group in general to consider the South African health-care system good, they tended to report access to all health services (even to a greater degree than the respondents from the PWV), they were less inclined than the group average to hesitate to seek medical assistance when it was needed, and they were more inclined to describe private health services as high or dishonestly high - although not to the extent that their neighbours in the Western and Southern Cape did. They tended to prefer acquiring their medicine for common illnesses at a private body, they reported having made provision for health expenditure to a somewhat greater extent than the group average (but not to the extent of the respondents from the OFS, the PWV region and even Northern Transvaal), they would be unlikely to have a death benefit included in their medical scheme, but they differed less from the group average than their non-metropolitan neighbours to the immediate North and East (Western and Southern Cape), and they were far more likely to spend less than the group average on medical bills and health premiums.

When compared with Table 11(a-j) the response from this region resembles that of the whites most closely except at the question on the amounts spent on health care, where it resembles the response pattern of the coloured respondents - the latter tending to spend much less than the group average on health care.

Eastern Cape and Ciskei. The subsample from the Eastern Cape was also one of the largest in the survey, but has been included for discussion specifically because the Eastern Cape rates low on the DBSA's human development index. The response from this region showed a significant deviation from the group average at three questions only. The respondents from this area tended to prefer receiving common medicine at a public body rather than at a private one, they had no opinion rather than some opinion on the matter of alternatives to expensive and scarce health care and they tended not to have a death benefit included in their health provision.

The fact that the response from this area does not show very clear trends most probably means that the respondents differed a great deal among themselves and therefore a response pattern that differs clearly from those of the other subgroups in the regions discussed thus far is not apparent.

Northern Transvaal including Lebowa. The respondents from this region differed very significantly from the group average at eight of the ten questions. They tended to have limited access to medical services, they would hesitate to a very considerable extent to seek a medical

service when they needed one, but they did not consider the cost of private medical services to be very high or dishonestly high to the same extent as most of the other groups. They certainly preferred to receive their medicine for common illnesses at a public facility, they tended to report having made some provision for health care and to have a death benefit included in it; there would be someone rather than no-one with exceptional medical needs in the household, and they spent more than the group average on health care.

When these findings are compared with those shown in Table 11, it appears that the respondents of the Northern Transvaal reacted like the black respondents at most questions except that, like the white respondents, they had some rather than no medical provision and spent more than the group average on health care.

Northern and Central Cape. The respondents from this region resembled those from the Eastern Cape in the small number of cases in which they differed significantly as a subsample from the other subsamples - at four questions only. They were considerably more negative than the group average in their assessment of the South African health-care system (poor to very poor) but they tended not to have suggestions about alternatives to scarce and expensive health care in South Africa. They would definitely hesitate to seek a medical service, but they were unlikely to have someone with exceptional medical needs in the household.

At all four questions the response from this region could be considered outlying, in other words its regression coefficient was further removed from the sample average than that of any of the other regions, and/or its deviation from the average was in the opposite direction from the other regions (with a clearly different response pattern).

Discussion

Looking at the influence of the variable "region" in general, it appears that in some cases the response can be tied to a specific population group, for example blacks in KwaZulu and Indians in Durban and adjacent neighbourhoods. However, in the PWV area and KwaNdebele the predominant pattern, although resembling that of the whites, is perhaps typically that of people living in or close to a Western metropolis where a variety of social security and related schemes - including medical aid - are participated in by the greatest proportion of the inhabitants.

On the other hand the low expenditure on health care in a metropolis like the Cape Peninsula may be due to the availability of free or near-free health care at the networks of day hospitals and clinics in that region.

An unexpected finding is the relatively high expenditure on health care in the Northern Transvaal (Region G with its very low rating (0,59) on the human development index mentioned earlier). However, perhaps the exclusion of Gazankulu and Venda from this subsample meant that the respondents from the economically stronger towns - Pietersburg, etc. - dominated the subsample.

4.3.3 Multiple regression analysis: population groups separately

Predictors: Gender, age, marital status, educational qualification, income, occupational level, reading a daily newspaper and watching TV.

TABLE 13: SUMMARY OF RESPONSES AND SOCIODEMOGRAPHIC PREDICTORS
(population groups separately)

Question	Black	Coloured	Asian	White
(a) Views on the health-care system	Gender	(Age)*	Mar. stat. Qualification	Mar. stat. (Qualification)
(b) Access to medical and health care (i) "Access" - continuous	Gender (Mar. stat.) Qualification (Income) Watching TV	(Income) Watching TV	Income Watching TV	Mar. stat.
	Qualification Watching TV	(Income) Watching TV	Income Watching TV	Mar. stat.
(c) Hesitation to seek medical assistance	(Mar. stat.) (Occupation)	(Age) (Income) Watching TV	(Gender) Income Reading a paper Watching TV	Mar. stat. (Occupation) Watching TV
(d) Views on cost of private medical/health care	Income (Reading a paper) (Watching TV)	(Watching TV)	Income Occupation Watching TV	Income
(e) Prefer receiving medicine at private/public facility	Mar. stat. Watching TV	Income	(Gender) Occupation	Income
(f) Alternatives to scarce and expensive health care (Some opinion/ No opinion)	Age Mar. stat. Income (Reading a paper) Watching TV	Watching TV	Income	(Gender) Age Mar. stat. Qualification Income

Question	Black	Coloured	Asian	White
(g) Most important type of medical provision (Some provision/No provision)	Occupation Watching TV	Income Watching TV	Mar. stat. (Qualification) (Income)	Mar. stat. Income
(h) Death benefit included in 13(g)	Mar. stat. Occupation	Mar. stat. Income	(Gender)	Age Mar. stat. Income Watching TV
(i) Exceptional medical needs in the household (age category)	Gender Age Mar. stat. (Occupation) Watching TV	Age (Mar. stat.) Occupation (Reading a paper)	Age	Age (Mar. stat.)
(j) Monthly medical expenditure	Income (Occupation) (Watching TV)	(Gender) (Income)	Mar. stat. Reading a paper Watching TV	(Age) Mar. stat. (Income) Watching TV

* Brackets indicate that the association was of borderline significance.

The within-group differences were generally insignificant. Even where an association was significant, it usually applied only to one of the categories of the predictor. For example the legally married might have had a significantly higher (more positive) opinion of the South African health system than the rest of the group, or the divorced (among the white respondents) significantly less access to health services than the rest of the group. In other words in most cases only one category stood out.

The value of the coefficient of determination (r^2) confirms this limited within-group variation. Only in a very few cases did the independent variables together explain more than 20 % of the variation in a particular response. The following nevertheless show where the predictors as a group explained at least 10 % of the variation in the response concerned:

- Views on the South African health system (Asians - mostly marital status and qualification).
- Access to health services (coloureds and Asians - mostly income and watching TV).
- Hesitation to seek medical assistance (coloureds - mostly age, income and watching TV; Asians - mostly gender, income, reading a paper and watching TV).

- Preference for receiving medicine at private/public health facility (coloureds - mostly qualification and income; Asians - mostly gender and occupation).
- Opinion/No opinion on alternatives to expensive and scarce health care (coloureds - mostly marital status and watching TV; Asians - mostly marital status and income).
- Provision made/No provision made for medical care (coloureds - mostly income and watching TV; Asians and whites - mostly marital status and income).
- Death benefit included in medical provision (blacks - mostly marital status and occupation; coloureds - mostly marital status and income; Asians - mostly gender, marital status and income; whites - mostly age, marital status, income and watching TV).
- Age category of the household member with exceptional health needs (blacks - mostly gender, age, marital status, occupation and watching TV; coloureds - mostly age, marital status, occupation and reading a paper; Asians - mostly marital status; whites - mostly age, marital status, income and watching TV).
- Expenditure on health care (coloureds - mostly gender and income; Asians - mostly marital status and watching TV; whites - mostly marital status, income and watching TV).

The variables mentioned at each point above differ somewhat from those listed in Table 13 because in the above exposition more note was taken of the magnitude of the influence of the individual predictors as they could be read from the values of the regression coefficients for each predictor variable. Nevertheless, the exposition above indicates that particularly among the white respondents the predictors used had limited influence on the respondents' reaction to the ten questions. On the other hand the recurrence of income, watching TV and marital status should not be ignored - marital status especially in the case of the white respondents (see Table 13).

4.4 Relations among dependent variables

Objective (iv): Associations among opinions, experiences and provision

The following analyses were done to determine the associations, if any, among the dependent variables as represented by the questions.

- (i) Cross tabulations on some of the questions, rendering categorical data.
- (ii) Cross tabulations on some of the questions, rendering categorical data, but to limit the number of cells in the table the data on one of each pair of questions/variables were recoded into two categories only, in other words treated as dichotomous.
- (iii) Pearson correlations on the data of all the dependent variables of which the data were continuous (or could be treated as continuous although the categories were rankable rather than strictly continuous, for example the data on the measure of access to health services).

- (iv) ANOVA (analysis of variance) on the data of pairs of variables, treating one of the two as the dependent variable, and testing the hypothesis that the means of the subgroups (categories) come from the same rather than different populations.

4.4.1 Cross tabulations - response categories remain as in the questionnaire

Only some pairs of questions were used in the cross tabulations and in each case a significant association was found ($p < 0,001$), although the smallness of the contingency coefficients shows that the associations found may be somewhat suspect.

Nevertheless, the following associations were revealed:

- (a) Between access (Question 2) and preferred place for obtaining medicine for the most common illnesses (Question 5): The respondents with access to all health services (full access) were more inclined to wish to receive their medicine at a private facility than were those with no or limited access (contingency coefficient = 0,30);
- (b) Between access (Question 2) and type of death benefit^d, if any, included in medical provision/health insurance (Question 8): The respondents with full access either had no death benefit (54 %) included or they had burial costs (24 %) or a survivors' benefit (19 %) included, while most of those with no access had burial costs (70 %) included in their medical provision (contingency coefficient = 0,31);
- (c) Between access (Question 2) and average amounts spent on health care (per month) (Question 10): The respondents with full access spent much larger monthly amounts on health care than those with very limited access/no access (contingency coefficient = 0,21);
- (d) Between preferred facility for obtaining medicine for common illnesses (Question 5) and having a death benefit included in the medical provision (Question 8): The respondents who preferred to receive their medicine at a private pharmacist or private practitioner (family doctor) were less likely to have a death benefit as part of their medical provision than were those who preferred other, mostly public, facilities (contingency coefficient = 0,40, but many cells had expected counts of less than five);
- (e) Between preferred facility for obtaining medicine for common illnesses (Question 5) and amounts spent monthly on health care (Question 10): The respondents who preferred a day or general hospital or a public clinic were more likely to spend less than R50 a month on health care - those preferring other facilities spent more (contingency coefficient 0,36; because of the many cells in the table the direction of the association found was not clear and the trend mentioned was determined by means of a correspondence analysis, the

diagram of which displays the different categories as points in a defined space (Greenacre 1984:6));

- (f) Type of death benefit, if any, included in the medical provision (Question 8) and amount spent on health care (Question 10): A third of the respondents who had a **survivors' benefit** included, spent more than R300 a month, while most of those who had no death benefit included fell in the categories that spent less than R50, or R51-R150 (the largest group) or R151-R300 a month on health care. Those who had other than survivors' benefits included fell in the lower levels of health-care expenditure (contingency coefficient = 0,32).

As can be seen the coefficients were all below 0,5. The significance revealed by the chi-square tests probably arises from the size of the sample - at least 800, depending on the question. The small coefficients indicate on the one hand large proportions of respondents in the middle ranges of access (limited, but some) and of health-care spending, and on the other hand external influences that affect access over and above income, and the question whether or not the medical provision includes a death benefit or not. With regard to access the possible effect of free or near-free services has already been mentioned and death benefits will be discussed later. However, the associations found among the variables discussed show two rough profiles emerging as two extreme types.

Profile One: *Full access to health services (including those needed in case of serious illness or a catastrophic event), a preference for a private health facility at which to obtain medicine for common illnesses, no death benefit as a component of the medical provision, and large average amounts spent monthly on health care.*

Profile Two: *Limited or no access to health services, a preference for public facilities at which to obtain medicine for common illnesses, some death benefit as part of the health provision, and small average amounts spent monthly on health care.*

The most noticeable exceptions can be found in Paragraph (b) (a considerable proportion of the respondents had full access yet also some death benefit included in their provision for medical expenditure) and in Paragraph (f) (a considerable proportion of the respondents who had a specific death benefit (for survivors) included in their medical provision, were spending large amounts on health care).

4.4.2 Cross tabulations - data from some questions treated as dichotomous

The following significant associations were found:

- (a) Between access (Question 2) and hesitation (or not) to use a health service when it is needed (Question 3): More than 80 % of those with full access would not hesitate, compared with 27 % of those with no access (contingency coefficient = 0,45). (With the decoding of the data into hesitate/do not hesitate the reasons for hesitation were ignored);
- (b) Between access (Question 2) and medical aid provision or health insurance (Question 7): Just over three-quarters (77 %) of those with no access had no medical aid or health insurance provision, while just over a half (51 %) of those with full access also had no medical provision (contingency coefficient = 0,23). However, of those who had some kind of provision, about three-quarters had access to all services while less than 10 % had no access to health services (actually, the latter figure is hard to explain since some provision should allow access to at least basic services);
- (c) Between type of facility preferred for obtaining medicine for common illnesses (Question 5) and hesitation to use health services (Question 3): Of those respondents who would use a private facility, particularly a private pharmacist, the majority would not hesitate to use a health service (78 % of those preferring a private pharmacist would not hesitate), while of those respondents preferring a district surgeon (in other words one of the public facilities) more than 50 % would hesitate to use a needed service (contingency coefficient = 0,20);
- (d) Between type of facility preferred (Question 5) and medical aid or health provision (Question 7): Those respondents who preferred a private pharmacist or a private doctor were more likely to have some kind of medical provision or health insurance than those preferring other, more public types of facilities. But showing the difference even more clearly, of those respondents who preferred public facilities such as a day hospital, general hospital and public clinic, between 73 % and 80 % had no provision (contingency coefficient = 0,35);
- (e) Between having a death benefit as part of medical provision made (Question 8) and hesitation to use a health facility (Question 3): Of the respondents who had some kind of provision for burial costs included in their medical provision, 56 % would not hesitate to use a medical service when needed, while of those with no benefit included and those with a survivors' benefit included about 80 % would not hesitate to use a medical service when needed (contingency coefficient = 0,25);
- (f) Between death benefit (Question 8) and having an opinion on alternatives to scarce and expensive health care (Question 6): Of the respondents who had a survivors' benefit less

than 30 % had suggestions about alternatives to scarce and expensive health care compared with between 42 % and 53 % of the other categories (no benefit included, or a benefit for burial costs and/or a tombstone) (contingency coefficient = 0,17);

- (g) Between amounts spent on health care (Question 10) and hesitation to use a health service when needed (Question 3): Of those respondents who paid more than R300 a month on average towards health care, 86 % would not hesitate to use a medical service; and the proportions who would not hesitate become smaller as the amounts spent become smaller. However, even in the group who spent less than R50 a month on health care, 62 % would not hesitate to use a health service (contingency coefficient = 0,15);
- (h) Between amounts spent on health care (Question 10) and having suggestions for alternatives to scarce and expensive health care (Question 6): The respondents who spent larger amounts on health care were more inclined to have a suggestion for alternatives, and the proportions who did so decreased gradually towards the lower levels of health-care expenditure (contingency coefficient = 0,10), and
- (i) Between amounts spent on health care (Question 10) and medical aid or health insurance provision (Question 7): Among those spending more than R300 a month, nearly 90 % had medical provision compared with 25 % of those spending less than R50 a month (contingency coefficient = 0,41).

The significance of the associations was high in that in all cases $P < 0,001$. However, the contingency coefficients were very small and only in two cases higher than 0,40, namely access and hesitation to use a health service (Paragraph (a)), and amounts spent on health care and provision for health-care costs (Paragraph (i)).

Nevertheless, in this series of cross tabulations three additional dependent variables have been introduced, namely hesitation to use a health facility when needed, opinions on possible alternatives to scarce and expensive health care and provision for medical bills, and this enables one to draw somewhat clearer health-care profiles than has been possible with the first set of cross tabulations.

Profile One: *Full access to health services, no hesitation to use a service when necessary, some kind of medical aid or health insurance provision but unlikely to include a death benefit in it, preference for a private facility at which to obtain medicine for common illnesses, high expenditure on health care and an opinion rather than no opinion on alternatives to the scarce and expensive health-care services in South Africa.*

Profile Two: *Limited access to health services, some hesitation to use a health service although it is indicated, no medical aid or health insurance or, if available, it is likely to have a death benefit included, preference for a public facility at which to obtain medicine for common illnesses, low expenditure on health care and no opinion about possible alternatives to the current expensive and sometimes scarce health services in South Africa.*

However, the full access that many respondents without medical aid provision of any kind enjoy, as shown in Paragraph (b), again indicates the availability of free or near-free services. Furthermore, direct cross tabulation of the data from the question on where to obtain medicine for common illnesses (Question 5) with those from the question on opinions on alternatives to scarce and expensive health care (Question 6) reveals a limited association (contingency coefficient = 0,10 and $P = 0,005$), while the data on access to health services (Question 2) and those on suggestions for alternatives (Question 6) show hardly any association (contingency coefficient = 0,03 and $P = 0,364$). These findings distort somewhat the profiles drawn above.

4.4.3 Pearsonian coefficient

The usefulness of the Pearson product-moment correlation coefficient lies in its "communication of directionality as well as magnitude of association" (Bohrnstedt & Knoke 1982:249). (In the analyses discussed in 4.4.1 and 4.4.2 the direction of the association had to be "read" from the tables/matrices since the contingency coefficient indicated only the strength of the association (between 0 and 1).)

The data from the questions/dependent variables discussed below were either continuous (or treated as such) or they were recoded into dichotomous categories. They were then entered into a single analysis in which all scores were standardized in terms of standard deviation units (Ghiselli, Campbell & Zedeck 1981:109). Two variables that were not included in the discussions under Paragraphs 4.4.1 and 4.4.2 but have been included in this section, are views on the cost of private health care (Question 4 - responses ranging from "too low" to "dishonestly high"), and the age category of the person in the household who had the most exceptional (expensive) health needs (Question 9; $N = 672$). The two variables of which the data were purely categorical were not included in this analysis: facility preferred for obtaining medicine, and type of death benefit included in health-care provision. Furthermore, owing to model constraints the variable "amount spent regularly on health care" had to be ignored in this round, but its association with six of the other variables was shown in the discussions under Paragraphs 4.4.1 and 4.4.2, while its unusual relationship with "opinion of the health system" is shown later in Paragraph 4.4.4 (ANOVAs, Table 18).

Only a few of the associations were of any magnitude - none reached a level beyond -0,50 or +0,50 - although several of the associations were highly significant (at the 1 % level).

(a) A high opinion of the South African health-care system (excellent or good) accorded with:

- better access to health care (coefficient 0,30);
- a view that private health care in South Africa is reasonably priced (coefficient = 0,13), and
- some medical aid or health insurance provision (coefficient = 0,07).

The small correlation coefficients are most probably due to a lack of true linearity; and hardly any of the associations among the other variables are any better. In the points that follow the associations will therefore be listed, with coefficients supplied only if they are larger than 0,30 and have not already been mentioned.

(b) Access to health care and:

- opinion on the health-care system (see (a)), and
- hesitation to use health care (coefficient = 0,48 - better access, no hesitation).

(c) Hesitation to use medical care when needed and:

- opinion on the health-care system (see (a));
- access to health care (see (b));
- views on the affordability of private health services in South Africa, and
- having made provision through medical aid or health insurance.

(d) Views on the affordability of private health care and:

- opinion on the health-care system (see (a));
- hesitation to use a medical service (see (c));
- having views/ideas on alternatives to scarce and costly health services, and
- provision made through medical aid or health insurance (association weak and significance low - Prob. > IRI = 0,013).

(e) Having views on alternatives to expensive and scarce health care and:

- views on the affordability of private health care (see (d)), and
- provision made through medical aid or health insurance.

(f) Medical aid or health insurance provision and:

- opinion of the South African health-care system (see (a));
- access to health care (see (b));
- hesitation to use a medical service (see (c));
- views on the affordability of private health care (see (d)), and
- having views on alternatives to expensive and scarce health care (see (e)).

The age category of a household member with exceptional health needs in terms of cost (Question 9) was not associated with any of the other dependent variables. In a second analysis in which all the respondents were included, also those who did not report a member with exceptional health needs, associations were revealed between this variable and opinion of the health-care system, access to health care and hesitation to use a service when needed. However, there is no true continuity between "no such person" and the different age categories of those who mention exceptional health needs, unless the size of the group with "no such person" - 1 328 persons in a single category - created a dichotomy between the households that did and those that did not include a member with exceptional needs. (See the associations between this variable and some of the sociodemographic characteristics of the respondents as shown in Table 11(i) and Table 12(i).)

The discussion in Paragraphs (a) to (f) above revealed interwovenness among the variables in the sense that each was associated with most of the others. However, **the question of whether respondents had or had not made some kind of medical provision - through a medical aid scheme, insurance, credit association or burial society - recurred most often, manifesting its association with almost all of the other variables entered into the Pearsonian model (even with the matter of having (or not having) views on alternatives to currently expensive and scarce health care - which was poorly associated with most of the other dependent variables):**

4.4.4 ANOVA (analysis of variance)

The technique or procedure used to test the hypothesis that the sample means of two or more groups come from the same rather than different populations, is called ANOVA (Bohrstedt & Knoke 1982:197-220). It is an analysis of variance in which the question is asked: How much of the total variation in the dependent variable can be explained by the independent or treatment variable and how much is left unexplained? As such the analyses discussed here could have been included with the multiple regression models in Section 4.3. However, here only two variables are entered at a time, over and above the fact that in Section 4.4 only the relations among the dependent variables (the questions) are being analyzed; none of the sociodemographic variables are included here.

The following effects⁵ were found:

- (a) The effect of access (Question 2) on opinion of the South African health system (Question 1)**

TABLE 14: ACCESS, AND OPINION OF THE SA HEALTH SYSTEM

Access	Opinion of SA health system (mean)*	Duncan grouping
1. Access to all health services	2,72	C
2. No access in case of serious illness or catastrophic events	3,08	B
3. No access, not even to basic services	3,48	A

* Means with different letters are significantly different. The "opinion" values ranged from 1 to 5: 1 = Excellent, 2 = Good, 3 = Average, 4 = Poor, 5 = Very poor.

If there were no effect, the three population means would have been equal to one another and hence to the overall or grand mean of 2,92. Table 14 indicates that respondents having full access to health services had significantly better opinions of the South African health system than those with limited or no access.

(b) The effect of preferred place for obtaining medicine (Question 5) on opinion of the South African health system (Question 1)

TABLE 15: PREFERRED PLACE FOR OBTAINING MEDICINE, AND OPINION OF THE SA HEALTH SYSTEM

Preferred place for obtaining medicine (for common illnesses)	Opinion of SA health system (mean)*	Duncan grouping
Private general practitioner (family doctor)	2,81	B
Private pharmacist	2,82	B
Day hospital	2,83	B
General (provincial) hospital	3,00	A* B*
Public (general) clinic	3,04	A* B*
District surgeon	3,06	A* B*
Other (herbalist, mobile clinic)	3,08	A* B*
Municipal/Provincial/State pharmacist	3,17	A

* Means with the same letter are not significantly different, while the means with more than one letter reflect considerable overlap. (For range, see Table 14.)

Table 15 indicates that the only significant difference is found between those respondents who preferred one of the two private facilities or the day hospital on the one hand, and those preferring the public authority pharmacist on the other. The first three groups had the better opinion of the South African health system, and the latter group the poorer opinion. The effect found here perhaps reveals not so much a preference for one or the other facility, but the presence or absence of a choice. Possibly those with a choice have a better opinion of the health system than those who are forced to use a free or near-free service with its connotations of stigma, longer waiting hours and less-than-first-rate treatment. (See discussion in Section 5.)

(c) **The effect of preferred place for obtaining medicine (Question 5) on views on the cost of private health-care services in South Africa (Question 4)**

TABLE 16: PREFERRED PLACE FOR OBTAINING MEDICINE, AND VIEWS ON THE COST OF PRIVATE MEDICAL AND HEALTH-CARE SERVICES IN SOUTH AFRICA

Preferred place for obtaining medicine (for common illnesses)	Views on the cost of private medical or health-care services in South Africa (mean)*	Duncan grouping
Day hospital	2,86	B
District surgeon	2,89	B
Public (general) clinic	2,89	B
Municipal/Provincial/State chemist	2,97	A B
General (provincial) hospital	2,98	A B
Private general practitioner	2,99	A B
Private pharmacist	3,04	A B
Other (herbalist, mobile clinic)	3,14	A

* Grand mean = 2,95. The values for "views" ranged from 1 to 4: 1 = Too low, 2 = Reasonable, 3 = Too high, 4 = Dishonestly high.

The only real difference was observed between those respondents preferring a day hospital, district surgeon or public clinic, and the "other" category. However, looking at the general trend revealed by Table 16, it seemed that people preferring free or near-free (public) services were less inclined to consider private health services as too high or dishonestly high than were the rest of the group. On the other hand, attention should again be drawn to Table 4 which shows that the majority thought the private service costs were too high (63,1 %) or dishonestly high (16 %).

- (d) The effect of having a death benefit included in the medical aid/health insurance provision (Question 8) on views on the cost of private medical and health-care services in South Africa (Question 4).

TABLE 17: DEATH BENEFIT INCLUDED, AND VIEWS ON THE COST OF PRIVATE MEDICAL AND HEALTH-CARE SERVICES IN SOUTH AFRICA

Death benefit included	Views on the cost of private medical and health care (mean)*	Duncan grouping
Assistance with grave and tombstone	2,85	B
Assistance with burial costs only	2,87	A B
None, no death benefit as part of medical provision	3,04	A B
Assistance to survivors	3,09	A

* Grand mean = 2,99 (N = 800).

Only those respondents who had made some kind of provision for health care responded to the question on a death benefit and as can be seen from the footnote, the overall mean is somewhat higher for Table 17 than Table 16 where the response of the entire group was analyzed. According to Table 17 respondents who had "assistance to survivors" included in their health-care provision were more inclined to find private health care too expensive than those with provision for grave and tombstone.

However, those with a survivors' benefit did not differ too much from those with no death benefit included in their health provision. In Paragraph 4.4(f) it was shown that those with a survivors' benefit included in their health-care provision spent more than R300 a month on average on health bills and health premiums - the largest expense category mentioned. These respondents are most likely people with fairly expensive health insurance which often includes a survivors' benefit. Those without a death benefit are most likely people with regular medical aid, and they might therefore also find their medical aid premiums plus additional payments too high or dishonestly high. One therefore comes to the conclusion that those who use private services through their medical aid and insurance provision are the ones in the best position to judge the cost of such services as too high.

- (e) The effect of monthly average spent on health care (Question 10) on opinion of the South African health system (Question 1)

TABLE 18: AMOUNT SPENT MONTHLY ON HEALTH CARE AND OPINION OF THE SOUTH AFRICAN HEALTH SYSTEM

Amount spent monthly on health care	Opinion of SA health system (mean)*	Duncan grouping
More than R300	2,67	B
R151-R300	2,68	B
Less than R50	2,95	A
Do not know	2,96	A
R51-R150	3,04	A

* Grand mean = 2,92, as in Tables 14 and 15.

Although the respondents who spent more on health care had a better opinion of the South African health system than the rest of the group, the analysis does not indicate a linear relationship; and the middle group (R51-R150) actually had the worst aggregate opinion of the system. Important however is the relatively poor opinion of the large group (over 1 000 respondents) who spent less than R50 a month.

If Table 15 and Table 18 are observed together one may deduce that people with a poorer opinion of the system, although preferring public facilities for obtaining standard medicine because they do not have to spend a great deal there, may be considering more than the financial aspect of the service; they may also have distance, inconvenience and staff treatment in mind. Moreover, for the poor anything close to the upper limits of R50 a month may not be very cheap, in which case cost forms part of their judgement of the health-care system. One should however recall that the grand mean of 2,92 lies between Points 2 and 3 on the scale used, which is between good and average, although closer to average (see again Table 1). The mean for the group spending between R51 and R150 a month is the only one that lies beyond average, in other words between average and poor, although still quite close to average.

- (f) The effect of monthly average spent on health care (Question 10) on views on the cost of private health services in South Africa (Question 4)

TABLE 19: AMOUNT SPENT MONTHLY ON HEALTH CARE, AND VIEWS ON THE COST OF PRIVATE MEDICAL AND HEALTH-CARE SERVICES IN SOUTH AFRICA

Amount spent on health care monthly	Views on the cost of private medical and health care (mean)*	Duncan grouping
Do not know	2,82	C
Less than R50	2,94	B
R51-R150	2,99	A B
More than R300	3,06	A B
R151-R300	3,08	A

* Grand mean = 2,96.

The association is closer to a linear one than that revealed in Table 18, although the two categories of highest spending are reversed. The true differences exist between the respondents who did not know how much they were spending, those who spent less than R50 a month and those spending between R151 and R300 (in other words between A, B and C). Nevertheless, the respondents who spent larger amounts most probably spent them on private services, and therefore, to a greater extent than the rest of the group, would judge these services as too expensive (between too high and dishonestly high although closer to too high).

The results of the ANOVAs (Section 4.4.4) coincide to a considerable degree with those of the Pearsonian analyses discussed in Section 4.4.3. First of all, none of the other dependent variables were associated with the age of the household member who had exceptional health needs (Question 9). Perhaps this finding was to be expected since age is a predictor or influencing variable rather than a dependent one, while it (age of affected household member) was positioned as a dependent variable in the four ANOVAs where Question 9 was entered. Nevertheless, the lack of association between this variable and the rest of the dependent variables was already revealed in the Pearsonian analysis.

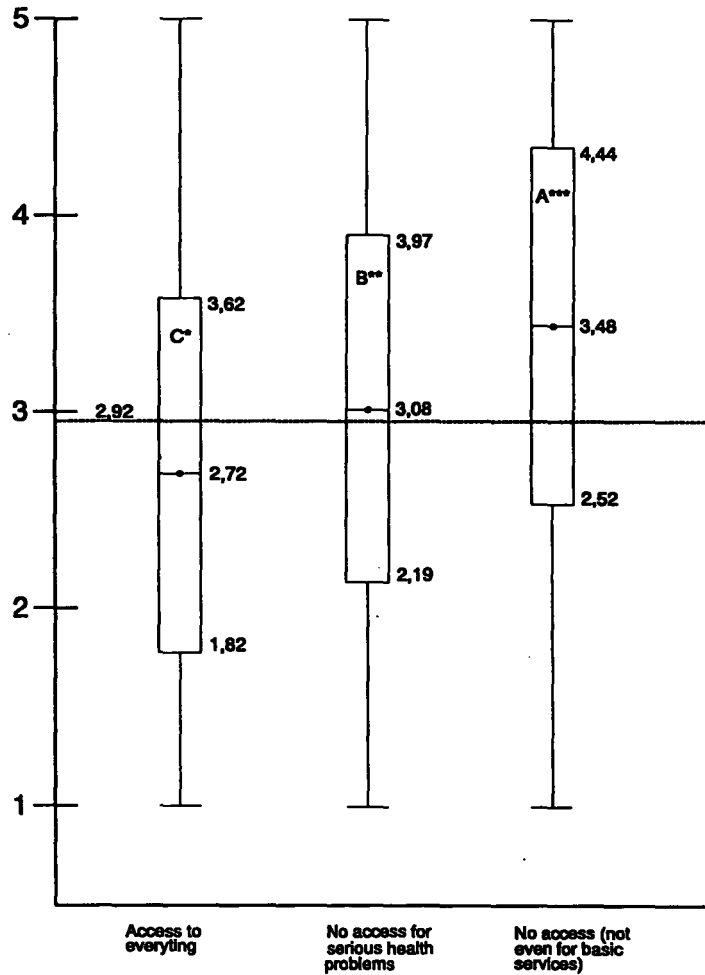
There was also no association between access (Question 2) and views on the cost of private medical care (Question 4); and between opinion of the health-care system (Question 1) and having a death benefit as part of medical provision (Question 8).

Although it was pointed out in earlier discussions in this report that "access" as *dependent* variable seems to be influenced by extraneous variables not considered in the analyses done here, the exposition in Table 14 suggests that "access" may be a potent *independent* or influencing variable. The exceedance probability ($PR > F = 0,0001$) shows the significance of the particular association, which is not much higher than any of the others which indicated an effect. But the F ratio⁶ of 99,76 shows the magnitude of the effect when compared to the effects revealed by the other ANOVAs (Tables 15 to 19): The highest F ratio revealed by the other analyses was 6,8 for the effect of the amount paid monthly towards health care on opinion of the South African health system. Returning to the hypothesis tested by the ANOVAs, one can state that in this case the hypothesis is not confirmed, and that the means of the three subsamples (categories of "access") do not come from the same population. The following box-and-whisker diagram shows how they differ, firstly through the difference in means, and secondly through the difference in standard deviations (see the position and height of the boxes).

As can be seen from the boxes and the footnotes to Diagram 1, the "whiskers" start and stop at the same place, namely at a value of 1 and a value of 5, since in all three "access" groups (three levels of access) there were some respondents who found the South African health-care system "Excellent"(1) and others who found it "Very poor"(5). The standard deviations also do not differ too much, although there is greater variation in the group with no access than in the other two categories.

Diagram 1 therefore confirms the impression gained from Table 14 that the relation between access and opinion on the health care system is linear although not perfectly so: The better the access, the better the opinion of the South African health-care system - but opinions are generally more favourable than unfavourable.

DIAGRAM 1: ACCESS AND OPINION OF SA HEALTH SYSTEM



- * Access to everything: Mean = 2,72
Std dev. = 0,90
Range = 4 (1-5)
 - ** No access for serious health problems: Mean = 3,08
Std dev. = 0,89
Range = 4 (1-5)
 - *** No access (not even for basic services): Mean = 3,48
Std dev. = 0,96
Range = 4 (1-5)
- Overall mean = 2,92 (see Tables 14 and 15)

4.5 Resumé of findings

Two-thirds (about 67 %) of the respondents thought the present South African health-care system good or average and about three out of every five (60 %) reported access to all possible health services. Just more than three-fifths (63 %) would not hesitate to seek medical assistance when necessary, but about one in five (20 %) would hesitate due to the cost. Close on 80 % thought that the cost of private medical and health-care services was too high, even dishonestly high (about 17 %).

A public clinic and a private pharmacist were each mentioned by just over a quarter of the respondents as the preferred place for obtaining medical kits for the most common illnesses, but the overall preference was for public facilities.

On the whole the respondents had few suggestions for alternatives to the expensive and scarce health care of South Africa, but more than 10 % (12 %) did not agree that it was expensive or scarce. Of the alternatives mentioned the decentralization of clinics and hospitals was the most popular.

Three out of every five respondents claimed that there was no medical provision made for/in their household, and for only about a quarter of the households a job-related scheme was the most important. Of those who had medical provision of some kind, the majority - just more than 45 % - had no death benefit included, but for a third there would be assistance with burial costs and for a little less than 20 % there would be a survivors' benefit.

Only about a third of the respondents judged that their households included a member with exceptional (expensive) medical needs, and of these most mentioned either a child under ten (20 %) or a person 50 years or older (nearly 40 %).

Approximately 55 % of the respondents reported health-care spending by the household head of less than R50 a month, but just more than 7 % reported a figure of more than R300 a month.

Sociodemographic factors that influenced the responses were mainly population group, income, watching/having TV and region. The white respondents generally had the most positive views and experiences of South African health care: They had better access, would not easily hesitate to seek medical assistance and were more likely to have medical provision of some kind. They also tended to spend larger amounts than the other population groups on health care on a regular basis, and although the general opinion of the group was that private health services were too expensive, the white respondents - and the Asians - were more inclined to mention "dishonestly high".

Barring a few exceptions the whites were the most clearly juxtaposed to the black respondents. Regional patterns coincided roughly with the differentiation between population groups, the clearest examples being the metropolitan PWV area with its white-centred profile and the more rural KwaZulu with its black-centred profile.

Some of the questions did not appear to be influenced too much by sociodemographic

factors, but rather seemed to have influenced each other. However, there were exceptions which indicated extraneous influences not measured in the study. For example access to health services influenced respondents' opinion of the South African health-care system but was itself most likely influenced by other, unmeasured, factors. Amounts spent on health care affected opinions of private medical care but also opinions of the South African health-care system in general: Those paying more - most likely into the private care system - thought private care too expensive and even dishonestly so; those paying less - most likely using public services to a greater extent - had a poorer opinion of the South African health system. The latter suggests that opinion of the health-care system is also influenced by factors not measured in the study.

In the next section these findings are discussed in relation to the findings of other studies, and to opinions expressed in various publications.

5. FINDINGS IN RELATION TO LITERATURE AND OTHER STUDIES

Other than in a true welfare state, people's access to health-care services in South Africa is ordinarily related to the provision they have been able to make in order to pay for such services. This is a kind of "self-provision" which in most industrialized countries may also have a strong "welfare" character in the sense that the scheme joined is normally administered at the place of employment where it is subsidized to some extent (Roth 1987:142, 149-152; Last of ... 1991:10; World Bank 1993:4, 11-12). Furthermore, value is added through the pooling of resources.

The benefits derived from having such ties with the formal market even where the wages are poor were described by Lovisololo *et al.* (1985:35). These authors indicated that a specific adult education project, although failing to reach its objective of improving trainees' earning capacity, had succeeded in equipping them to enter the formal market - albeit at the lowest level - and participate in the social security schemes functioning there.

However, there are many reasons why large proportions of a population may not be included in such provision, specifically in a medical aid scheme. Firstly many people, particularly in a poor economic climate, are outside the formal market where most of the schemes are in operation (De Beer & Broomborg 1990:144). Van Aardt (1993:8-9) quotes figures showing that the labour absorption capacity (LAC) of the formal sector has been decreasing inexorably since the late 1970s when nearly 75 % of new entrants to the labour market could obtain a job in that sector; the LAC for 1992 was approximately -1 %, indicating a loss rather than an expansion of jobs.

Secondly many enterprises, particularly small ones, do not maintain such schemes at all or at least not for certain categories of employees. Owners or managers might consider a certain section of their workforce too mobile, or "unstable", or they feel it is the responsibility of the worker himself or of the state to create and maintain social security provision (Van Dijk 1992:75-92). Furthermore, at a certain level wages are so low that insurers - in this case specifically medical

aid societies - are reluctant to include these workers in any scheme, reasoning that the contributions of such members would not cover the benefits they would wish to claim, particularly if, under the extended family system, there is an exceptionally large number of dependants.

Other people may be members of medical schemes but the rules of the scheme and/or the extent of claims submitted may require considerable direct payments on the part of the member - in addition to the premiums already payable. Moreover, people with very low wages may not want to join a medical insurance scheme, whether it is subsidized by another party or not.

Although it therefore may be eminently desirable to have some provision for health-care expenses, many people do not have it, or have it to a limited extent. The figure of those without provision was about 60 % in the survey discussed here - closer to 80 % in the case of the black respondents - while for 7 % a rotating credit association, like a stokvel or burial society, was the most important source of health-care benefits.

The first question is: To what extent does this absence of provision affect people's utilization of health services? Since this question could not be surveyed directly in the study, perceptions of access to different levels of health care were measured.

As was pointed out in Paragraph 4.4.2(b), about three-quarters of the respondents who had some kind of medical aid had access to all possible services; and just more than three-quarters of those with no access reported no medical aid or health insurance of any kind. However, just over half of those who perceived themselves as having "access to all possible services and care whatever happens" also reported no medical aid provision.

For the latter households it would be reasonable to assume that they either enjoyed services provided entirely at or through the place of employment, or - more likely - at and by public authorities at no or low cost. Only a very small proportion would utilize the private health market without any kind of insurance provision and is therefore overlooked.⁷ The matter of no medical aid provision yet access to health care will be discussed in more detail later when deviations from the main profiles are considered.

Since the provision made through medical aid schemes and through "catastrophe" insurance is usually used for services in the private health market (even though some of them are offered at public facilities), the second issue related to health care provision is its affordability. The questionnaire item on the "cost of private medical and health-care services" measured respondents' views on this matter, and, as has been shown in Table 4, less than a quarter of the respondents thought it was anything but too high or dishonestly high.

The increasing and often exorbitant cost structures prevailing in health care have been a matter of concern in South Africa and elsewhere for a long time. Various persons and parties receive the blame: high rates per unit of service, the high cost of manufacturing and distributing drugs and equipment, the duplication of services, overservicing by professionals and overuse - excessive demand - by the consumers of health care and lack of congruence between diagnosis

and level of treatment (Spier 1993:18-23; Fourie & Van Rensburg 1993:14; World Bank 1993:3-4).

Part of the problem of overdemand, overtreatment and inappropriate high-tech approaches for low-tech requirements is firstly the very existence of generous job-related medical aid for those who have jobs, and secondly the rules controlling the payment of benefits. Demand is said to rise rapidly to the level of supply (Spier 1993:19-20): If contributors regularly pay their medical aid premiums they feel that they have an accumulated fund that should be used regularly. Simultaneously the health practitioner or administrator, for the most part being guaranteed payment by a third party - the medical aid society - treats, prescribes, or provides medication or any other service without hesitation and without allowing the matter of payment to enter the service relationship (Morley & Lovel 1986:163-164; Some ABCs ... 1991:5; Fick 1993:5; Fourie & Van Rensburg 1993:13-14; Metelerkamp 1993:16; World Bank 1993:7; Bilateralism Project 1993:27, 30).

There are also accusations - often anecdotal - of overcharging and other practices that are borderline fraudulent, such as charging for items not used or procedures not carried out (Metelerkamp 1993:16-17).

But even in the best of circumstances modern physicians form part of a powerful medical elite who are very conscious of international (or rather First World) state-of-the-art technology and methods and who insist on the establishment and use of services that often can be described as luxurious rather than cost-effective or of the appropriate level and standard (Morley & Lovel 1986:165-166, 174-175; Last of ... 1991:10; World Bank 1993:3-4; Fourie & Van Rensburg 1993:17).

However, in the end the consumer pays, particularly in the case of medical aid abuse. "A medical aid fund effectively belongs to its members," states Fick (1993:5), and also "(!)It is the members who have to pay for all abuse and overuse by way of contribution increases."

Alternatives that are being suggested to the current more expensive practices relate in the first place to a greater responsibility on the part of the consumer for direct payment of health-care costs. This would not only limit the drainage of the funds of medical aid societies and allow the latter to keep premiums at reasonable levels, but would also restore the relationship between consumer and supplier and encourage negotiation of fees (Snyman 1989:21-22). New legislation promulgated in South Africa already frees medical schemes from compulsory guaranteed payment, and some schemes have a choice of packages with variable benefit ceilings and proportions of coverage (Spier 1993:20, 23; Metelerkamp 1993:16). Negotiations can also take place between the funder or insurer and a network of suppliers for lower service fees for the members of the particular fund or medical aid society. The insurer could also become provider and create his own service team. An example of this is the Health Maintenance Organization's group practice care concept which includes hospitals and pharmacies (Slabbert 1992:13; World Bank 1993:161; Bilateralism Project 1993:30-31). Similar initiatives could be followed by labour unions and employers.

A second category of alternatives refers to matching health needs and health services more appropriately, for a given society in general but also for the individuals in it. On the one hand

there is better education of the public and environmental support and infrastructure that should all contribute to healthier life-styles and the prevention of acute, chronic or serious - preventable - conditions (Morley & Lovel 1986:182-183, 204-205; Roth 1987:123-128; Oppl & Von Kardorff 1990:49; Te veel geld ... 1993:S5), and on the other hand there are guidelines according to which level or type of treatment and level or type of diagnosis are co-ordinated, at least in terms of the maximum fee payable by the medical insurance body for a specific health problem (Spier 1993:19, 21; World Bank 1993:161).

Two of the questions asked in the survey on which this report is based referred to the matter of alternatives. In one of the questions the suggestions were specific and arose from the practice of having a prepared kit for colds and ordinary influenza available at a variety of outlets, thereby bypassing an appointment with, and examination, diagnosis and prescription by a doctor. The time and cost savings are considerable but without special arrangements most medical aid societies would not honour a claim for the cost of medicine obtained without a physician's prescription - although the situation has eased considerably since pharmacists have very gingerly started to provide a prescription along with some standard medication, *inter alia* nutritional supplements. Several medical aid organizations now provide for the payment of a certain proportion of the cost of medicine "prescribed by a pharmacist".

The first of the two questions referred to above elicited respondents' preferences for obtaining medicine for the most common illnesses. Although 28 % would choose a public (general) clinic and almost the same percentage a private pharmacy, about 14 % would (still) prefer to receive such medicine from a private practitioner. This latter choice may indicate faith in the personal general practitioner, or it may signify a preference for a one-stop service which conveniently permits obtaining a medical consultation and medicine at the same place and with a single set of documentation. However, it may also signify an assumption on the part of these respondents that even the standard kit would be subject to a doctor's prescription - especially if one wishes to ensure payment by a medical aid society. As already mentioned, the latter requirement is being relaxed, while a future health dispensation may embrace a larger number of decentralized multipurpose clinics - some of them, as already said, established and managed by the medical aid societies themselves, or by local authorities (Spier 1993:21; cf. Fourie & Van Rensburg 1993:16; World Bank 1993:129).

The second question referring to alternatives was left "open" although it included some examples of alternatives. Provision was made however for the possibility of respondents having no opinion on the matter, or of not considering South African health-care services expensive and scarce and therefore finding the matter of alternatives irrelevant. Perhaps these two provisions led respondents to take the easy way out, especially that of having no opinion (60 %). Nevertheless, of those who did have an opinion, nearly half (about 46 %, 13 % of the total sample) suggested the decentralization of hospitals and clinics, considering probably the cost of transport and accommodation involved in utilizing comprehensive centralized facilities, but perhaps also hoping

that a local service would be cheaper. However, such a suggestion might also have a bearing on the appropriate level at which a service should be available.

Ijsselmuiden and De Beer (1991:161-164) discuss one kind of decentralization, namely the extension of the role of the local authority so that instead of preventive and promotive services only, they would provide comprehensive services including hospital curative services. Such an extended role might overcome the problems of underutilization of staff skills and other local authority resources, of needs neglected through fine task division between different health authorities, the cost increasing that results from the splitting and duplication of services and the time spent by patients who for minor ailments are referred from one facility to another.

Morley and Lovel (1986:165), although admitting that there are relatively few good comparative studies of the services of health-care centres and those of hospitals, argue that less busy peripheral units can provide services earlier in the development of a disease; they are more likely to offer a truly comprehensive service, and they are preferred by the less mobile patients - mostly women and children. Other references to the value of well-staffed clinics and mini-hospitals have already been cited elsewhere in this report (*cf.* Spier 1993:21).

The World Development Report 1993 (World Bank 1993:129-130) commends the efforts at decentralization of *inter alia* Botswana and Chile. In Botswana the responsibility for primary health care has been devolved to local district councils, while the central government continues to finance, through annual block grants, most of the recurrent primary care expenditures.

In Chile, decentralization has been taking place in phases, first through the creation of 26 Health Service Areas (HSAs) countrywide. These HSAs would manage all government health facilities in their respective areas. Thereafter the primary care network (a few thousand clinics, rural health posts and medical stations, and 14 000 health personnel) would be transferred to the municipalities - with the HSAs monitoring the transfer. The central government would gradually withdraw completely from service provision, leaving it to the HSAs to enter into formal performance contracts with the central health department.

The limited reference in this survey to a traditional healer was surprising, especially in view of the findings of Pretorius, De Klerk and Van Rensburg (1991:37-38) that even where some groups adhered to a Western life-style, they still consulted or believed in the art and medicine of the traditional healer. However, the respondents' reasons for consulting and using such alternative health systems referred to the success rates, the specific types of illnesses in which such success rates were believed to be achieved, the confidence evoked by the traditional healers and the latter's relative proximity to their patients. Affordability hardly entered the picture; in fact, the fees of the traditional healers could be comparatively high, especially in the case of the herbalist and the diviner (Pretorius, De Klerk & Van Rensburg 1991:42). According to the World Development Report (1993:128-129) traditional medicine accounts for more than 10 % of total health spending in many African and Asian countries. The report recommends that in countries where the numbers of traditional healers are many times larger than the numbers of medical physicians (in Ghana 25:1, in Nigeria 28:1) the government should search for opportunities to improve the delivery of

essential health services by using traditional practitioners.

Although traditional healers sometimes indulge in unnecessary and dangerous practices, the report mentions measured successes such as a programme for the detection of malaria in Thailand, traditional health practitioners dispensing drugs and certain contraceptives in remote villages in Kenya and traditional birth attendants in Bangladesh helping to considerably lower maternal mortality rates (World Bank 1993:129).

However, the findings discussed so far may have limited value as a basis for policy making in view of the fact that at most of the questions there were significant differences between the different population groups, revealing the two crude profiles mentioned earlier, one mainly of the white respondents and the other mainly of the black respondents. Region was also important and, in some regions at least, perhaps showed better than population group that responses were tied to the presence of work and work-related provisions, factors which are found differentially in urban and in isolated rural infrastructural frameworks.

For example, looking only at access (Table 12) one observes the difference between the Cape Peninsula and the PWV regions on the one hand, and the Northern and Western Transvaal regions and KwaZulu on the other. Pretorius, De Klerk and Van Rensburg (1991:17-18), referring to availability only, compare the clinic:population ratio of most of the black states, and point out that KwaZulu was in a particularly poor position with a ratio of 1:26 000 (in 1981⁸) compared with the World Health Organization norm of one clinic for every 10 000 of the population. The hospital bed:population ratio for the national states was 1:340 in 1985 compared with a national average of 1:80 for the country in general. Several of the other development regions with large rural populations - Northern Transvaal, Northern Cape and the Eastern Cape - have low ratings on the human development index which includes health indicators such as life expectancy and infant mortality rate, as well as others that may have an impact on health - literacy, labour force participation and age dependency ratio (DBSA 1992). At least the Northern Transvaal response pattern in the survey under discussion here is commensurate with its low rating on the above index.

According to the World Development Report 1993 (World Bank 1993:160) it is generally hard to divert a share of the budget to "district health infrastructure" against the strong pressures exerted by politicians, doctors and the urban population for higher spending on tertiary care facilities in the major metropolitan areas. The report therefore lauds Malawi's achievement in raising the proportion of government spending on district health services from 15 % to 23 %. Simultaneously the share allocated to Malawi's three central hospitals has been reduced from 35 % to 25 % (World Bank 1993:160).

While regional isolation and deprivation are the prevailing conditions of the black states rather than of metropolitan areas, population group differences do not disappear altogether in the metropolitan areas. For example Van Vuuren, De Klerk and Van Rensburg (1993:35) found that 90 % of their

white respondents from Greater Bloemfontein enjoyed membership of a medical scheme compared to the 80 % of the black and 64 % of the coloured respondents who reported that they were not members of such schemes. Yet the health-care needs of the individuals and families in the respective communities are probably as "random and unpredictable" (De Beer & Broomberg 1990:144) as anywhere else.

Overly rapid urbanization, a trait of the developing countries of the southern hemisphere (Morley & Lovel 1986:32-33), may make it increasingly difficult to establish the necessary infrastructures in all parts of the metropolitan areas; the differences between residents in more settled and stable neighbourhoods and the recently urbanized in peri-urban informal settlements, may therefore increase. In this respect the Department of National Health and Population Development (1993:123) uses figures from the 1991 census to show that 77 % of all shack dwellers live in districts where there are 10 000 or more people. And "[p]opulation growth and population movements had created a situation in which the sprawling growth centres, large and small, did not have adequate medical coverage" (Department of National Health and Population Development 1993:123, 126). In its discussion of the differences between poor and non-poor metropolitan neighbourhoods, the World Development Report 1993 (World Bank 1993:7) mentions that in at least one South American study it was found that the poor neighbourhoods were, broadly, squatter settlements with substandard housing and infrastructure. And although these poor are likely to spend any extra income in health-enhancing ways - improving nutrition, obtaining safe water, etc. - they still have the greatest remaining health needs.

Important also for policy making however are the deviations from the main profiles, in other words the minor profile of: a poor opinion of the South African health-care system but tending slightly away from the worst possible view of the cost of private medical services; low expenditure on health care and no provision for health care but considerable access to health-care services and a preference for public facilities at which to receive medicine for standard illnesses. The implication of this profile is firstly that a large proportion of the respondents had public facilities in mind when they gave the South African health-care system a low score, which also means that the strong choice for a public authority was no real choice but only an acknowledgement of the only alternative.

This was indeed found to be the case by Van Vuuren, De Klerk and Van Rensburg (1993:63-65), and Fourie, Van Rensburg and De Klerk (in press - Chapter 2, Paragraph 2.2.2) in two separate studies of the health services of Greater Bloemfontein. In the first-mentioned study it was found that whites, through their medical aid schemes, made more use of medical practitioners while the brown and black respondents made more use of clinics - mostly municipal clinics at which services were free. The second study investigated *inter alia* reasons for dissatisfaction with health services. The authors found that most of the reasons mentioned by their white respondents referred to high fees, expensive medicine or simply expensive medical services, in other words market-related reasons; while the complaints of the blacks were typical of socialized

or "state medicine": long waiting times, overcrowding in the hospitals, impersonal services and indifference on the part of hospital and clinic personnel. (Cf. Fourie & Van Rensburg 1993:14.)

It seems therefore that if the health system in general is to achieve a better image among the South African population, one of the imperatives would be to improve the image and functioning of the public services.

The second implication is that those who had the worst opinion of the cost of private medical services were the ones who had the most experience of it - through their greater participation in the medical aid and health insurance systems and their higher medical expenditure. (See also the reference to Fourie, Van Rensburg & De Klerk above.) In South Africa, as elsewhere, this category, through taxation, also makes the most generous - visible - contribution⁹ to the state's health funding which amounts to about R11 billion at present¹⁰ (Te veel geld ... 1993:S5). This group may however be dwindling here and elsewhere as well as reaching their limit of tolerance (cf. Oppl & Von Kardorff 1990:43-44; World Bank 1993:11).

Broadening the base from which contributions to the pool of health-care provision can be drawn, is therefore important. This would to some extent increase access to health services, and since better access was associated with a higher opinion of the South African health-care system (Table 14) an improved image of the South African health system should ensue. In this respect the World Development Report 1993 (World Bank 1993:123, 161) recommends extending health insurance to include more of the self-employed, the elderly and the poor, and structuring insurance schemes or funds to cover not only occupational groups but also regional groups. Diversifying sources of health financing should also reduce dependence on the public budget (World Bank 1993:169). One of these resources is the general insurance sector which already provides for a variety of other life cycle crises such as retirement and death (Versekerars sal ... 1993:S13). The role of this and several other sectors will be discussed in Section 6.

6. CONCLUSIVE COMMENTS AND SOME RECOMMENDATIONS

6.1 Targeting interventive programmes

The profiles that revealed the relative deprivation of some population groups and some regions suggest that policy makers and administrators should target health-care provision in a more concentrated fashion to specific population groups and specific regions in the country. Areas including one or more black states may have to receive priority.

The limited provision for personal health financing among all but the white respondents calls for efforts to expand medical aid systems at work but also outside the formal workplace for the thousands who are self-employed or work in the informal sector. Small business people in particular should be assisted and encouraged to create a measure of social security for their employees which at least includes some basic medical benefit. Simultaneously large corporate

insurers could be more hospitable to small or informal associations such as neighbourhood burial societies, *stokvels* and other rotating credit associations that either already do, or would be able to, include a component for health expenditure in their savings schemes. Moreover, in spite of the limited mention made in the survey under discussion of the possible involvement of traditional healers, the reality of their value in South Africa suggests that they would have to be recognized to a much larger extent by health insurers.

6.2 A national health insurance system

Sooner or later however a national unitary health insurance system that guarantees access to at least basic services to all people in the country should be set into motion. As an insurance scheme such a system would in the first place be based on the principle of contribution although the principle of social assistance would come into play in those cases where participants - "potential", "latent" or "dormant" contributors - could not contribute at all or enough for essential basic services.

If all people see themselves - and are seen by others - as contributors to a medical or health scheme, non-payment would be regarded as a temporary measure, dependent on special exemption and subject to scrutiny and review. People would not have a choice as to whether they wished to join or not join such a system. They would nominally be members in the way South African citizens nominally are taxpayers.

This national system would apply only to basic or essential services, which will have to be defined but would include a certain proportion of preventive services. With a broader base of contributors there is automatically a broader constituency, of which many members will be more in need of preventive services than of sophisticated therapy.

Individuals or groups of people could make additional provision privately, i.e. outside such a unitary system. However, that does not imply that the unitary system will be a public or state-run system. In fact, it may be wiser to establish the scheme as a corporation, a utility company or non-profit non-governmental organization.

6.3 Structuring of health services

Emphasis on certain regions - specifically those characterized by rural decay - also implies a greater measure of decentralization. However, long distances and expensive transport as well as the reality of overburdened metropolitan services, require that fragmentation be limited, and integrated, community-based "one-stop" health services be developed away from urban areas. Existing small-town hospitals could become such multipurpose health centres, as can presently single-purposed municipal clinics.

6.4 Relationship between suppliers, consumers and financiers

Regardless of whether a national health scheme takes shape and of how health facilities are physically deployed, the relationship between suppliers, consumers and financiers should be reviewed. It should be acknowledged that through self-care the consumer is also a health provider, and that, regardless of who pays the major portion of his health bill, he himself is also a health funder. There are no real free services; and the consumer who accepts this will on the one hand exercise his right to good health service - the best available - but will on the other hand feel that he himself gets hurt through the abuse and overuse of services.

The supplier is in a similar position. He is a part of the economic system that has to pay for health services, while the financier's participation should entail more than an assessment and payment of a claim. The education of suppliers and consumers regarding cost-effective health care and health maintenance should be a core task of health funders.

6.5 Relationship between public and private health

Ways of co-operation and integration will have to be found in order to overcome the dichotomy and conflicting pulls between these two sectors. Appropriate attitudes towards health care for the total population should go a long way towards achieving such integration and co-operation.

6.6 Closing remark

Although good health is a goal in itself, people in a struggling economy may appreciate it more as a means to an (other) end - that of economic productivity and growth.

NOTES

- Multiple regression offers a "least squares" solution to the weighting of variables for the purpose of optimally explaining or predicting a criterion variable (Ghiselli, Campbell & Zedeck 1981:479). Tables 11(a-j) and 12(a-j) present part of the output of the multiple regression analyses carried out according to the General Linear Models procedure of the base SAS* software system. (*SAS is the registered trademark of SAS Institute Inc., Cary, North Carolina, USA.)
- To determine the maximum difference a predictor can make in the value of the dependent or criterion variable when all other predictors are kept constant, the following indices may be calculated: For categorical predictors (e.g. marital status, income, watching TV, etc. in Table 11) with regression coefficients of the dummy variables b_1^1, \dots, b_1^r :

$$\text{Index} = \frac{\text{max. } (b^1) - \text{min. } (b^1)}{V_y} \times 100 \text{ (\%)}$$

where V_y is the range of the dependent variable. For example in Table 11(a) the index for population group is

$$\begin{aligned} & \frac{0,134 - (-0,214)}{4} \times 100 \text{ (\%)} \\ & = 8,7 \text{ \% (9 \% - Annexure 1(a))} \end{aligned}$$

The index for continuous predictors

$$= b_i \frac{V_{x_i}}{V_y} \times 100 \text{ (\%)}$$

where b_i is the parameter of the variable X_i , and V_{x_i} the range of the variable X_i . For example in Table 11(j) the index for age (with its range of 6) is

$$\begin{aligned} & = \frac{0,004 \times 6}{6} \times 100 \text{ (\%)} \\ & = 0,4 \text{ \%} \end{aligned}$$

- After collapsing and recoding the more than 40 regional categories used in the survey, the following 12 remained - shown with the proportion of respondents selected from each:

	(%)
1. Northern and Central Cape	3,2
2. OFS and QwaQwa	6,8
3. Western and Southern Cape	5,4
4. Cape Peninsula	9,7
5. Eastern Cape (including Ciskei)	7,9
6. Greater Durban and environment	9,8
7. Natal Northern and Southern Coast	2,7
8. PWV area (including KwaNdebele)	23,6

9.	Eastern and North-Eastern Tvl (including Gazankulu, KaNgwane and Venda)	8,3
10.	Northern Tvl (including Lebowa)	6,5
11.	Western Tvl	2,1
12.	KwaZulu	14,0

4. It has to be kept in mind that only about 800 of the response group of 2 000 reported having some kind of medical provision, in other words about 40 %. Only a quarter of the group had a medical aid scheme at work (see Table 7).
5. Although the term "effect" is used, it is very difficult to draw causal inferences from a non-experimental design. Moreover, with only one independent variable entered in each ANOVA procedure, the effect of other independent variables has not been ruled out. In fact, other analyses to test some of the effects found and described in Section 4.4.4 indicated that the influence of region overruled that of some of the independent variables entered in the ANOVA. The effects shown by certain ANOVA results were true for certain regions only. (See the influence of region in Tables (12) and 12(a-j): Region was one of the few sociodemographic variables that influenced respondents' opinion of the South African health-care system.)
6. The F ratio is a test statistic with a known sampling distribution under the null hypothesis. The observed F ratio is tested against the assumption that it came from a population where the null hypothesis is true. Note that the ANOVA tests the alternative (null) hypothesis, namely that the sample means come from the same not different populations (Bohrnstedt & Knoke 1982:210-211).
For a definition of the box-and-whisker diagram, see Bohrnstedt and Knoke (1982:186-187).
7. However, the number of people in the South African population who avail themselves of private services in the traditional indigenous rather than the modern health systems without the benefit of health insurance, may be larger than is allowed for in this report (Roth 1987:123-124, 133; Pretorius, De Klerk & Van Rensburg 1991:37-41, 59).
8. The provision in most of the national states may have improved since 1981. KwaZulu for example introduced a community-based health service which has been found to be of great value to the communities where it is in operation (Steyn *et al.* 1991).
9. People who do not pay tax because they live on incomes far below tax baselines may make an indirect contribution to state funds, especially if they themselves make no or few claims on state funds. However, these are invisible contributions and difficult to discount in any discussion on the cost of health or other social services.
10. An amount of R11 billion is not necessarily a high health-care input, nor is the approximately R10 billion spent in the private sector (Te veel geld ... 1993:S5). The main issue, not discussed in too much detail here, is that such a small proportion of the total health-care budget is spent on preventive activities, *inter alia* environmental improvement, immunization, and routine mass examinations to identify killer diseases.

REFERENCES

- BILATERALISM PROJECT. 1993. The provision and funding of employee healthcare benefits. *The Bilateralism Review*, 2(3), Sept.-Nov.:23-33. (This article was compiled by Trevor Bernhardt from a paper read by Dr Brian Brink at the Wits Business School.)
- BOHRNSTEDT, G.W. & KNOKE, D. 1982. *Statistics for social data analysis*. Itasca, Illinois: F.E. Peacock.
- DBSA (Development Bank of Southern Africa). 1992. Fertility rate and literacy rate (unpublished information).
- DE BEER, C. & BROOMBERG, J. 1990. Financing health care for all - is national health insurance the first step? *South African Medical Journal*, 78(3), 4 Aug.:144-147.
- DEPARTMENT OF NATIONAL HEALTH AND POPULATION DEVELOPMENT. 1993. The squatters. *Epidemiological Comments*, 20(8), Aug.:123-126.
- EXECUTIVE Director's report. 1993. *Annual Report 1.4.92 to 31.3.1993*. Operation Hunger.
- FICK, A. 1993. Painful and not healthy. *Alexander Forbes Quarterly*, 3(1), January:5.
- FOKUS OP mediese versekering. *Beeld*, 31.3.93:S12-13.
- FOURIE, A. & VAN RENSBURG H.C.J. 1993. Policy-making for real: Politics and progress in South African health care. *Curationis*, 16(3):13-19.
- FOURIE, A., VAN RENSBURG, H.C.J. & DE KLERK, G.W. 1993. *Gemeenskapsgebaseerde gesondheidsorg: 'n Bekostigbare sorgmodel vir Suid-Afrika* (in press).
- GHISELLI, E.W., CAMPBELL, J.P. & ZEDECK, S. 1981. *Measurement theory for the behavioral sciences*. San Francisco: W.H. Freeman.
- GREENACRE, M.J. 1984. *Theory and applications of correspondence analysis*. London: Academic Press.
- HOPE, K.R. (Sr). 1992. Child survival and health care among low-income African-American families in the United States. *Health Transition Review*, 2(2), October:151-163.
- IJSSELMUIDEN, C.B. & DE BEER, C. 1990. Reducing health care costs - potential and limitations of local authority health services. *South African Medical Journal*, 78(3), 4 Aug.:161-164.
- LAST OF the big spenders. 1991. *The Economist*, 6.7.1991:9-10, 15.
- LOVISOLO, H.R. *et al.* 1985. MOBREAL's functional literacy programme and the reduction of

poverty. In: DUKE, C. *Combating poverty through adult education: national development strategies*. Kent: Croom Helm:11-46.

METELERKAMP, P. 1993. R2 miljoen wins uit 'n bietjie gas. *Insig*, April:16-17.

MORLEY, D. & LOVEL, H. 1986. *My name is today*. London: Macmillan Publishers.

OPPL, H. & VON KARDORFF, E. 1990. The national health care system in the welfare state. *Social Science & Medicine*, 31(1):43-50.

PRETORIUS, E., DE KLERK, G.W. & VAN RENSBURG, H.C.J. 1991. *Die tradisionele heler in Suid-Afrikaanse gesondheidsorg*. Pretoria: Human Sciences Research Council (Verslag BBS/ASS-27).*

ROTH, G. 1987. *The private provision of public services in developing countries*. New York: Oxford University Press.

SLABBERT, A. 1992. Goedkoper gesondheidsorg. *Finansies & Tegniek*, 31 Jan.:12-13.

SNYMAN, Ina. 1988. *Work, retirement and financial crisis: the views of a number of key persons from employers' and employees' bodies*. Pretoria: Human Sciences Research Council (Report ASS/BBS-5).

SNYMAN, Ina. 1989. *Social security in six South American countries - report of a study tour*. Pretoria: Human Sciences Research Council (Report ASS/BBS-10).

SOME ABCs of medicconomics. 1991. *The Economist*, 6.7.1991:4-6.

SPIER, A. 1993. Health services in the new South Africa. What are the options? *Afford-ability*, 2(3), August-September:18-23 (adapted from a paper read at the conference: Achieving an Affordable and Cost-effective Health Care Structure, in Johannesburg on 27 & 28 January 1993).

STEYN, M. et al. 1991. *An assessment of the community-based health programme in KwaZulu*. Pretoria: Human Sciences Research Council (Report ASS/BBS-18).

'TE VEEL geld bestee' aan duur mediese dienste. *Beeld*, 9.6.93:S5.

VAN AARDT, C. 1993. The necessity and affordability of broad-based upliftment programmes in South Africa. *Afford-ability*, 2(3), August/September: 8-13.

VAN VUUREN, S.J.E.J., DE KLERK, G.W. & VAN RENSBURG, H.C.J. 1993. *Professionele gesondheidsorg in drie gemeenskappe: aanbod-, behoefte- en verbruikspatrone*. Pretoria: Human Sciences Research Council (Verslag BBS/ASS-36).

VAN DIJK, E. 1992. *Small business and provision for social security*. Pretoria: Human Sciences Research Council (Report ASS/BBS-23).

VERSEKERAARS sal steun aan mediese fondse moet gee. *Beeld*, 31.3.1993:S13.

WORLD BANK. 1993. *World Development Report 1993*. New York: Oxford University Press.

-
- * A translated version, with some updating in the references, appeared in 1993: *The traditional healer in South African health care*. The rest of the particulars, series number, etc., remained the same as for the Afrikaans report.

ANNEXURE 1: MAGNITUDE OF POSSIBLE INFLUENCE OF PREDICTORS (INCLUDING POPULATION GROUP)

See Table 11	Predictors	(%)	R ² (%)
(a) Views on the health-care system in SA	Gender Population group	6 9	3,7
(b)(i) Access to medical/health care (access" - continuous)	Marital status Income Watching TV Population group	12 14 17 19	15,9
(b)(ii) Access to medical/health care ("access" - dichotomous)	Income Watching TV Population group	15 19 24	14,3
(c) Hesitation (or not) to use a health service	Marital status Income Watching TV Population group	11 14 13 10	6,2
(d) Views on the cost of private medical/health care	Gender Watching TV Population group	4 4 12	6,5
(e) Preference for a private or public facility	Marital status Qualification Income Watching TV Population group	13 19 18 10 38	26,0
(f) Alternatives to present health-care system (opinion/no opinion)	Watching TV Population group	16 33	5,2

See Table 11	Predictors	(%)	R ² (%)
(g) Some medical or health provision <i>versus</i> no provision	Gender Qualification Income Occupation Watching TV Population group	8 16 24 20 15 36	29,3
(h) Death benefit included in the provision mentioned in 11(g)	Qualification Watching TV Population group	25 14 30	14,1
(i) Presence of person with exceptional (expensive) medical needs (age category) (N = 672)	Gender Age Marital status Watching TV Population group	6 6 20 10 23	30,4
(j) Amounts spent on medical/health care and provision	Gender Age Marital status Qualification Income Watching TV Population group	3 0,4 5 4 9 6 18	35,3

ANNEXURE 2: MAGNITUDE OF POSSIBLE INFLUENCE OF PREDICTORS (INCLUDING REGION)

See Table 12	Predictors	(%)	R ² (%)
(a) Views on the health-care system in SA	Gender Income TV Region	5 7 3 12	4,4
(b)(i) Access to medical/health care ("access" - continuous)	Marital status Qualification Income Watching TV Region	16 13 19 14 26	18,7
(b)(ii) Access to medical/health care ("access" - dichotomous)	Qualification Income Watching TV Region	18 25 10 28	15,4
(c) Hesitation (or not) to use a health service	Marital status Qualification Income Watching TV Region	13 12 17 10 35	10,2
(d) Views on the cost of private medical/health care	Gender Age Income Reading a newspaper Watching TV Region	8 0,5 7 5 4 16	5,8
(e) Preference for a private or public facility	Marital status Qualification Income Occupation Watching TV Region	9 35 32 9 10 35	27,9

See Table 12	Predictors	(%)	R2 (%)
(f) Alternatives to present health-care system (opinion/no opinion)	Qualification Watching TV Region	14 11 36	6,1
(g) Some medical or health provision <i>versus</i> no provision	Age Marital status Qualification Income Occupation Watching TV Region	2 8 33 5 18 16 29	26,9
(h) Death benefit included in the provision mentioned in 12(g)	Qualification Income Occupation Reading a newspaper Region	43 29 13 13 83	21,1
(i) Presence of person with exceptional (expensive) medical needs (No such person present/indeed such a person present)	Age Marital status Qualification Income Occupation Region	3 14 14 15 10 61	12,5
(j) Amounts spent on medical/health care and provision	Marital status Qualification Income Reading a newspaper Watching TV Region	13 26 40 7 15 30	32,2

ERN: 404417

ORDER: 94-2488

COPY: PB 94003

2 38.00