Health Expenditures and Insurance

WORLD HEALTH SURVEY

SAUDI ARABIA (KSAWHS)

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1. SURVEY BACKGROUND

1.1 OBJECTIVES

A second round of WHS+ was implemented in 2019. The Saudi Arabian Ministry of Health (MoH) implemented the survey during 2019 in collaboration with the General Authority for Statistics (GASTAT) and the Saudi Health Council.

The main objective of the Kingdom of Saudi Arabia World Health Survey (KSAWHS 2019) is to provide up-to-date, timely and relevant information on SDGs health-related indicators and WHO indicators, framework programmatic indicators, and socio-demographic stratifiers.

1.2 METHODOLOGY

The 2019 Kingdom of Saudi Arabia World Health Survey (KSAWHS 2019) was implemented by the MoH and designed to provide up-to-date and reliable

measurement of priority health-related indicators at national level by urban and rural residence, and for each of the 13 administrative areas. The Master Sample Frame (MSF) used for the 2019 KSAWHS was based on the Population and Housing Census of the Kingdom, which was conducted in 2010 by the General Authority of Statistics (GASTAT).

A nationally representative sample of completed interviews with 9,339 households was conducted from the 13 administrative regions according to population size. The KSAWHS 2019 followed a stratified three-stage sample design with a probability proportional to population size, as follows: sampling PSUs at the first stage, then a systematic sampling of households of a fixed size of eight households per PSU at the second stage, and at the third stage, an adult member of the household aged 15+ was selected using a random number generated by the tablet computer at the end of the household interview. A total of 8,912 individual interviews were conducted as a result of stage 3 selection.

All analyses were performed using the survey design and the normalized weights of the households and individuals, so that the results would be representative at the national level as well as the domain level.

Two questionnaires were used in this survey: household, and individual. The questionnaires were based on the WHO's World Health Survey (WHS) questionnaires and the Tunisian 2015 WHS questionnaires (4, 5). Survey indicators were mapped to the Sustainable Development Goals (SDGs) and the WHO Global Reference List of 100 Core Health Indicators, and the questionnaires were further adopted to cover further indicators to meet national priorities.

Field supervisors and interviewers were recruited based on the following criteria: 1-Being a physician or nurse (i.e. having a bachelor's degree or above in medicine or nursing); 2-Being proficient in English and Arabic; 3-Having knowledge of the dialects of the region where they will work.

The household questionnaire was administered to the head of the household or the most knowledgeable person of the house if the head of the household was not present at the time of the interview.

Use of tablets/CAPI helped reduce errors and prevent missing data, remove the manual data entry steps and allow for timely monitoring of the quality of the data.

2. Overall Results

Governmental and health insurance coverage:

97% of households have health coverage and 20% have insurance coverage. 13% are covered by mandatory insurance, and 10% are insured as dependents. 3% purchase insurance independently. 92% of household members are eligible for free governmental health care.

- Current income
- Health insurance plans
- Savings
- Support from relatives or friends
- Loans from financial institutions or agencies
- Selling items such as land, livestock or jewellery

Mean household health care expenditure:

Approximately 4% of household expenditures are spent on health.

Financial sources for health care services payment:

(50%) of households use the current income of household members to pay for health care services, while only 9% depend on payment or reimbursement from health insurance plans. Other sources of health financing include savings (10%), support from relatives or friends (4%), loans from financial institutions or agencies (4%), and selling items such as land, livestock or jewelry (2%).

Health care systems provide health care services to populations with the aim of improving health outcomes and providing financial risk protection. All individuals should have access to effective health care. This means removing the possibility that an individual will not be able to pay for the healthcare that they need, or that they will be impoverished because of their healthcare expenses. This report examines household health care expenditures and looks at the areas of health care that place the largest financial burden on households

In addition, many questions were proposed in regards to cost of health-related items (such as prescription glasses, hearing aids, canes or prosthetic devices), cost of treatment during overnight stays, ambulance cost, and cost associated with long-term care facilitates.

Table 4.1 shows the mean per capita monthly household total expenditure and health expenditure in Saudi Riyals by type of care, according to residence, wealth and region. On average, each household member spends 5,427 Saudi Riyals (SR) per month, about 4% (191 SR) of this is spent on health care alone. This average amount spent on health can be broken down as follows: on average, 126 SR is paid for consultation fees, 19 SR is used to buy medicines, 20 SR is the cost of diagnostic and laboratory tests, 1 SR is spent on transportation, and 13 SR on other products or services. Additionally, members who use inpatient care pay 47 SR for their treatment during overnight stays and 6 SR on health-related items.

Total household expenditure on health care in rural and urban areas

■ Rural ■ Urban
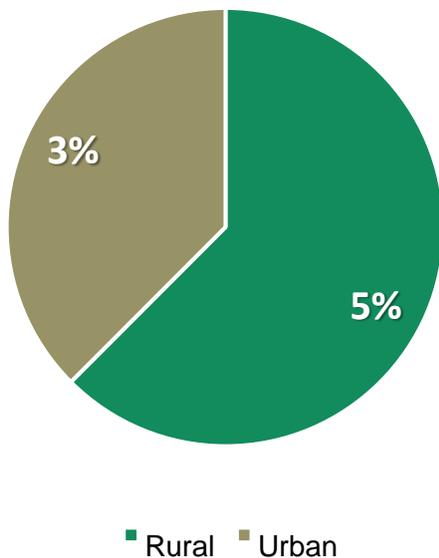
1. Mean household health care expenditure.
2. Financial sources households use for health services payment.
3. Government and health insurance coverage
4. Benefiting from outpatient care facilities and inpatient care services.

Health care financing

This section discusses total household and health care expenditures in further detail. Information about expenditure was collected from key informants in households, who were asked about their total household expenditure and spending on outpatient and inpatient health care. Furthermore, key informants were asked about the source of money used to pay for healthcare. The unit of analysis in this section is the household.

Health care expenditures

First, to estimate the general expenditure, key informants were asked about the household's general spending in the thirty days prior to the survey. They were asked about the monetary amount the household spent on housing and utilities, personal items, transportation, recreation, and domestic services. Key informants were also asked about the amount of money spent on food items in the seven days preceding the survey. Additionally, they were asked to provide information about the household's expenses over the past twelve months; the purpose of this question was to shed light on periodic spending or "big purchases" similar to education fees, clothing, maintenance and repair of households or vehicles, vehicle purchases, taxes and gifts or ceremonies such as weddings or funerals.

Second, to allow for calculation of health care expenditure, key informants reported whether or not members of the household have benefited from outpatient care services in the past month or inpatient care services in the past twelve months. Households that have members who utilized outpatient care services were asked to report the amount of money paid out of pocket (not covered by insurance) for consultation fees (doctors or nurses), diagnostic and laboratory tests, medication, dental care, alternative health care and any other health care products or services. Likewise, households with members who reported using inpatient care services were asked similar questions.

Patterns of measurement indicators:

Total household expenditure differs depending on income level. For example, the lowest income households spend 3,231 SR on average, while members of households with highest income spend 9,716 SR on average. Yet health spending does not follow the same pattern; the highest percentage of health spending is seen in the first three levels of income (lowest 6%, low 5% and middle 6%), while the lowest spending is seen in households in the two highest levels of income (high 3% and highest 2%). Furthermore, households with the lowest of income spend a significantly higher amount of money on inpatient care (219 SR) when compared to other levels of income (less than 18 SR).
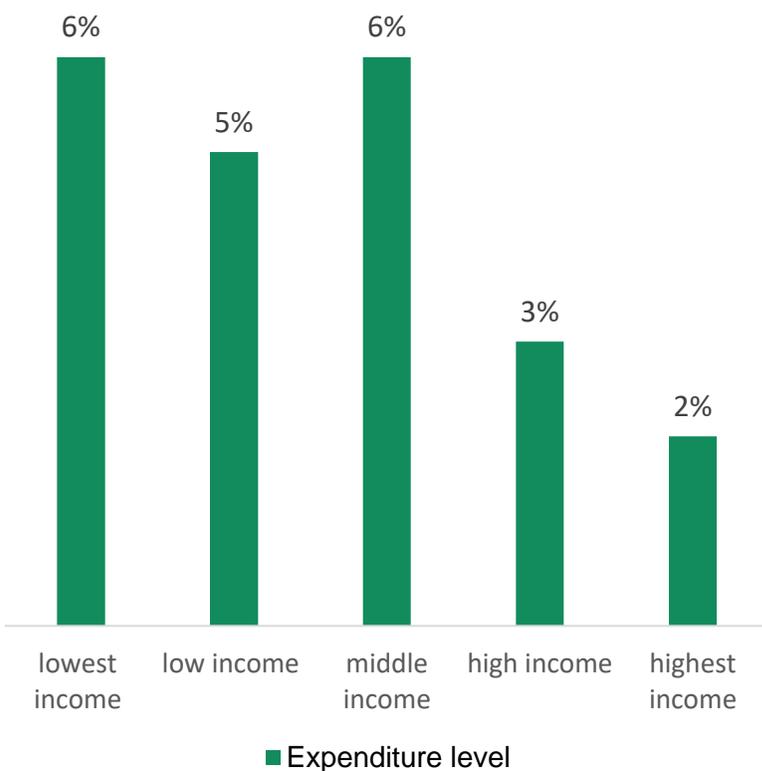
Patterns of measurement indicators:

Members of rural households spend more money on health on average compared to members of urban households (216 SR and 186 SR, respectively). To elaborate, household members living in rural areas spend more money paying for consultation fees and transportation compared to household members living in urban areas (154 SR and 122 SR, respectively). On the contrary, members of urban households spend more money on overnight stays in hospitals and health-related items than those of rural households. Health care expenditure amounts to 5% of total household expenditure in rural households and 3% in urban households

6%   5%   6%   3%   2%

lowest income | low income | middle income | high income | highest income

■ Expenditure level

216   186   154   122

Mean expenditure on health | Transportation and consultation fees

■ Rural   ■ Urban
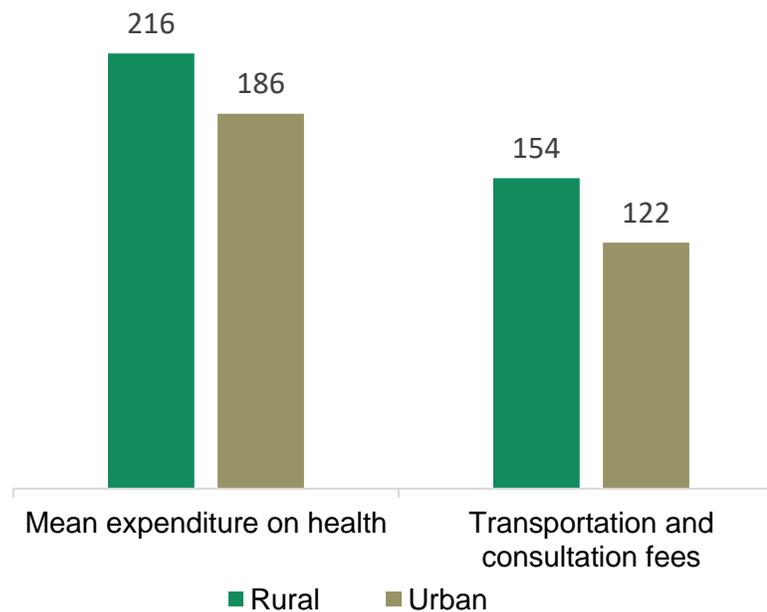
Patterns of health expenditure vary by region, from 0.3% to 7%. Households in Bahah, Najran and Jawf spend less than 1% of their expenditure on health care. Meanwhile, households in the Northern Borders, Jizan and Asir spend approximately 6%, and households in Makkah spend approximately 7% of their expenditure on health care.

Patterns of measurement indicators:

Means of payment for health care services varies from region to region. Households that mostly use their current income for healthcare payment are in the regions of Asir (75%) and Makkah (68%), with the fewest in Najran and Bahah (9%). The region of Asir also has the largest percentage of households that use their savings for health care payments (27%). Meanwhile, the highest percentage of households benefitting from insurance health plans are in Riyadh (16%). The regions of Qasim, Jizan and Asir have more households reporting selling items or asking for support from relatives and friends to pay for their health care. Qasim also has the largest percentage of households borrowing from financial institutions to cover the cost of health care (7%).

Health coverage and benefiting from health care services

Households' key informants reported whether or not household members were eligible for free governmental health care. They were also asked to provide information about health insurance coverage for each household member. The information obtained included the type of health insurance household members have; whether it is mandatory insurance, provided by their employer, or voluntary insurance which is independently purchased by the individual, or insured as dependents due to their relationship to a household member who has health insurance. The unit of analysis in this section is the household member.

Table 4.3, shows that the total coverage is 97% and insurance coverage is 20%. 92% of household members are eligible for free governmental health care. 13% of the household members are covered by mandatory insurance, with higher coverage for males as compared to females (16% and 10%, respectively), and 3% of the household members purchase their insurance plans independently. Finally, 10% of household members are insured as dependents, with a higher percentage among females (13% vs. 7%).

Financial sources used by households for payment of health care services

Households' key informants were asked about the source of the money used to pay for previous outpatient and inpatient healthcare according to residence, wealth and region.

Table 4.2, shows that half of the households state that the current income of household members is their main means of financing health care. 10% of households use their savings to pay for healthcare, and 9% depend on payment or reimbursement from health insurance plans. 4% ask for financial support from relatives or friends from outside their household, and another 4% borrow from financial institutions or agencies to cover the costs of their healthcare. In very few households (2%), items such as land, livestock or jewelry are sold to pay for health care.

Patterns of measurement indicators:

The main means of payment for health care services in urban households is the current income of household members (51%), followed by reimbursement from health insurance plans and savings (9%), then relatives/friends and borrowing from financial institutions (4%), and sold items (2%). The most common sources for rural households were current income of household members (49%), savings (11%), relatives/friends (5%), and borrowing from financial institutions and sold items (4%)

Financial sources used to pay for health care differ according to income levels. Households with the highest levels of income have the highest probability of benefitting from health insurance compared to other income levels (17% vs. 4-7%, respectively). On the other hand, households with the lowest inome are the most likely to sell their belongings (3%) or ask for financial support from friends and family (7%) to cover health care expenses.

Total coverage increases with increasing level of income from 95% in the lowest income level to 99% in the highest income level. A higher percentage of household members in the richest households report free governmental health care services (98%), while members in the lowest and second lowest levels of income report lower rates (83% and 87%, respectively). Mandatory insurance and insurance of dependents is most common in the high levels of income(15% and 14%, respectively).

The regions of Makkah and Madinah have the lowest percentage of free governmental coverage (86% and 84%, respectively), Madinah also has a higher percentage of individuals purchasing voluntary insurance (6%). Mandatory insurance coverage is significantly higher in the region of Jawf (34%). Finally, insurance as a dependent is reported mainly in Riyadh, Makkah, the Eastern Province and Madinah, the other regions have relatively low percentages of insured dependents.

Information about the utilization of health care for each household member was also obtained. Key informants were asked about the number of times each member has used outpatient care in the thirty days before the survey, and the number of inpatient admissions for each member in the past twelve months.

Table 4.4 The mean number of outpatient visits in the last month and inpatient admissions in the last twelve months reported by the affected household population, according to age, sex, nationality, residence, marital status, education, income levels and region.

On average, household members have two outpatient visits monthly and three inpatient admission annually, with no significant differences by Patterns of measurement indicators.

Households members

- ■ eligible for governmental health care
- ■ covered by mandatory insurance
- ■ purchase insurance plans independently
- ■ insured as dependents
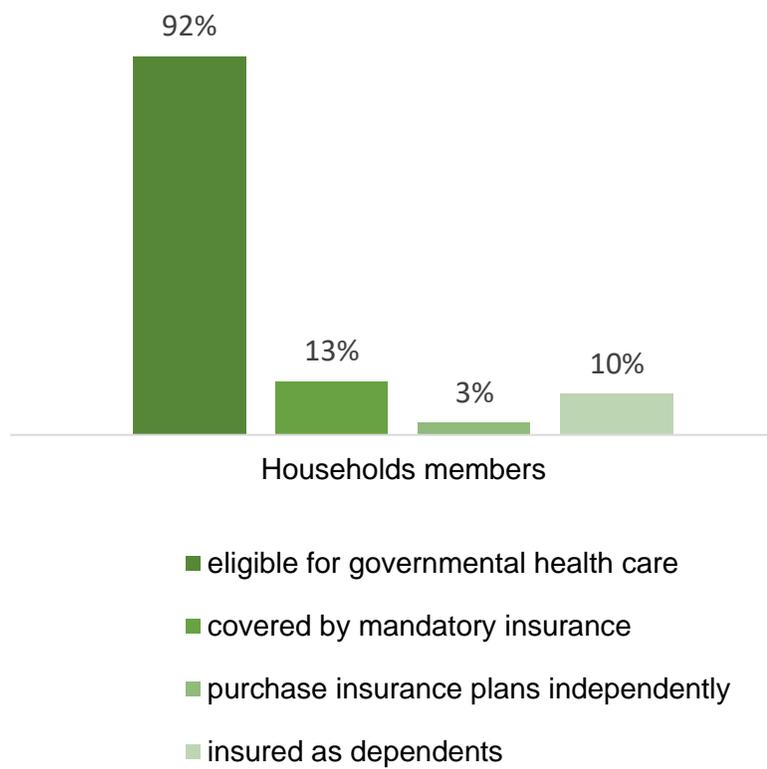
Patterns of measurement indicators:

Household members above the age of 80 report the highest percentage of eligibility for free governmental health care (98%) and the lowest percentage of voluntary insurance (0.6%). Moreover, the 30 to 59 age group has the largest percentage of individuals with mandatory insurance provided by employees. Finally, insurance dependents are mostly under the age of 29.

Household members living in urban areas are less likely to have free governmental health care than those living in rural areas (91 % and 96%, respectively). Also, urban household members are more likely to be covered by mandatory insurance compared with rural residents (14% vs. 7%), and less likely to be insured as dependents (11% vs. 4%).

Level of education affects insurance coverage among household members. Mandatory

List of Main Tables

According to age, sex, nationality, residence, marital status, education, income level and region

4.1 Household Health Care Expenditures

According to residence, income level and region

4.1 Household health care expenditures according to residence, income level and region

Measurement indicators / Residence	Number of respondents	Expenditures Per Household						
		Hospital inpatient treatment 1	Health – related items	Consultation fees	Medicines	Diagnostics and lab tests	Transportation	Other 2
Urban	5,625	53	7	122	19	20	0	10
Rural	4,329	4	4	147	18	21	7	31
Income level								
Lowest	3,231	219	15	75	18	22	3	10
Low	4,099	17	2	126	19	26	0	9
Middle	3,873	16	5	156	19	19	1	21
High	5,225	10	3	125	17	20	2	10
Highest	9,716	12	7	141	20	15	0	15

Measurement indicators / Residence	Number of respondents	Health Expenditure Per Capita		Number of households 3
		Mean	%	
Urban	5,625	186	3.3	3,736
Rural	4,329	216	5	672
Income level				
Lowest	3,231	179	5.5	803
Low	4,099	183	4.5	905
Middle	3,873	220	5.7	840
High	5,225	175	3.4	811
Highest	9,716	195	2	1,048

1 Only asked if household reported using inpatient services in the last 12 months. Also, respondents might not have included the cost of using personal vehicles.
2 Asked if household reported using inpatient services in the last 12 months or outpatient services in the last month.
3 Includes households who reported using inpatient services in the last 12 months or outpatient services in the last month and reported expenditures.

4.1 Household health care expenditures according to region 2-1

Measurement indicators Region	Number of respondents	Expenditures Per Household						
		Hospital inpatient treatment 1	Health – related items	Consultation fees	Medicines	Diagnostics and lab tests	Transportation	Other 2
Riyadh	4,373	12	4	108	15	18	0	5
Makkah al mukramah	3,067	30	7	151	25	22	0	5
Al Madinah al monwarah	2,916	1	2	77	10	22	1	7
Al Qassim	7,675	7	13	269	39	52	0	22
Eastern province	15,645	223	6	178	22	16	0	12
Asier	3,915	13	12	173	25	29	7	6
Tabuk	3,124	2	17	33	6	8	-17	4
Hail	3,702	38	3	71	14	16	0	5
Northern borders	6,594	1	2	235	44	33	1	49
Jazan	6,036	22	9	173	30	45	-	113
Najran	2,840	0	1	13	2	2	-	0
Al Baha	2,115	1	0	2	1	2	-	1
Al Jouf	1,754	-	0	9	3	1	1	0
Total	5,427	47	6	126	19	20	0	13

1 Only asked if household reported using inpatient services in the last 12 months. Also, respondents might not have included the cost of using personal vehicles.
2 Asked if household reported using inpatient services in the last 12 months or outpatient services in the last month.
3 Includes households who reported using inpatient services in the last 12 months or outpatient services in the last month and reported expenditures.

4.1 Household health care expenditures according to region 2-2

Measurement indicators	Number of respondents	Health Expenditure Per Capita		Number of households 3
Region		Mean	%	
Riyadh	4,373	150	3.4	1,435
Makkah al mukramah	3,067	211	6.9	890
Al Madinah al monwarah	2,916	114	3.9	199
Al Qassim	7,675	382	5	111
Eastern province	15,645	303	1.9	560
Asier	3,915	237	6	263
Tabuk	3,124	57	1.8	198
Hail	3,702	120	3.2	85
Northern borders	6,594	360	5.5	53
Jazan	6,036	353	5.8	270
Najran	2,840	18	0.6	149
Al Baha	2,115	6	0.3	128
Al Jouf	1,754	13	0.7	67
Total	5,427	191	3.5	4,409

1 Only asked if household reported using inpatient services in the last 12 months. Also, respondents might not have included the cost of using personal vehicles.
2 Asked if household reported using inpatient services in the last 12 months or outpatient services in the last month.
3 Includes households who reported using inpatient services in the last 12 months or outpatient services in the last month and reported expenditures.

4.2 Financial Sources for Health Care Services Payment

According to residence, income level and region

4.2 Financial Sources for Health Care Services Payment according to residence, income level

Measurement indicators / Residence	Income of household members	Savings	Payment or reimbursement from heath insurance plan	Sold items	Relatives or friends from outside the household	Loans from financial institutions or agencies	Other	Number of household 1
Urban	51	9	9	2	4	4	1	3798
Rural	49	11	4	4	5	4	2	684
Income level								
Lowest	48	11	4	3	7	3	2	845
Low	48	10	6	2	5	6	1	923
Middle	51	12	7	2	4	4	1	847
High	54	9	7	2	4	4	1	815
Highest	51	7	17	1	2	4	1	1051

4.2 Financial Sources for Health Care Services Payment according to region

Measurement indicators / Region	Loans from financial institutions or agencies	Other	Number of household 1	Income of household members	Savings	Payment or reimbursement from heath insurance plan	Sold items	Relatives or friends from outside the household
Riyadh	52	7	16	1	2	4	1	1441
Makkah al mukramah	68	11	11	2	4	6	1	894
Al Madinah al monwarah	31	9	2	2	4	2	1	232
Al Qassim	34	14	5	9	8	7	5	113
Eastern province	40	9	2	2	3	6	2	560
Asier	75	27	4	5	11	4	4	263
Tabuk	44	11	3	0	6	0	1	198
Hail	57	6	7	2	5	5	1	85
Northern borders	37	9	2	3	2	5	4	53
Jazan	60	10	0	5	10	6	2	296
Najran	9	5	2	1	2	1	0	150
Al Baha	9	1	0	0	0	0	1	128
Al Jouf	19	7	1	1	3	1	0	67
Total	50	10	9	2	4	4	1	4481

4.3 Governmental and Health Insurance Coverage

According to age, sex, residence, marital status, education, income level and region

4.3 Governmental and Health Insurance Coverage according to age

Measurement indicators / Age	Free health care services	Mandatory insurance	Voluntary insurance	Insured as dependent	Insurance coverage 1	Total coverage	Number of household members
0-4 years-old	94	9	2	13	17	98	3324
5-9 years old	93	9	2	13	18	98	6798
15-29 years-old	91	13	2	11	21	97	10373
30-44 years-old	89	17	3	6	22	97	8461
45-59 years-old	90	15	5	8	23	98	4241
60-69 years-old	93	14	4	8	21	97	1173
70-79 years-old	95	8	2	6	12	98	395
80 years-old and more	98	6	1	3	6	98	139

4.3 Governmental and Health Insurance Coverage according to sex, residence and marital status

Measurement indicators / Sex	Free health care services	Mandatory insurance	Voluntary insurance	Insured as dependent	Insurance coverage 1	Total coverage	Number of household members
Male	90	16	3	7	21	97	17484
Female	93	10	2	13	19	97	17418
Residence							
Urban	91	14	3	11	22	97	30012
Rural	96	7	2	4	10	99	4891
Marital Status							
Never married	92	11	2	10	20	97	9899
Married	90	16	3	8	22	97	15330
Formerly Married	93	14	3	5	19	98	1423
Do not know	77	39	17	11	39	100	19
Not applicable	94	9	2	13	18	98	8232

4.3 Governmental and Health Insurance Coverage according to education – income level

Measurement indicators / Education level	Free health care services	Mandatory insurance	Voluntary insurance	Insured as dependent	Insurance coverage 1	Total coverage	Number of household members
No formal education	91	9	3	9	15	98	1776
Less than secondary school	92	9	3	11	17	97	9744
Secondary school	92	11	3	8	19	97	10049
More than secondary school	90	21	3	9	27	97	9174
Do not know	89	11	8	8	16	94	60
Not applicable	94	9	2	13	17	98	4101
Income level							
Lowest	83	14	4	8	20	95	6983
Low	87	13	3	10	20	97	7010
Middle	94	10	1	8	17	98	6949
High	95	13	2	9	20	99	6984
Highest	98	15	3	14	25	99	6977

4.3 Governmental and Health Insurance Coverage according to region

Measurement indicators / Region	Number of household members	Free health care services	Mandatory insurance	Voluntary insurance	Insured as dependent	Insurance coverage 1	Total coverage	Number of household members
Riyadh	7937	92	18	3	14	27	100	7937
Makkah al mukramah	10051	86	17	3	13	29	94	10051
Al Madinah al monwarah	2080	84	13	6	8	17	95	2080
Al Qassim	1262	95	5	2	3	7	98	1262
Eastern province	4693	98	10	1	11	17	99	4693
Asier	2478	92	8	2	4	11	98	2478
Tabuk	1202	97	3	1	3	6	99	1202
Hail	736	98	3	1	3	6	99	736
Northern borders	355	97	4	1	1	5	99	355
Jazan	1743	99	2	1	1	2	99	1743
Najran	960	96	3	3	2	5	99	960
Al Baha	545	99	1	0	2	3	100	545
Al Jouf	860	94	34	2	2	35	99	860
Total	34903	92	13	3	10	20	97	34903

4.4 Benefiting from Outpatient Care Facilities and Inpatient Care Services

According to age, sex, residence, marital status, education, income level and region

4.4 Benefiting from Outpatient Care Facilities and Inpatient Care Services according to age

Measurement indicators Age	Mean number of outpatient health care visits in the last month	Number of household members	Mean number of inpatient admissions in the last 12 months	Number of household members
0-4 years-old	2	1088	3	466
5-9 years old	1	1486	3	578
15-29 years-old	2	1829	3	843
30-44 years-old	2	2019	3	846
45-59 years-old	2	1325	4	530
60-69 years-old	2	499	3	183
70-79 years-old	2	185	3	96
80 years-old and more	2	91	3	38

4.4 Benefiting from Outpatient Care Facilities and Inpatient Care Services according to sex –residence – marital status

Measurement indicators Sex	Mean number of outpatient health care visits in the last month	Number of household members	Mean number of inpatient admissions in the last 12 months	Number of household members
Male	2	4190	3	1677
Female	2	4331	3	1903
Residence				
Urban	2	6894	3	2948
Rural	2	1627	3	632
Marital Status				
Never married	2	1543	3	710
Married	2	4163	3	1726
Formerly Married	2	574	4	215
Do not know	2	8	3	4
Not applicable	1	2233	3	925

4.4 Benefiting from Outpatient Care Facilities and Inpatient Care according to education – income level

Measurement indicators Education level	Mean number of outpatient health care visits in the last month	Number of household members	Mean number of inpatient admissions in the last 12 months	Number of household members
No formal education	2	622	4	290
Less than secondary school	2	2332	3	935
Secondary school	2	2070	3	972
More than secondary school	2	2203	3	841
Do not know	2	13	1	3
Not applicable	2	1281	3	539
Income level				
Lowest	2	1536	4	640
Low	2	1732	3	670
Middle	2	1649	3	738
High	2	1573	3	844
Highest	2	2031	2	687

4.4 Benefiting from Outpatient Care Facilities and Inpatient Care according to region

Measurement indicators Region	Mean number of outpatient health care visits in the last month	Number of household members	Mean number of inpatient admissions in the last 12 months	Number of household members
Riyadh	2	2710	3	618
Makkah al mukramah	2	1419	3	1088
Al Madinah al monwarah	2	354	3	216
Al Qassim	2	203	3	186
Eastern province	2	845	3	250
Asier	2	482	3	350
Tabuk	2	556	3	120
Hail	2	170	4	82
Northern borders	2	136	2	75
Jazan	2	662	5	214
Najran	1	550	2	304
Al Baha	1	267	1	21
Al Jouf	1	166	2	56
Total	2	8521	3	3580

4. Key Findings

- 97% of households have health coverage and 20% have insurance coverage
- 50% of households use the current income of household members to pay for health care services. In addition, the current income is the leading means of payment in both urban household by (51%) and rural households by (49%).
- Only 9% of households depend on payment or reimbursement from health insurance plans.

- The mean per capita monthly household total expenditure and health expenditure in Saudi Riyals by type of care, according to residence, income level and region. On average, each household member spends 5,427 Saudi Riyals (SR) per month, about 4% (191 SR) of this is spent on health care alone.
- Members of rural households spend more money on health on average compared to members of urban households (216 SR and 186 SR, respectively.
- Households that mostly use their current income for healthcare payment are in the regions of Asir (75%) and Makkah (68%), with the fewest in Najran and Bahah (9%).
- The highest percentage of households benefitting from insurance health plans are in Riyadh (16%).
- Household members above the age of 80 report the highest percentage of eligibility for free governmental health care (98%) and the lowest percentage of voluntary insurance (0.6%).
- The 30 to 59 age group has the largest percentage of individuals with mandatory insurance provided by employees.
- Insurance dependents are mostly under the age of 29.
- Household members living in urban

وزارة الصحة
Ministry of Health