حكومة دبي
GOVERNMENT OF DUBAI

هيئة الصحة بدبي
DUBAI HEALTH AUTHORITY

Health Accounts

System of Dubai

2020

Table Of Contents

Foreword

Awadh AL Ketbi,

Director General
Dubai Health Authority

Dubai Health Authority has a clear vision to enhance the quality of care provided to the population and visitors alike, to ensure the provision of accessible, specialized and patient-centered care using the latest medical technologies. The health insurance system, which was developed and mandated by Law no 11 of 2013, issued by HH Sheikh Mohamed Bin Rashid Al Maktoum, Vice President and Prime Minister of the United Arab Emirates(UAE) ruler of Dubai, is paramount to help us fulfill our vision and further advance our health system. Access to care for all community members is a key goal that the health insurance sector helps us fulfill. It is driver to make healthcare accessible and affordable.

Healthcare big data and analytics provide evidence-based decisions support and policy making that is extremely beneficial at all levels of the health sector. Health insurance data analytics can help improve efficiency, sustainability, equity and reduce costs and enhance patient care and wellbeing.

The year 2020 was an unprecedented due to the Covid-19 pandemic. With the support of our visionary leadership as well as the dedication of healthcare workers and front liners, we are proud that we were able to tide over the situation.

We are pleased to publish the sixth report of Health Accounts systems of Dubai (HASD) which shows detailed analysis of health expenditures for the Emirate of Dubai. The 2020 HASD report is the reflection of Dubai's efforts to ensure access to high quality health care even during the global COVID-19 pandemic.

At DHA, we strive to ensure that we develop transparent and in-depth health accounts year-on-year to:

- Measure the financial dimensions of Dubai's healthcare system, to allow for assessing the efficiency in allocating funds between the private and public health sectors.
- Depicts a clear picture of the size and magnitude of the inflow and out flow of healthcare funds showing where the money comes from and on what was it spent.
- Empower both the regulator and investors alike, with information needed to understand investment size and trends based on factual data.

DHA greatly appreciates the participation of all stakeholders for their contribution to ensuring the establishment of an efficient and dynamic healthcare system in Dubai.

I take this opportunity to invite stakeholders to utilize the information contained in this report to support their decisions on how better to deliver healthcare.

Message

Saleh Al Hashimi,

CEO, Dubai Health Insurance Corporation
Dubai Health Authority

The healthcare sector has witnessed the recent unprecedented pandemic and has shown its resilience and commitment to take utmost care of human life in the face of several challenges. Dubai's health sector rose to this challenge, aided by a strong and effectively functioning health insurance system which was beneficial to all stakeholders involved especially our patients, who are our priority.

The establishment of ISAHD (Insurance System of Advancing Health in Dubai) scheme has been instrumental in mobilizing financial resources to improve access to health services and health outcomes and we witnessed its benefits over the last few years. The aim is to continue building a robust health insurance system with the cooperation and input of our stakeholders in order to sustain the incremental resource allocation and financial protection.

We will continue to generate and use evidence on the magnitude and flow of health sector resources using the Health Accounts methodology. In-line with WHO NHA standards, institutionalized Health Accounts informs how total health expenditure flows from financing sources to end users.

The current health account charts Dubai's steady progress in increasing health expenditure and expanding understanding of where investments are made. HASD 2020 report provides an insightful reflection of the healthcare financing indicators for Dubai.

I would like to extend my appreciation to HASD technical team who have been involved in the data collection and analysis for the sixth round of health accounts, as well as the writing and production of this report.

Acknowledgement

Substantial efforts were undertaken to provide this comprehensive analysis of health expenditure and flow of funds throughout Dubai's healthcare sector. Significant data on expenditure was collected, analyzed and validated to produce the HASD Report, 2020. The Dubai Health Insurance Corporation (DHIC) in DHA worked in close collaboration with key stakeholders, in order to publish a credible and transparent report.

This exercise could not have been successfully completed without the support of key stakeholders. Sincere gratitude and appreciation goes to the cooperation of various organizations in providing the vital and sensitive financial information necessary to produce this report. In particular, the following organizations' collaborative efforts are recognized:

- Department of Finance (DOF), Dubai
- Ministry of Health and Prevention (MOHAP), United Arab Emirates
- Finance Department, Dubai Health Authority
- Dubai private healthcare providers and insurance companies

The DHA technical team responsible for the execution of HASD and this report includes the following members:

- **Dr. Meenu Mahak Soni,** Health Economist, led the technical production of this report.
- **Mr. Philip Swanny,** extracted and interpreted the data from e-claim system.
- **Dr. Eldaw A. Suliman,** Advisor for Strategy and Governance Department, provided valuable technical review of the report.
- **Senior team members from Dubai Health Insurance Corporation,** participated in a comprehensive review of the report.

List of Abbreviations and Definitions

AED	United Arab Emirate Dirham
CHE	Current Health Expenditure
DHA	Dubai Health Authority
DHCC	Dubai Health Care City
DHCCA	Dubai Health Care City Authority
DHIC	Dubai Health Insurance Corporation
DHHS	Dubai Health Household Survey
DM	Dubai Municipality
DoF	Dubai Department of Finance
DSC	Dubai Statistics Center
FS	Funds of Financing Scheme
GDP	Gross Domestic Product
GGHE	General Government Expenditure on Health
HASD	Health Accounts System of Dubai
HC	Health care Functions
HF	Health Financing Schemes
HP	Health care Providers
ISAHD	Insurance System of Advancing Health in Dubai
MOH	Ministry of Health
MOHAP	Ministry of Health and Prevention
OECD	Organization for Economic Co-operation and Development
OOP	Out-of-Pocket
n.e.c	Not Elsewhere Classified
NCU	National Currency Unit
PPP	Purchasing Power Parity

List of Abbreviations and Definitions

PvHE	Private Expenditure on Health
RoW	Rest of the World
SHA	System of Health Accounts
THE	Total Health Expenditures
UAE	United Arab Emirates
US$	United States Dollars
WHO	World Health Organization

Definitions

Ancillary services: A variety of services such as laboratory tests, diagnostic imaging and patient transport, usually performed by paramedical or medical technical personnel with or without the direct supervision of a medical doctor.

Investment: Investment in health care facilities and equipment that creates assets that are typically used over a long period of time.

Curative care: Medical and paramedical services delivered during an episode of curative care. An episode of curative care occurs when the principal medical intent is to: relieve the symptoms of injury or illness; to reduce severity of an illness or injury; or to protect against injury or exacerbation of an injury which could threaten life or normal function.

Current health expenditure (CHE): Comprises all services such as curative care (including services provided to residents by non-residents providers), rehabilitative care, prevention, public health, and ancillary health care. Also includes expenditures for administration of these services and drugs, medical goods, and salaries and fees of health personnel. This excludes investment expenditures, and exports (services provided to non-residents).

Day care: Planned medical and paramedical services delivered to patients who have been formally admitted for diagnosis, treatment or other types of health care but with the intention to discharge the patient on the same day.

Definitions

Exports (of health care goods and services): Health care goods and services acquired by non-residents (visitors) from resident providers.

Financing agents (FA): Institutional units that manage health finance schemes. For example, collecting Funds and premiums, purchase services, and pay for these services.

Financing schemes (HF): Components of a country's health financial system that channel funds to pay for, or purchase, the activities within the health accounts boundary.

Health care functions (HC): The goods and services provided and activities performed within the health accounts boundary.

Health care system administration and financing: Establishments that are primarily engaged in the regulation of the activities of agencies that provide health care and in the overall administration of the health care sector, including the administration of health financing.

Imports of healthcare goods and services (Imports): Health care goods and services acquired by residents from nonresident providers. In other words, healthcare services provided outside the geographical boundaries of the health care system.

Inpatient care (IP): Formal admission into a health care facility for treatment and/or care that is expected to constitute an overnight stay.

Not Elsewhere Classified (n.e.c): A category used to reflect those activities or transactions that fall within the boundaries of the health accounts but which cannot be definitively allocated to a specific category due to insufficient documentation.

Out-Of-Pocket (OOP) spending: The direct outlays of households, including gratuities and payments in-kind, made to health practitioners and suppliers of pharmaceuticals, therapeutic appliances, and other goods and services whose primary intent is to contribute to the restoration or enhancement of the health status of individuals or population groups. Includes household payments to public services, non-profit institutions or non-governmental organizations.

Definitions

Outpatient care (OP): Any care offered to a non-admitted patient regardless of where it. It may be delivered in a hospital, an ambulatory care center, or a physician's private office.

Preventive services: Services provided as having the primary purpose of risk avoidance, of acquiring diseases or suffering injuries, which can frequently involve a direct and active interaction of the consumer with the health care system.

Providers (HP): Encompass organizations and actors that deliver health care goods and services as their primary activity, as well as those for which health care provision is only one among a number of activities.

Inflow Funds of financing schemes (FS): The funds of the health financing schemes received or collected through specific contribution mechanisms.

System of Health Accounts (SHA): A system developed by the OECD, Eurostat, and WHO to provide international comparability standards for member and non-member countries. The manual was produced first in 2010 with the latest iteration published in 2011.

Total health expenditure (THE): Total health expenditure is no longer part of the health accounts as per SHA 2011. It is defined as the sum of current health expenditure (CHE) and the expenditure on capital goods. In this report, the term is used only to draw comparison with other countries.

Prepayment schemes: Schemes that receive payments from the insurer or other institutional units on behalf of the insured, to secure entitlement to benefits of health insurance schemes.

Executive Summary

HASD (Health Accounts System of Dubai) provide a systematic, consistent and complete overview of Dubai's healthcare system from a financial perspective with focus on expenditure and sources of fund. It acts as a tool for monitoring, evaluation and policy formulation, by illustrating the vital information regarding who pays for health, who manages health resources and on which interventions health resources are spent.

Annually, Dubai Health Insurance Corporation of Dubai Health Authority leads the production of Dubai's health accounts and provides factual account of health expenditures by government and private sector by healthcare functions and by healthcare provider type. This report covers the results of 2020 and examine five-year trend of healthcare expenditure in Dubai, based on the findings from previous reports (2016 to 2019).

Similar to previous years, 2020 HASD report is carried out in accordance with the guidelines of producing System of Health Accounts (SHA) 2011 [World Health Organization, 2011]. In keeping with prior analysis, we define the boundaries of Dubai's healthcare spending as all healthcare related transactions made by or on behalf of citizen of Dubai or a non-citizens with work visa from Dubai regardless of domicile. We include their spending even if it occurred outside the physical boundaries of Dubai. The accounting excludes healthcare spending by short term tourist. Also, excluded is the healthcare spending inside the physical boundaries of Dubai on behalf of citizens of other emirates or by non-citizen workers with visa from other emirates.

In 2020, Dubai spent 19.49 B AED on healthcare (5.3% of GDP), of which 18.9B AED was spent within Dubai and 585M AED was spent outside Dubai. The annual growth rate between 2019 and 2020 was just 1% after accounting for change in the utilization pattern due to the Covid-19 pandemic.

The growth in health expenditure was not uniform across all sources. Compared to the 2019 estimates, the 2020 growth rates were +4%,-3% and -1% per year for government, private insurance and household spending respectively. In 2020, the share of government spending reached 7,721 Million AED (40%). The private insurance and out of pocket spent on healthcare was 9,819 Million AED (50%) and 1,951 Million AED (10%) respectively.

The share of all health spending received by various providers was 49%, 24% and 15% for hospitals, clinics, retail pharmacies and ancillary providers, respectively. There was an increase (7%) in the share of expenditure going to hospitals. The Covid-19 outbreak in 2020 explains partially this increase in hospital spent.

The curative care accounted for 61% of the total health expenditure. The spent on ancillary services and medical goods was 13% and 15%, respectively. The spent on preventive care services was very low at 1%. The government allocated 23% of their health expenditure to governance and administrative functions. The private insurance spent 36% of their total health expenditure on ancillary services and medical goods.

Highlights

Current Health Expenditure (CHE)

AED 19,492 M

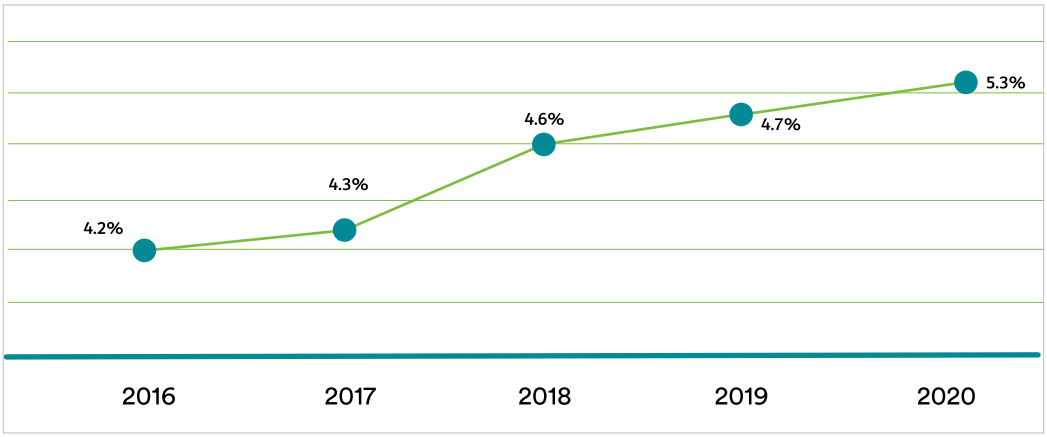
5.3% of GDP

Per capita health expenditure

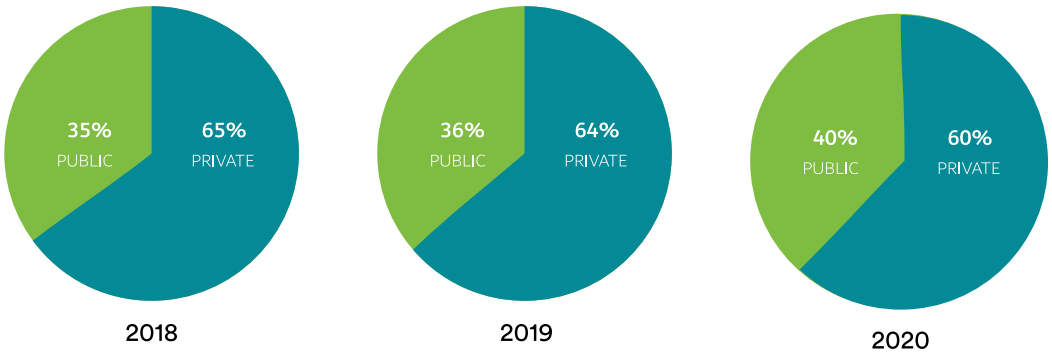
AED 4,324 (USD 1,201)

How has current expenditure changed?

CHE as % of GDP



Who paid for it?



What was it spent on?

Curative Services **61%**

Medical Goods **15%**

Ancillary Services **13%**

Governance **9%**

Introduction

Along with economic development, the health system and healthcare delivery in Dubai has improved significantly since the establishment of ISAHD (mandatory health insurance law no. 11) in 2013. Dubai Health authority (DHA) has introduced various health policies and strategies to regulate and strengthen the health system. As an example, Dubai Health Insurance Corporation (DHIC) at Dubai Health Authority introduced the essential basic package (EBP) in 2014. The main purpose of this was to specify minimum level of health services that must be provided in any health insurance plan offered in Dubai. The package is revised on regular basis to address the health needs of the population.

DHA mandated the use of updated ICD and CPT classification systems, which the healthcare providers and insurance companies need to comply with while processing the insurance claims, thus improving the quality of health system.

In 2020, Dubai adopted the International Refined Diagnosis Related Groups (IR-DRGs), as payment methodology for inpatient services, under the DHA initiative to regulate the prices of healthcare services in Dubai and make the health system affordable and sustainable.

However, 2020 has been a peculiar year due to the outbreak of covid-19. The pandemic placed enormous strain on healthcare sector, accelerating the change across the health ecosystem and forcing public and private health providers to adapt and innovate in their healthcare delivery models. The local government was quick to mobilize the additional funds for the health system in response to the pandemic. Though the resources were poured into combating the virus, non-urgent care and elective surgeries were reduced or deferred for interim period in order to create hospital capacity. There were travel restrictions and other lockdown measure to reduce the spread of infection. The patients stayed clear of hospitals in fear of contracting the virus.

In third quarter of 2020, the healthcare use began to rebound as in-person care resumed for hospitals and covid-19 testing became more widely available. Overall, the pattern of healthcare utilization was significantly different when compared to previous years and HASD report examines the impact of this change on healthcare spending.

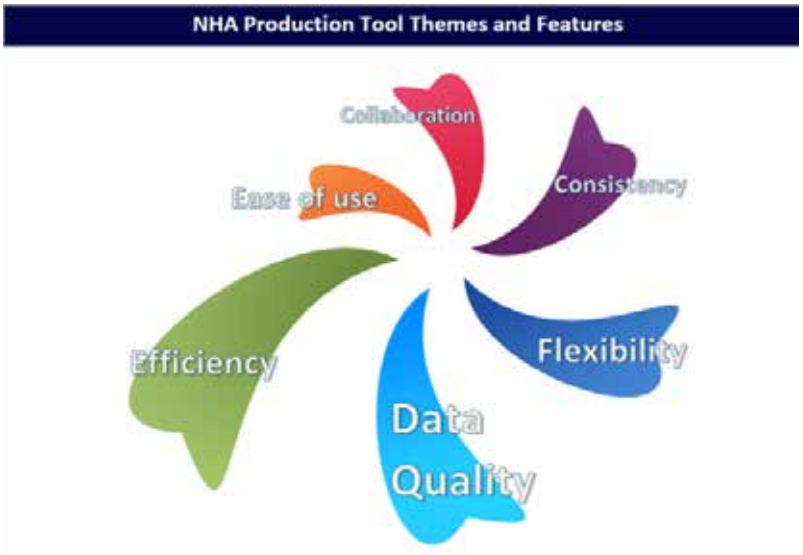
The report presents the findings of the sixth health account estimation, using the data for year 2020.
It determines the contribution of stakeholders in financing the healthcare and highlights the changes occurred due to the Covid-19 pandemic. It illustrates the distribution of healthcare expenditure by financing sources, agents, providers and functions.

Methodology

The method and analysis used in HASD 2020 conforms to the methods used in the previous cycles where by detailed definitions of what constitute health expenditure and types of disaggregation were drawn up based on inputs from several documents, meetings and consultative discussion. The expertise gained through previous international consultancy is extremely helpful in setting guidelines to ensure that HASD estimation methods are acceptable and reliable under NHA methodology used by OECD and WHO.

Both primary and secondary data were used in this analysis. The entities from both public and private sector provided data in several formats. The secondary health expenditure data was retrieved through eClaimlink. The Dubai Household Health Survey (DHHS) was used to estimate the household out-of-pocket spending. The datasets from each source or entity were processed differently depending on the availability, format and completeness of data. Data classification was carried out based on three axes of consumptions, provision and financing. The health accounts framework enabled health expenditure disaggregated to the level of sources of funds, providers and healthcare functions. Any data gaps were subjected to imputation methods used by HASD technical team to fill the gaps.

The initial data preparation, analysis and coding was done in Microsoft excel spreadsheets. Some unique data verification processes were also implemented. This involves validation of total estimates for each data source prior to merging for the production of final database.
The final data files were uploaded into the HAPT tool. It is a software application developed by USAID and WHO that supports countries undertaking health accounts exercise. It facilitates the production of health accounts by mapping health expenditure according to SHA 2011 methodology classification and any defined country-specific classification. The software has in built functionalities to check for double counting and errors in classification codes hence enhancing the data quality. It also allows keeping track of multiple data files and managing the large datasets with ease thus reducing the time to generate health accounts matrices.



Population boundaries for HASD

The population in Dubai is classified into the following groups:

1. Nationals in the Emirate of Dubai
2. Non-Nationals with employment visas from Dubai and residence inside Dubai
3. Non-Nationals with employment visas from Dubai and residence outside Dubai
4. Tourists who visit Dubai

Dubai Statistics Center considers first two groups as part of Dubai's population. However, the health care financing reform is aimed to offer mandatory health coverage to all members of the first three groups, regardless of geographical location. Thus, for the purpose of HASD report, the first three groups were considered. Healthcare expenditures for HASD are not limited to the activity that take place within Dubai. They include healthcare expenditure by citizens temporarily abroad and exclude health spending by tourists in Dubai.

The data collection process for HASD 2019 report extensively relied on secondary as well as primary data collected through Dubai Health Household survey (2018-2019). Secondary data was used for the estimation of expenditures, collation and triangulation of primary data, including determining health expenditure ratios

Data Sources

Government

Dubai Department of Finance (DoF)

Dubai Government funds the health services rendered by Dubai police and Dubai Ambulance. HASD's technical team contacted DOF to obtain the health expenditure data of these entities. The data received included a detailed breakdown of expenditure and funds based on the Dubai Government Chart of Accounts which includes the cost centers and the line item details. The breakdown was useful to accurately map the expenditures at the item level, and to ensure consistency with the reports from recipients of the funds. DOF also provided data on amount paid towards health insurance claims for government employees distinguishing clearly between the funds paid towards insurance premiums and healthcare claims. These data were adjusted based on claims data for government schemes in eClaimlink Data. DOF data didn't indicate which providers and health services were used.

Dubai Health Authority (DHA)

DHA finance provided two datasets which were used to analyze and map DHA activities to HASD

DHA Expenditure Dataset: Detailed government expenditure data was collected from DHA by cost center by each item definition and by sector. The cost center data was classified in healthcare functions (inpatient, daycase and outpatient) based on the healthcare utilization data published by DHA health information and statistics department.

DHA Revenue Dataset: The revenue data that contains the money collected by each cost center, was used to triangulate validate the estimates of out-of-pocket (OOP) Expenditures.

Ministry of Health and Prevention, U.A.E (MOHAP)

MOHAP provided the HASD team with detailed expenditure data broken down by facility type and cost centers located in Dubai. MOHAP healthcare utilization in Dubai was used to analyze and map this expenditure by healthcare functions. MOHAP collection of revenue from service users was not reported and has been omitted from this report

eClaimlink Data

Dubai Health Authority (DHA) oversees all operations relating to the eClaimLink system, and ensures adherence to rules and regulations for full compliance and that all health insurance transactions are reported through the system. The administrative data for private health insurance in 2020 was extracted from eClaimlink. The datasets from eClaimlink included the claims transaction data for all Dubai based policies with details of the services provided, and the financial transaction for each service episode. The data was classified by payer type, provider type and service type so that it could be mapped to SHA 2011.

Major employers

Data from major employers in Dubai such as Emirates Airlines that provided health insurance coverage for their employees and families were collected and classified by provider type, and service type, and mapped to SHA 2011.

Dubai Household Health Survey (DHHS)

The household health expenditures were derived using Dubai Household Health Survey (DHHS) 2018 conducted by DHA with logistical support from Dubai Statistics Center (DSC). The DHHS is the largest comprehensive household survey of healthcare and health issues carried out in The Emirates of Dubai. This was a representative survey of Dubai stratified across households categorized into 4 groups as Nationals, Non-nationals in households, Non-nationals in collective housing, and Non-nationals in labor camps. The probability that each of the 4 categories of household would have any discretionary, or any outpatient, or any inpatient OOP expenditure was calculated, then multiplied by weighted estimate of the average total OOP expenditure for households who incurred that type of event. Outliers above the 99th percentile were excluded to reduce the skewness of the data. The 2018 estimates were then used to extrapolate to 2020 by adjusting for inflation i.e CPI and population growth assuming that the proportion of each type of household remained constant. Additional adjustment was made to account for change in utilization due to covid- 19 outbreak in 2020.

Appendix A details the methodology of 2018 DHHS

Limitations

There are some limitations of the results from HASD. First, the insurance payment data obtained from some government entities did not indicate the financial allocations by category of healthcare providers and services used. Second, the private sector data did not reflect the portion of the collected premium for private insurance that was not used to pay claims. Thus, the operating cost of the private insurance companies that was attributed to medical loss ratio or "loading" are omitted. Third, a portion of the revenue data from public providers did not clearly identify possible outside sources of revenue to rule out double-counting of sources of expenditure. Finally, HASD is limited to tracking of what entities pay for healthcare and not the production cost. In this case, it cannot be used as a tool for validation of existing policies on cost of provision, but rather as a tool of identifying issues related to the way the health system is organized.

Results of HASD 2020

Table 1. Health Accounts Summary Indicators for 2020

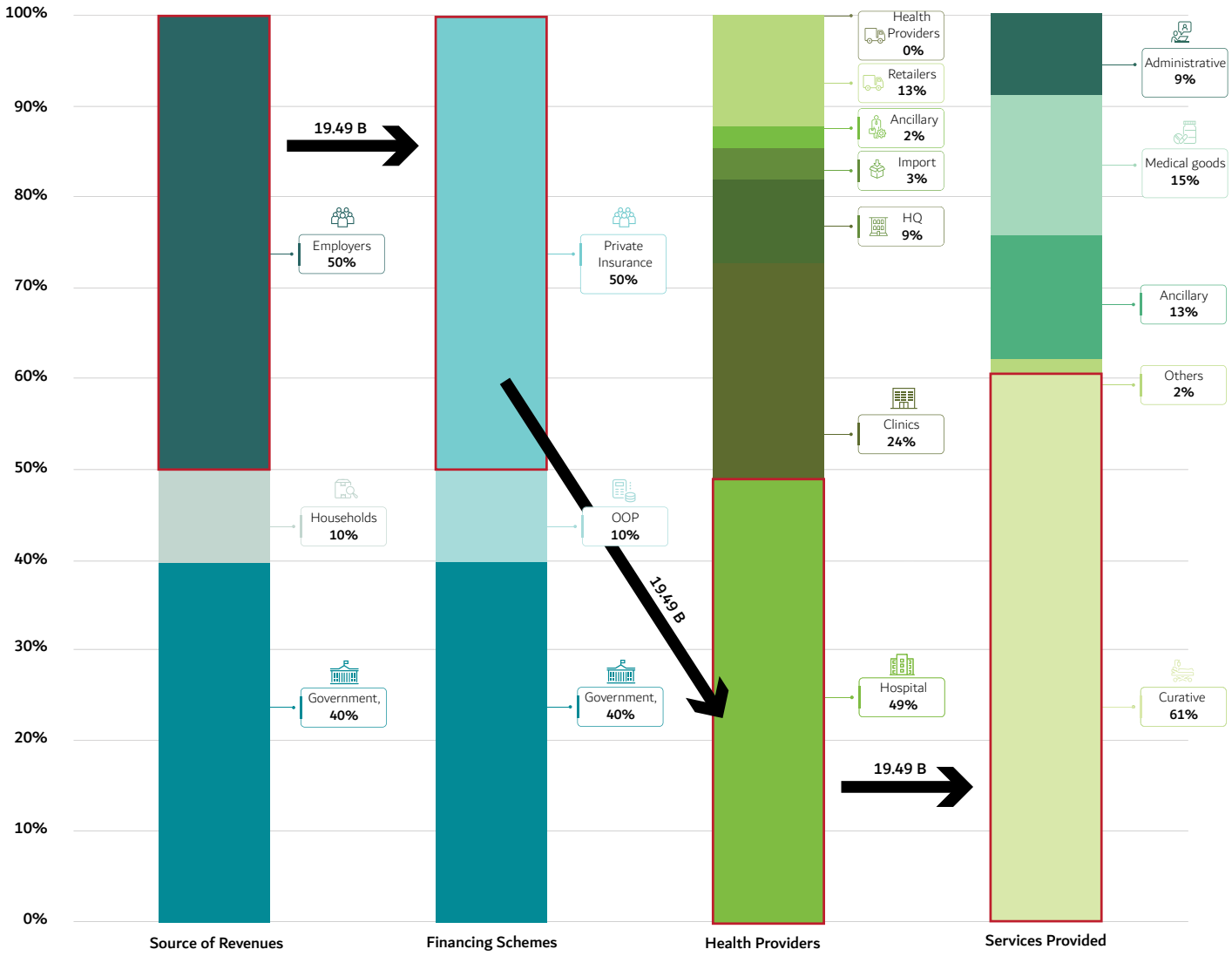
	Indicators	2020
1.	Health expenditure (HE) % Gross Domestic Product (GDP)	5.3%
2.	General Government Expenditure on Health (GGHE) as % of GDP	2.1%
3.	General Government Expenditure on Health (GGHE) as % of HE	40%
4.	Private Expenditure on Health (PvHE) as % of HE	60%
5.	Out-Of-Pocket expenditure as % of HE	10%
6.	Out-Of-Pocket expenditure as % of PvHE	17%
7.	Private Insurance as % of PvHE	83%
8.	Expenditure on Inpatient care as % of HE	26%
9.	Government Expenditure on Inpatient care as % of GGHE	28%
10.	Prevention and Public Health services as % of HE	1%
11.	Medical goods as % of HE (not including IP)	15%
12.	Current expenditure on health / capita at exchange rate (NCU per US$)	1,201
13.	Current expenditure on health / capita at Purchasing Power Parity (NCU per US$)	2,643
14.	General government expenditure on health / cap x-rate	476
15.	General government expenditure on health / cap Purchasing Power Parity (NCU per US$)	1,047
16.	OOPS / capita at exchange rate (NCU per US$)	120
17.	Exchange Rate (NCU per US$)	3.67
18.	PPP 2018(NCU per US$)	2.2
19.	Gross domestic product - Million AED(Constant Prices)	367,057
20.	Financial Population*	4,420,370
21.	Current Health Expenditure – Million AED	19,492

*The estimate of financial population is based on the member data provided by insurance companies. (Dubai Insurance covered Population/HASD Population)

Sources and flow of funds

In 2020, the biggest source of funds and financing schemes were employers, who accounted for 50% of funds followed by the government and households who accounted for 40% and 10% respectively. In terms of flow of funds, Hospitals received almost half of the pooled funds (49%) with the majority of funds received by hospitals being used for curative care (61%) which includes inpatient, outpatient and daycare. Healthcare expenditure outside Dubai ("Import") is estimated at 3%. Expenditure on preventive care remains very low at 1% (Preventive care not shown in Figure 1)

Figure 1: Flow of funds



Financing schemes that managed the healthcare expenditure

The current health expenditure increased by 1% from 2019 to 2020. The private employers were the major source of funds estimated at 9,819 M AED (50%) in 2020. The government financing schemes accounted for 7,721 M AED (40%) in 2020. Households out of pocket was estimated at 1,951 M AED (10%) in 2020.

Out of the 7,721 M AED funds managed by the government entities, the major spending was made by the government of the Emirates of Dubai, estimated at 7,328 (95%) while the federal government contributed only 393 M AED (5%)

Between, 2016 to 2019 (Figure 2). There was a significant increase in funds from private employers whereas the government contribution decreased by 7% (from 43% to 36%). However in 2020, there was a noticeable change in government spending trend, with 4% increase in government funding in order to address the Covid-19 pandemic. The household out of pocket spending didn't show much variation during these five years.

Table 2. Financing Schemes (HF) by Financing Sources (FS) in 2020 (HF X FS)

Revenues of health care financing schemes **U.A.Emirates dirham (AED), Million** Financing schemes	FS.1 Transfers from government domestic revenue (allocated to health purposes)	FS.4 Compulsory prepayment (Other, and unspecified, than FS.3)	FS.6 Other funds from households n.e.c	All FS	Share of FS
HF.1 Government schemes and compulsory contributory health care financing schemes	**7,721**	**9,819**	**0**	**17,540**	**90%**
HF.1.1 Government schemes	**7,721**	**0**	**0**	**7,721**	**40%**
HF.1.1.1 Central government schemes	**393**	**0**	**0**	**393**	**2%**
HF.1.1.2 State/regional/local government schemes	**7,328**	**0**	**0**	**7,328**	**38%**
HF.1.2 Compulsory contributory health insurance schemes	**0**	**9,819**	**0**	**9,819**	**50%**
HF.1.2.2 Compulsory private insurance schemes	**0**	**9,819**	**0**	**9,819**	**50%**
HF.3 Household out-of-pocket payment	**0**	**0**	**1,951**	**1,951**	**10%**
All HF	**7,721**	**9,819**	**1,951**	**19,492**	**100%**
Share of HF	**40%**	**50%**	**10%**	**100%**	

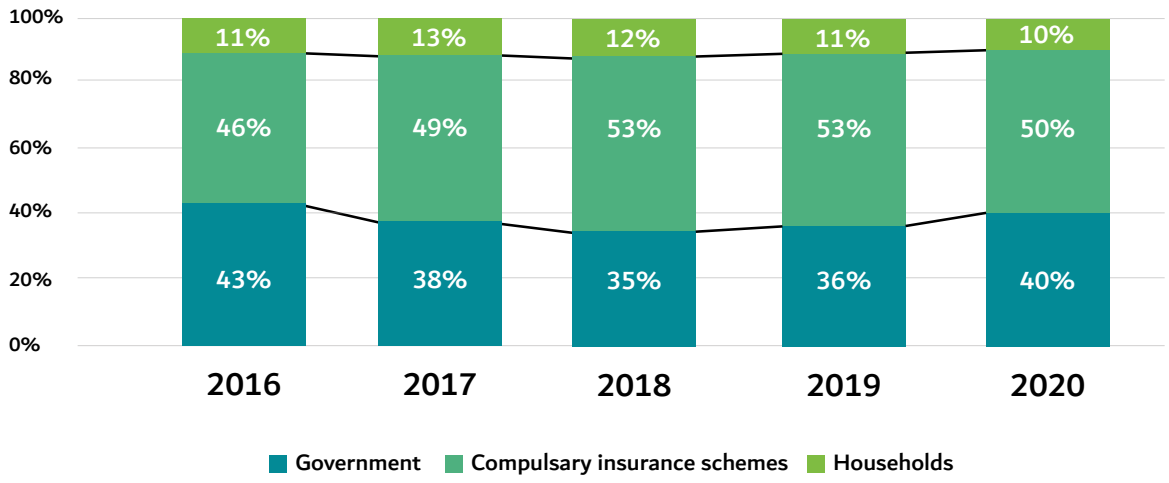
Table 3. Funds of Health Care Financing over Time, Dubai (2016-2020)

Inflow Funds of health care financing schemes (Million AED)	2016	2017	2018	2019	2020
FS.1 Transfers from government domestic revenue (allocated to health purposes)	6,858	6,338	6,495	6,864	7,721
FS.4.2 Compulsory prepayment from employers	7,246	8,282	9,703	10,198	9,819
FS.5 Voluntary prepayment	0	0	0	0	0
FS.6.1 Other funds from households	1,746	2,152	2,195	2,212	1,952
Total	**15,851**	**16,773**	**18,393**	**19,273**	**19,492**

Table 4. Financing Schemes over Time, Dubai (2016-2020)

Financing schemes, Million AED	2016	2017	2018	2019	2020
HF.1.1 Government schemes	6,858	6,338	6,495	6,864	7,721
HF.1.2 Compulsory contributory health care financing schemes	7,246	8,282	9,703	10,198	9,819
HF.2 Voluntary health care payment schemes	0	0	0	0	0
HF.3 Household out-of-pocket payment	1,746	2,152	2,195	2,212	1,952
Total	**15,851**	**16,773**	**18,393**	**19,273**	**19,492**

Figure 2. Trends in Health Financing Schemes, Dubai (2016-2020)



Types of health providers that received the healthcare expenditure amount through the various financing schemes

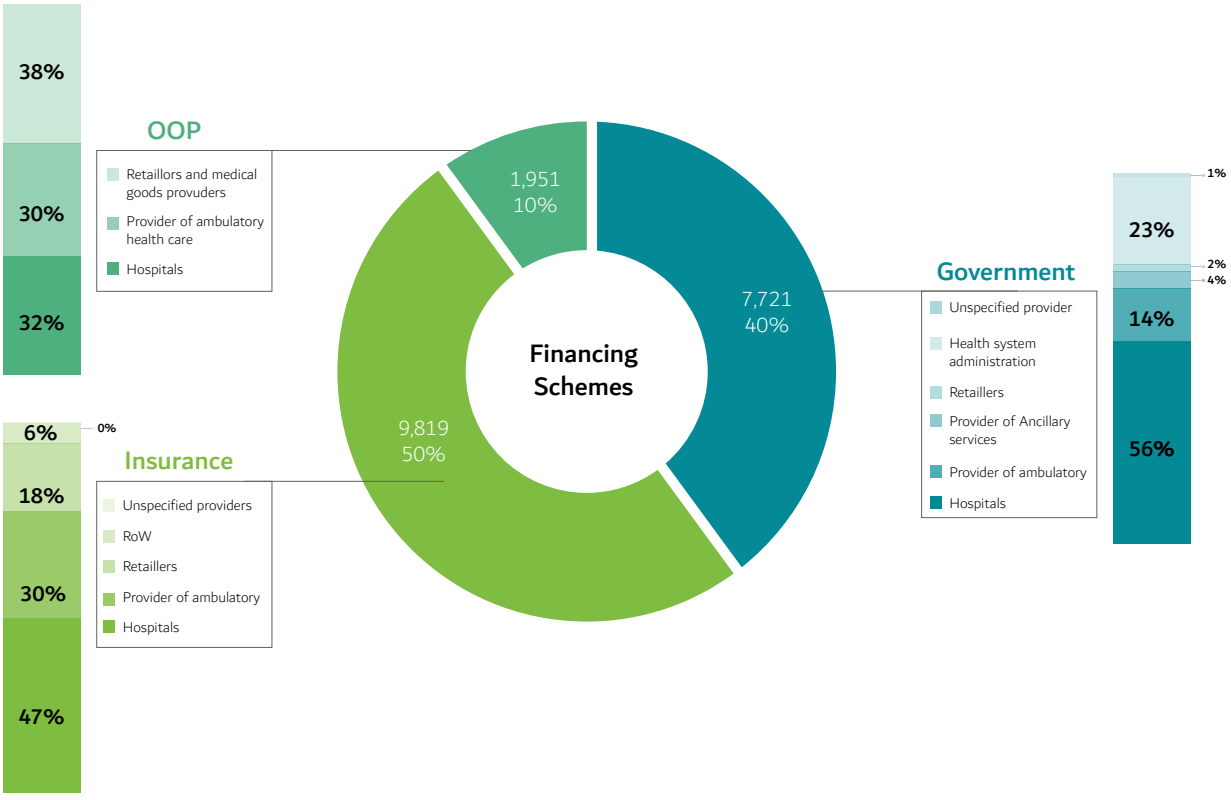
The major amount of current healthcare expenditure for 2020 went to hospitals amounting to 9,516 M AED (49%), followed by the primary health centers 4,620 (24%) Ancillary providers such as medical and diagnostic labs, imaging centers received 297 M AED(2%) while pharmacies received 2,596 M AED (13%). Healthcare governance and providers of healthcare system administration and financing received 1,782 (9%) of the funds. Households allocated 734 M AED (38%) towards discretionary health care spending. And 585 M AED (3%) was given to providers outside Dubai.

The HF1.1 column of Table 5 shows that large share of government scheme's spending goes to Hospitals (56%) and healthcare system administration (23%) which is 2% lesser compared to 2019. The private insurance schemes provide a major share of fund to hospitals (47%) and clinics (30%), respectively. The pharmacies received 1,730 M AED (18%) from private insurance schemes. As noted earlier, data about private health insurance spending on administration and claims management was not available.

Table 5. Health Providers (HP) by Financing Schemes (HF) in 2020 (HP X HF)

Financing schemes U.A.Emirates dirham (AED), Million Health care providers		HF.1 Government schemes and compulsory contributory health care financing schemes	HF.1.1 Government schemes	HF.1.1.1 Central government schemes	HF.1.1.2 State/regional/local government schemes	HF.1.2 Compulsory contributory health insurance schemes	HF.3 Household out-of-pocket payment	All HF	Share of HF
HP.1	Hospitals	8,937	4,340	275	4,065	4,597	624	9,561	49%
HP.3	Providers of ambulatory health care	4,027	1,113	96	1,017	2,914	594	4,620	24%
HP.4	Providers of ancillary services	297	289	0	289	8	0	297	2%
HP.5	Retailers and Othe providers of medical goods	1,862	132	0	132	1,730	734	2,596	13%
HP.7	Providers of health care system administration and financing	1,782	1,782	22	1,760	0	0	1,782	9%
HP.9	Rest of the world	585	15	0	15	570	0	585	3%
HP.nec	Unspecified health care providers (n.e.c.)	51	51	0	51	0	0	51	0%
All HP		17,540	7,721	393	7,328	9,819	1,951	19,492	100%
Share of HP		90%	40%	2%	38%	50%	10%	100%	

Figure 3. CHE by Financing Schemes and Providers, Dubai 2020



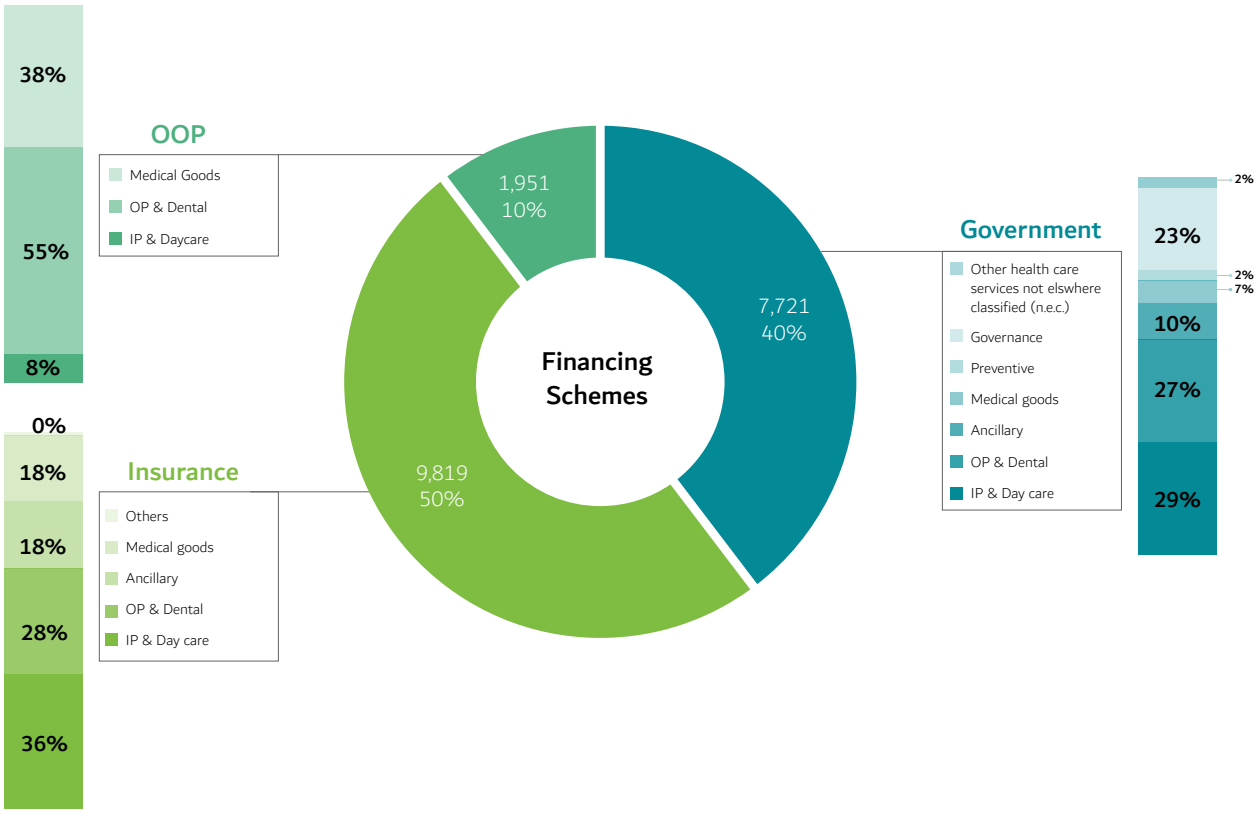
Health services expenditure through the various financing schemes

In 2020, curative care received the biggest share of funds at 11,823 M AED (61%). A breakdown of curative care indicates that inpatient care spending was 5,160 M AED (26%) and outpatient care spending was 5,430 M AED (28%) out of the total healthcare spending(19,492M AED). Ancillary services spending was 2585 M AED (13%), medical goods spending was 2975 M AED (15%) and preventive care spent was 192 M AED (1%). Healthcare governance and administration represented 1,782 M AED (9%).

Table 6. Health Care Functions (HC) by Health Financing Schemes (HF) for 2020 (HC X HF)

Financing schemes **U.A.Emirates dirham (AED), Million** Health care functions	HF.1 Government schemes and compulsory contributory health care financing schemes	HF.1.1 Government schemes	HF.1.1.1 Central government schemes	HF.1.1.2 State/regional/local government schemes	HF.1.2 Compulsory contributory health insurance schemes	HF.3 Household out-of-pocket payment	All HF	Share of HF
HC.1 Curative care	10,605	4,332	253	4,079	6,273	1,218	11,823	61%
HC.1.1 Inpatient curative care	5,006	2,169	128	2,040	2,837	154	5,160	26%
HC.1.2 Day curative care	804	101		101	704		804	4%
HC.1.3 Outpatient curative care	4,365	1,633	125	1,508	2,732	1,064	5,430	28%
HC.1.nec Unspecified curative care (n.e.c.)	429	429		429			429	2%
HC.2 Rehabilitative care	58	58		58		0	58	0%
HC.4 Ancillary services (non-specified by function)	2,585	776	16	760	1,809		2,585	13%
HC.4.1 Laboratory services	1,437	356	12	344	1,081		1,437	7%
HC.4.2 Imaging services	909	208	5	204	701		909	5%
HC.4.3 Patient transportation	230	203		203	28		230	1%
HC.4.nec Unspecified ancillary services (n.e.c.)	9	9		9			9	0%
HC.5 Medical goods (non-specified by function)	2,242	512	101	411	1,730	734	2,975	15%
HC.6 Preventive care	192	192		192	0	0	192	1%
HC.7 Governance, and health system and financing administration	1,782	1,782	22	1,759		0	1,782	9%
HC.9 Other health care services not elsewhere classified (n.e.c.)	76	69		69	7	0	76	0%
All HC	17,540	7,721	393	7,328	9,819	1,951	19,492	100%
Share of HC	90%	40%	2%	38%	50%	10%	100%	

Figure 4. Financing Flows from Financing Schemes and Healthcare Functions, Dubai 2020



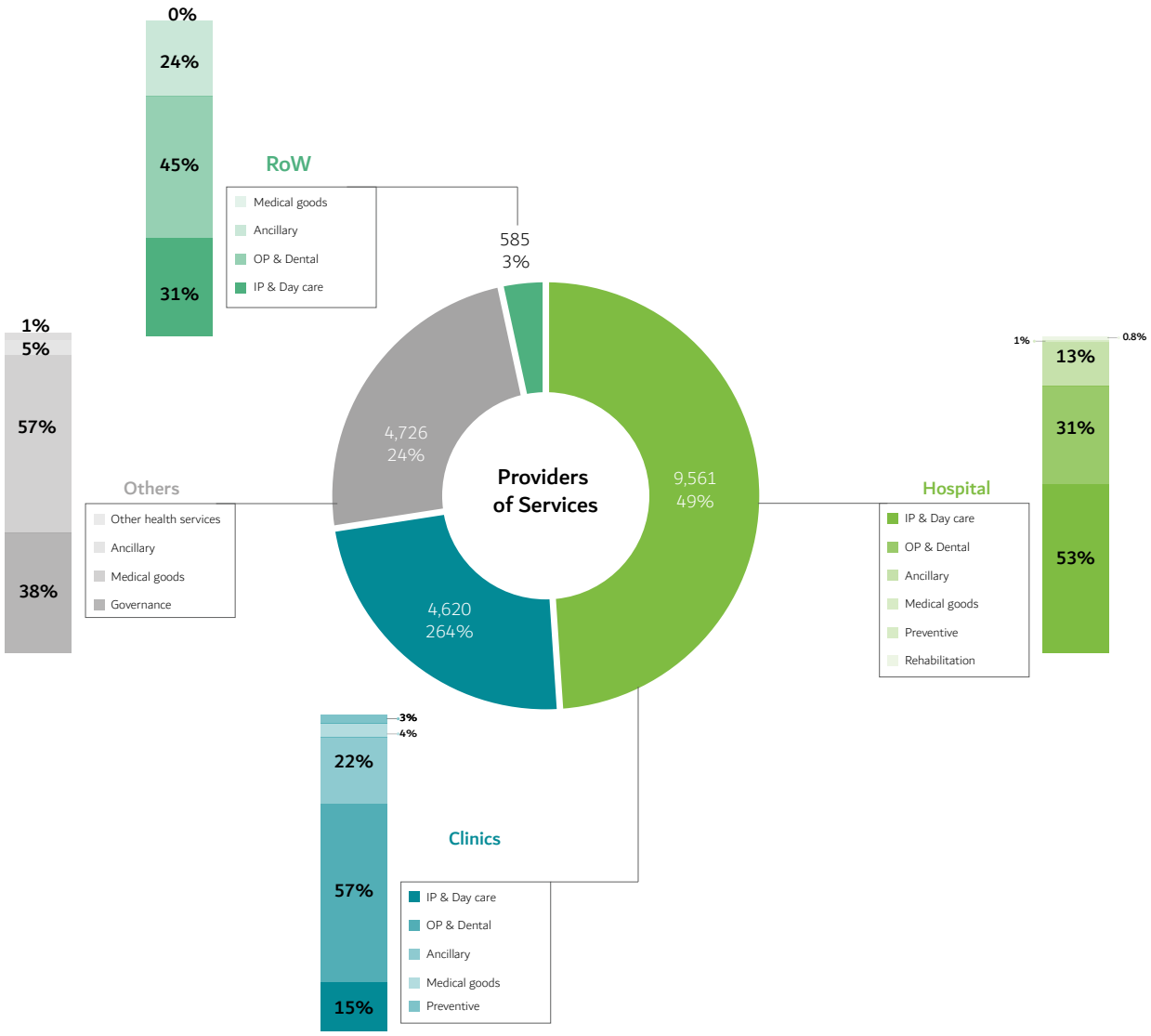
Types of health services that received the healthcare expenditure amount through the various health providers

As shown in Table 7, in 2020, hospitals received a total of 9,561 M AED of which 8,067 M AED was spent on curative care, 1,225 M on ancillary services ,54M on rehabilitative care, and 136 M on medical goods. Primary Healthcare centers received a total of 4,620 M of which 3,310 M was spent on curative care, 1,004 M on ancillary services, 115 M on preventive care and 164M on medical goods. Retailers and providers of medical goods received 2,596 M AED. The Rest of the World provided a wide array of services totaling 585 M AED with majority spent towards curative care (445 M).

Table 7. Health Care Functions by Health Care Providers in 2020

Health care providers **U.A.Emirates dirham (AED), Million** Health care functions	HP.1 Hospitals	HP.3 Providers of ambulatory health care	HP.4 Providers of ancillary services	HP.5 Retailers and Other providers of medical goods	HP.7 Providers of health care system administration and financing	HP.9 Rest of the world	HP.nec Unspecified health care providers (n.e.c.)	All HP	Share of HP
HC.1 Curative care	8,067	3,310				445	0	11,823	61%
HC.1.1 Inpatient curative care	4,434	567				159		5,160	26%
HC.1.2 Day curative care	643	137				25		804	4%
HC.1.3 Outpatient curative care	2,561	2,606				262	0	5,430	28%
HC.1.nec Unspecified curative care (n.e.c.)	429							429	2%
HC.2 Rehabilitative care	54	4						58	0%
HC.4 Ancillary services (non-specified by function)	1,225	1,004	217	1		139		2,585	13%
HC.4.1 Laboratory services	721	612	10	0		94		1,437	7%
HC.4.2 Imaging services	504	360		0		45		909	5%
HC.4.3 Patient transportation	0	32	198					230	1%
HC.4.nec Unspecified ancillary services (n.e.c.)			9					9	0%
HC.5 Medical goods (non-specified by function)	136	164	80	2,595				2,975	15%
HC.6 Preventive care	78	115						192	1%
HC.7 Governance, and health system and financing administration					1,782			1,782	9%
HC.9 Other health care services not elsewhere classi fied (n.e.c.)	2	23	0		1		51	76	0%
All HC	9,561	4,620	297	2,596	1,782	585	51	19,492	100%
Share of HC	49%	24%	2%	13%	9%	3%	0%	100%	

Figure 5. CHE by Healthcare Providers and Healthcare Functions, Dubai 2020



Major Diagnostic Category

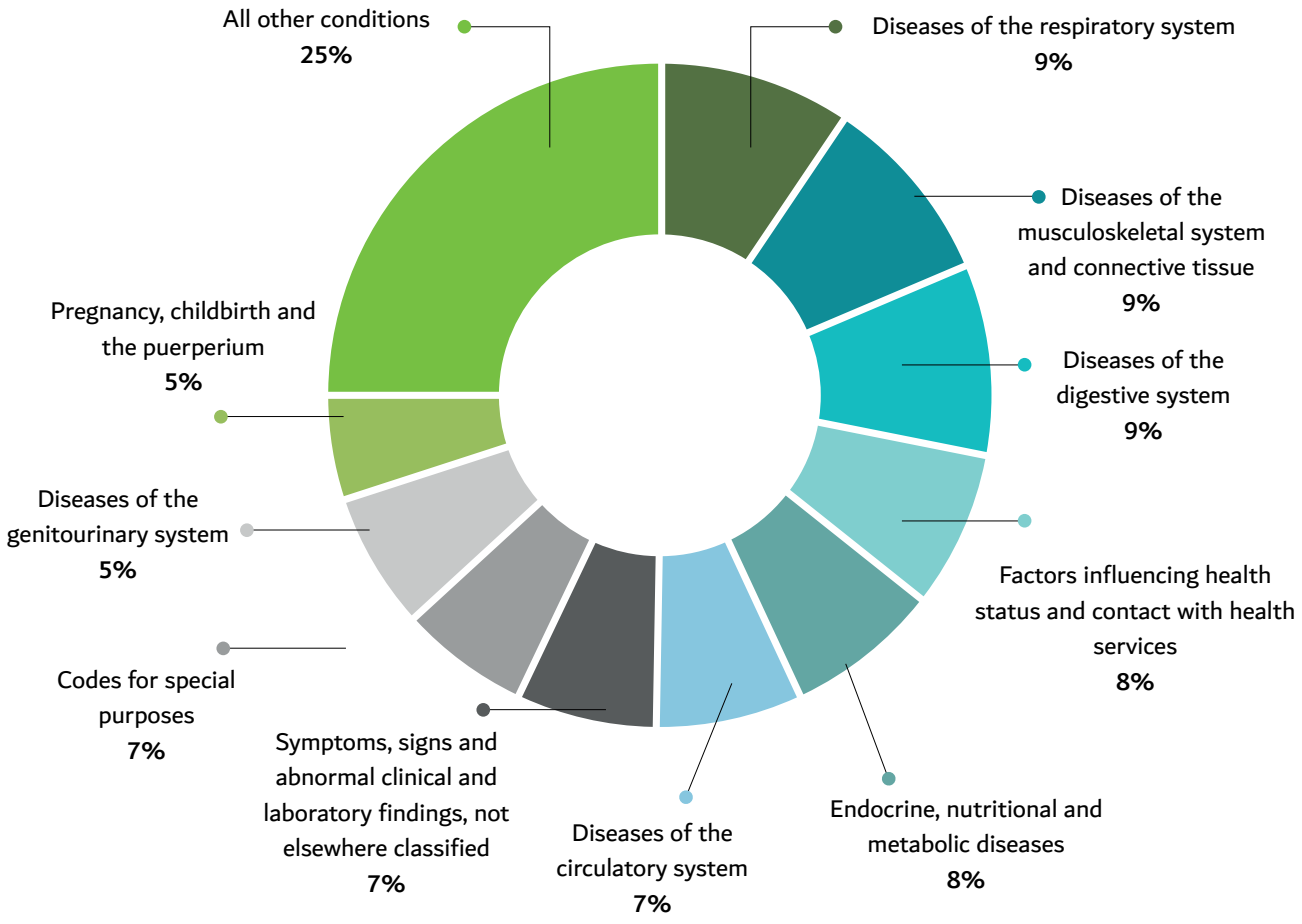
Table 8 illustrates healthcare expenditure by Major Diagnostic Category (MDC's) in Dubai. In 2020, the total net amount spent by MDC's was 13.5 billion AED. The highest expenditure was on three main disease category namely digestive system (9.4%), musculoskeletal system (9.3%) and respiratory (9.3%). The top ten MDC's in Dubai represent 76% of the total expenditure. The codes for special purposes accounts for 6.5% of the total spent reflecting the covid pandemic financial burden.

Table 8

MDC	Share
Diseases of the digestive system	9.4%
Diseases of the musculoskeletal system and connective tissue	9.3%
Diseases of the respiratory system	9.3%
Factors influencing health status and contact with health services	7.7%
Endocrine, nutritional and metabolic diseases	7.6%
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	7.2%
Diseases of the circulatory system	6.7%
Codes for special purposes	6.5%
Diseases of the genitourinary system	6.4%
Pregnancy, childbirth and the puerperium	5.3%
Injury, poisoning and certain other consequences of external causes	4.1%
Neoplasms	3.7%
Certain infectious and parasitic diseases	3.4%
Diseases of the skin and subcutaneous tissue	2.8%
Diseases of the eye and adnexa	2.4%
Diseases of the nervous system	2.2%
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	1.2%
Diseases of the ear and mastoid process	0.8%
Mental and behavioral disorders	0.5%
Certain conditions originating in the perinatal period	0.4%
Congenital malformations, deformations and chromosomal abnormalities	0.4%

Figure 6.

MDC's percentages from total paid amount

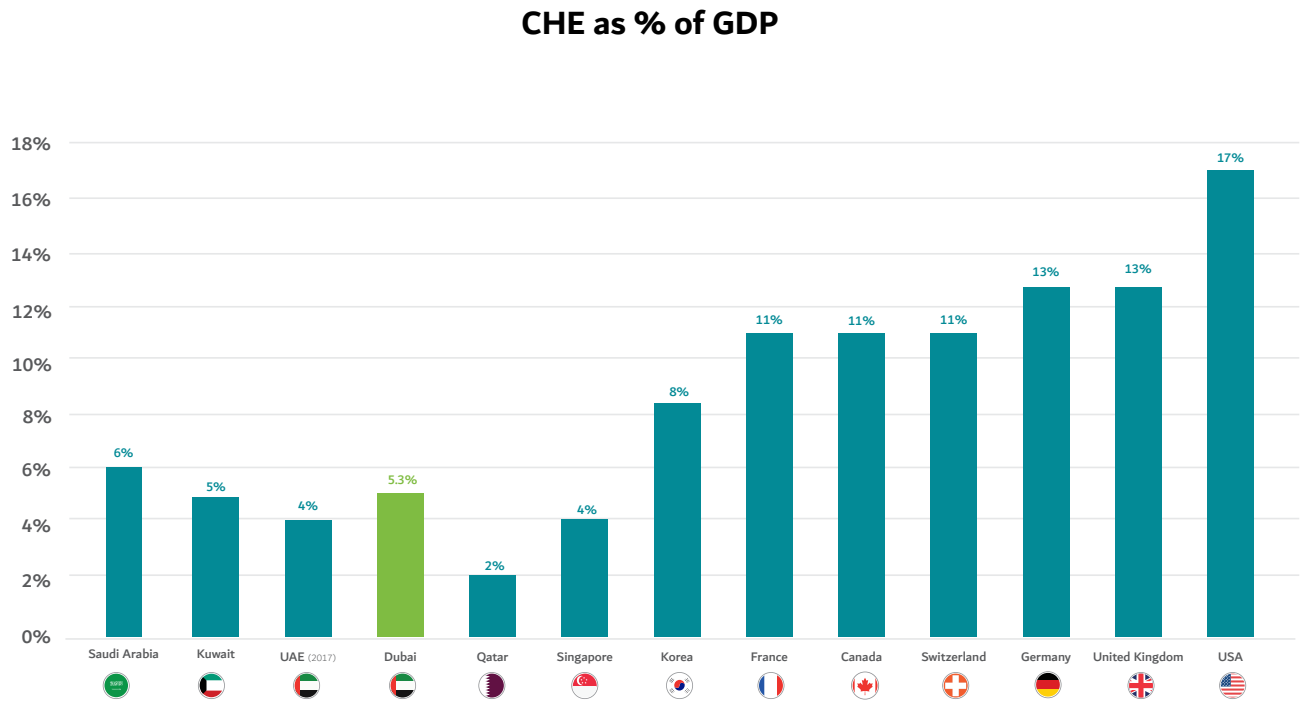


Comparative Analysis

This section compares Dubai's results with other regional and selected countries from The Organization of Economic Cooperation and Development (OECD). Data for comparative analysis was obtained from WHO Global Health Expenditure Database and OECD Health Expenditure and Financing Statistics for the recent year available. The OECD countries such as France, Switzerland, Canada, United Kingdom and USA were chosen to create a basket of countries that are similar to the current or future health financing system in Dubai. In addition, UAE health accounts for year 2017 was used to compare Dubai's health indicators with UAE overall.

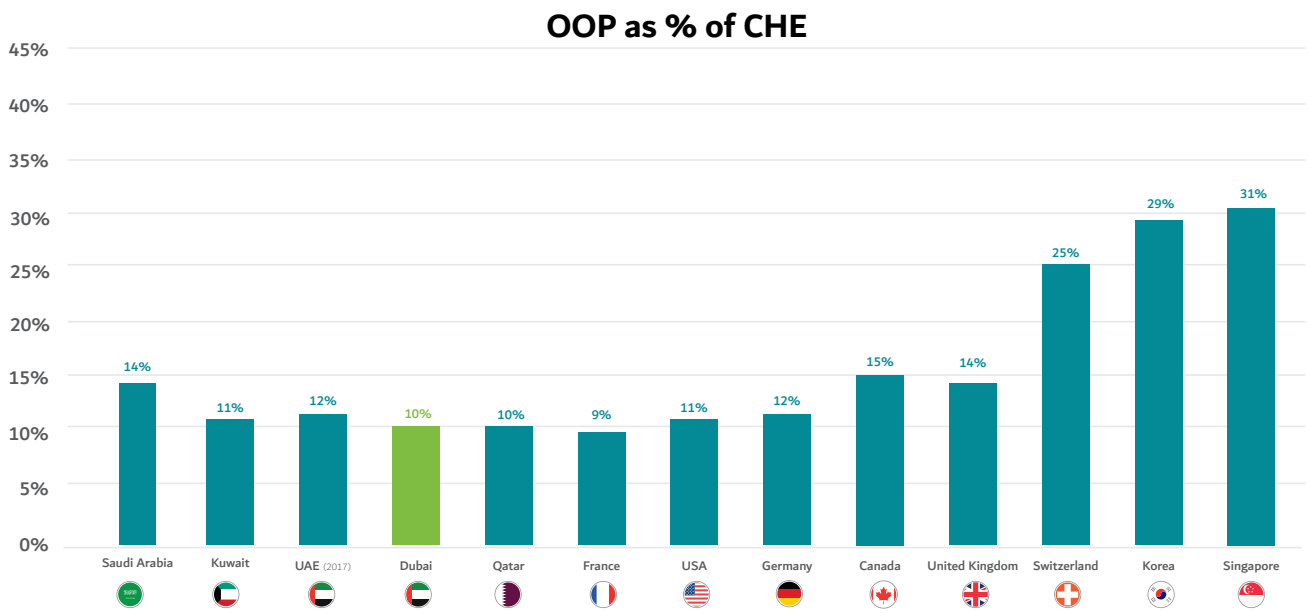
The data from the other GCC countries provided the closest regional comparison to Dubai's healthcare system.

Figure 7. Current Health Expenditure (CHE) as Percentage of GDP



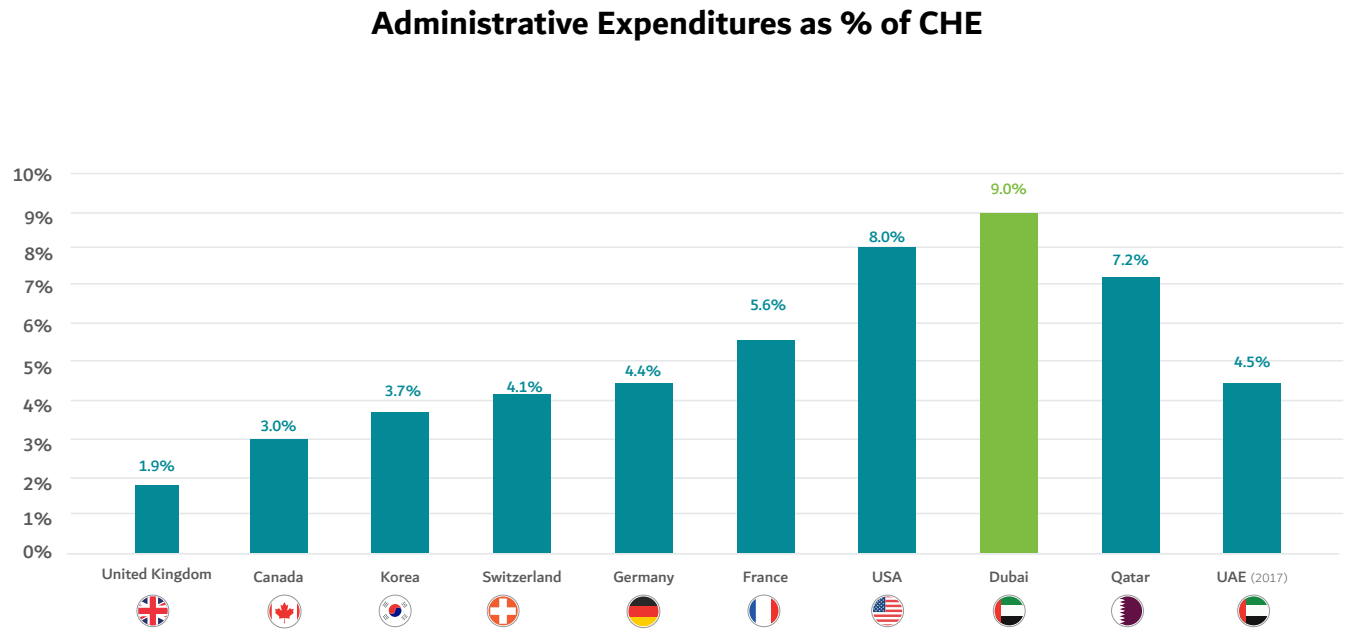
Dubai rank second among GCC countries in terms of CHE as % of GDP and rank among the lowest compared to OECD countries

Figure 8. Share of Out of Pocket Expenditure of Current Health Expenditure (CHE)



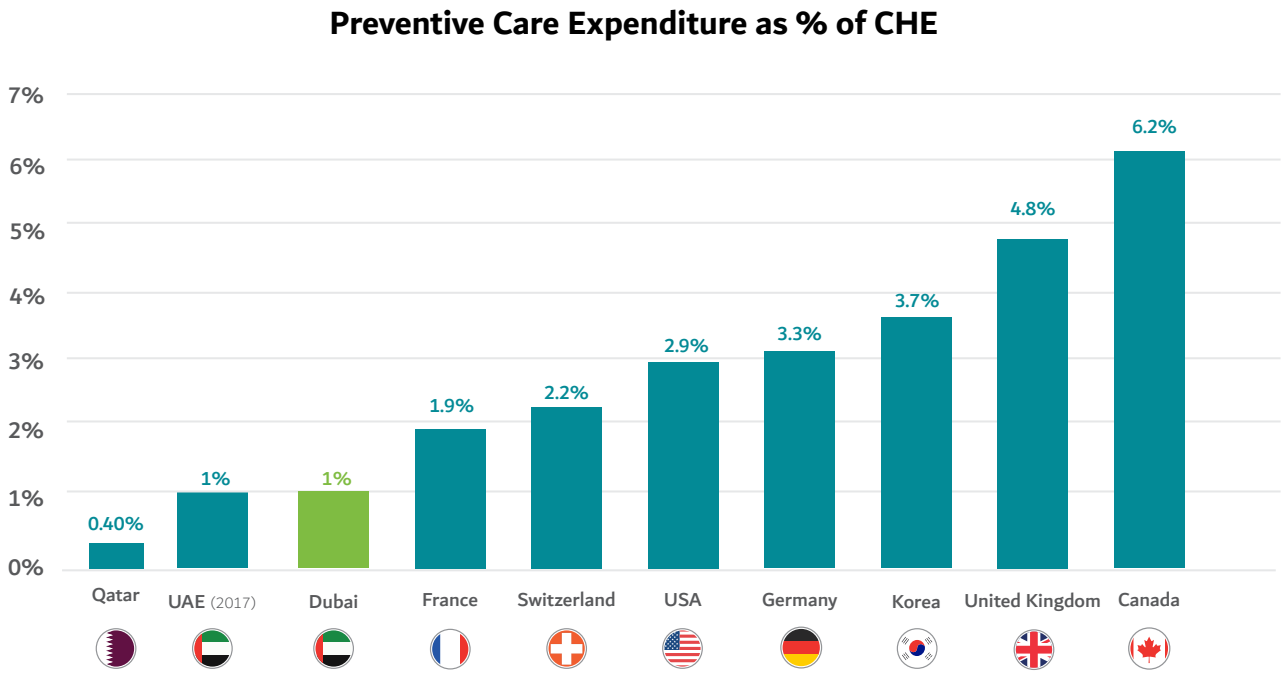
Dubai ranks among the lowest compared to selected GCC and OECD countries in terms of OOP as % of CHE

Figure 9. Share of Administration and Financing Expenditure of Current Health Expenditure



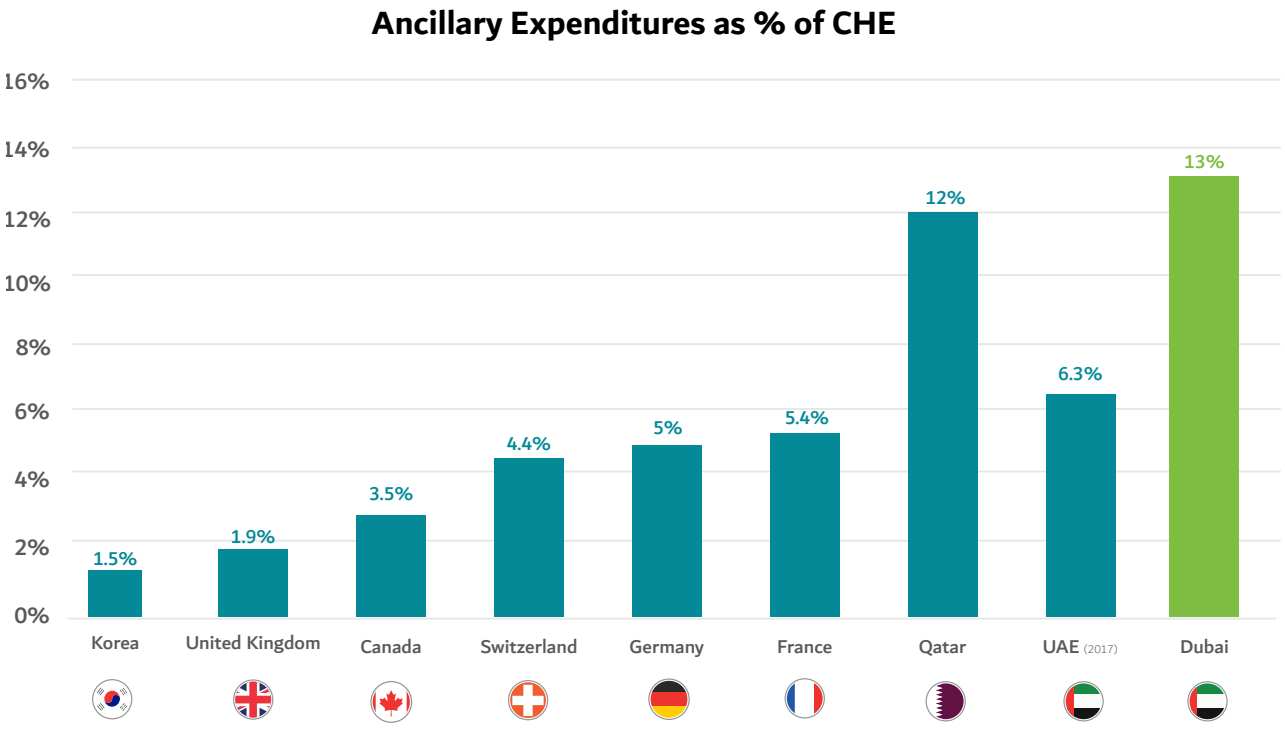
Dubai reports to have highest administrative expenditure as % of CHE compared to selected GCC and OECD countries.

Figure 10. Share of Preventive Care Expenditure of Current Health Expenditure (CHE)



In terms of preventive care spent as % of CHE, Dubai rank among the lowest compared to selected GCC and OECD countries.

Figure 11. Share of Ancillary Services Expenditure of Current Health Expenditure (CHE)



Dubai reports to have highest ancillary services expenditure as % of CHE compared to selected GCC and OECD countries.

Appendix A

Dubai Household Health Survey (DHHS) is the largest comprehensive household survey of healthcare and health issues carried out in The Emirates of Dubai
The survey provides a statistically accurate and representative outlook of key health and healthcare variables across the entire population of Dubai.

The survey of 2018 was based on a multi- stage stratified cluster sample. The sampling was designed so that after weighting it would be representative of four subpopulation: UAE citizens, Non- citizens living in households, Non-citizens living in collective housing and Non- citizens living in labor camps. Surveyors personally visited these randomly selected households to obtain detailed information on issues ranging from household health expenditure, and access to health services to questions on exercise levels, dietary habits, lifestyle diseases, mental health, and a detailed module on the use of public and private health services in Dubai. The 2018 survey had a response rate of 96%. The design and methodology of the survey were adopted from those used in the World Bank's Living Standards Measurement Surveys (LSMS), the World Health Organization's World Health Surveys (WHS) and the US Center for Disease Control's National Health Interview and Examination Surveys (NHIES).

Importance weights were assigned by DSC because UAE citizens were oversampled. After weighting, the sample was representative of population of 3.2 million Dubai residents as of 2018. The sample size for 2018 was a total of 9,630 persons in 2200 housing units of whom 5,665 were UAE citizens, 2342 were Non- citizens in households, 1,335 were Non-citizens in collective housing, and 288 were Non-citizens in labor camps. The survey was sanctioned by the institutional review board of the Dubai Health Authority.
Each of the surveyors received extensive training in the collection of self-reported expenditure data and interviewed the person in the household most knowledgeable about recent medical utilization. After collecting a household roster and basic demographics for each household member, the surveyor asked whether each household member had had any outpatient utilization in the last 30 days, made any discretionary purchases of medical supplies or over the counter medicines (mentioning blood pressure cuffs, blood sugar monitors, orthopedic supplies, medicines etc.) in the last 30 days and whether each household member had an overnight inpatient stay in the last 12 months. For households where more than one member had experienced these events, an individual member was selected at random and details of their medical events were collected to investigate the total of out of pocket spending for various categories of discretionary spending, outpatient spending and inpatient spending, after adjusting for the appropriate weights.

A Report by

DUBAI HEALTH INSURANCE CORPORATION

Dubai Health Insurance Corporation was formed in 2018 under the guidance of Shaikh Hamdan Bin Mohammad Bin Rashid Al Maktoum, Crown Prince of Dubai and Chairman of the Dubai Executive Council who issued Executive Council Resolution No. (18) of 2018 approving the new organizational structure of Dubai Health Authority (DHA). The Corporation helps regulate the insurance market, create a conducive environment for growth and help maximise benefits to customers as well as protect their interest. At the same time, it also keeps the interest of the insurance companies and Third Party Administrators in mind.

The corporation also license and regulate health insurance companies, claims management companies, insurance brokers and service providers.

It is responsible for managing Dubai Government's health insurance programme and issuing reports and recommendations related to health insurance and health economics.

For Any Queries

Contact - Dr. Meenu Mahak Soni (Health Economist, DHIC, DHA)

Email: mschandersoni@dha.gov.ae

الملخص التنفيذي

الحاجة لـ "حصد"

تم تطوير "حصد" باستخدام منهجية موحدة ومعترف بها دوليًا والتي تسهل المقارنات المعيارية بين البلدان وإمارة دبي على وجه الخصوص. حيث يتم الإشراف على إعداد تقرير "حصد")نظام الحسابات الصحية في دبي(سنويًا من قبل فريق مؤسسة دبي للضمان الصحي والذي يخضع لتحسينات مستمرة في شتى القطاعات بما في ذلك التغطية الصحية الإلزامية.

يغطي التقرير الحالي نتائج العام المالي 2020 ويتضمن أيضًا النتائج الرئيسية من التقارير السابقة التي تغطي الأداء للأعوام 2016 الى 2019.

كما يوفر تقرير "حصد" معلومات حيوية بشأن:

• قياس الأبعاد المالية لنظام الرعاية الصحية في دبي بما يتيح الكفاءة في تخصيص الأموال بين قطاعي الصحة العام والخاص.

• مراقبة التغيرات في التوزيع المالي بين القطاعات الصحية الحكومية والخاصة مقارنة بالدول الإقليمية والدولية حيث أن مراقبة التغيرات التي تحدث بمرور الوقت ستمنح حكومة دبي والمستثمرين المعلومات اللازمة لقياس حجم واتجاهات الاستثمار.

• توضيح الجهات التي تقوم بالدفع مقابل الخدمات الصحية، كيفية إدارة الموارد الصحية وفي أي مسار يتم إنفاق الموارد الصحية.

• آلية تدفق إجمالي الإنفاق الصحي من مصادر التمويل إلى المستخدمين النهائيين.

• مراقبة تدفق الأموال في نظام الرعاية الصحية في دبي.

جمع وتحليل البيانات

تم جمع بيانات الإنفاق الصحي من عدة مصادر وجهات، حيث تم جمع المعلومات حول الإنفاق الحكومي على شكل (قوالب مصممة مسبقاً من دائرة المالية (DOF) وهيئة الصحة في دبي (DHA) ووزارة الصحة ووقاية المجتمع (MOHAP)). بالإضافة إلى ذلك تم استخراج البيانات الخاصة بنفقات القطاع الخاص من منصة المطالبات الإلكترونية eClaimLink system وكذلك من أصحاب العمل. فيما استندت المعلومات الخاصة بالإنفاق الصحي للأسر على نتائج مسح صحة الأسرة في دبي للأعوام 2018 – 2019 والتي أجرته هيئة الصحة في دبي بدعم لوجستي مركز دبي للإحصاء.

النتائج الرئيسية لـ "حصد"

بلغ إجمالي الإنفاق الحالي على الرعاية الصحية في عام 2020 حوالي 19.49 مليار درهم إماراتي، بزيادة قدرها 1% عن الإنفاق في عام 2019 ، والذي بلغ 19.27 مليار درهم إماراتي. حيث شكلت نفقات الرعاية الصحية الممولة من الحكومة، في عام 2020 ما يعادل 40% من إجمالي الإنفاق بما يعادل 7,721 مليون درهم إماراتي، فيما بلغت نفقات الرعاية الصحية في القطاع الخاص نسبة 60% من إجمالي الإنفاق بما يعادل 11,770 مليون درهم إماراتي.
ارتفعت حصة الإنفاق الحكومي على الصحة من إجمالي الإنفاق الصحي إلى 40% (2020) من 36% في عام (2019) وانخفضت حصة الإنفاق من قبل أصحاب العمل إلى 50% (2020) من 53% من عام (2019) وانخفض كذلك الإنفاق الصحي للإسر من 11% إلى 10%.

وقد بلغ مجموع حصة الإنفاق الصحي التي تلقاها مختلف مقدمي الخدمات الصحية كالتالي:
49% للمستشفيات، 24% للعيادات، 15% لمقدمي خدمات المساعدة كصيدليات بيع بالتجزئة والمختبرات ومراكز التصوير. بالإضافة إلى زيادة بنسبة 7% على نسبة المصروفات التي تذهب للمستشفيات، كما يعد تفشي فايرس Covid-19 في عام 2020 جزئياً هذه الزيادة في الإنفاق في المستشفيات.

شكلت الرعاية العلاجية 61% من إجمالي الإنفاق الصحي. فيما بلغ الإنفاق على الخدمات الإضافية 13% والسلع الطبية 15%. كذلك الإنفاق على خدمات الرعاية الوقائية كان منخفضاً جداً بنسبة 1%.

خصصت الحكومة نسبة 23% من نفقاتها الصحية لمجالات الحوكمة والإدارة. فيما تم إنفاق 36% من إجمالي نفقات التأمين الصحي الخاص على الخدمات الإضافية والسلع الطبية.