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Foreword



His Excellence Humaid Al Qatami,Chairman of the Board and Director General
Dubai Health Authority

Under the leadership of His Highness Sheikh Mohammed Bin Rashid Al Maktoum, Vice President and Prime Minister and Ruler of Dubai significant, advancements have been made in all services and economic sectors. The general aim is to build a sustainable socio-economic environment that can respond to the healthcare needs of the Dubai population.

With the introduction of a Mandatory Health Insurance Law 11 of 2013, Dubai's health sector landscape is evolving rapidly. The regulatory role of the Dubai Health Authority is to ensure accessibility, quality and continuity in the provision of health services to residents of and visitors to Dubai.

Allocating sufficient and sustainable funds for healthcare is a cornerstone of the success of any health system

The Dubai Health Authority is pleased to publish the third account of health expenditures for the Emirate of Dubai. The 2016-2017 HASD report is the reflection of Dubai's progress towards universal health coverage with a mandate to track health expenditures for evidence based policy and making healthcare accessible, affordable and of better quality. This report also acts as a benchmark for the production of a National Health Accounts system for the United Arab Emirates (UAE).

Our decision to implement HASD was based on two needs:

- To measure the financial dimensions of Dubai's healthcare system, allowing efficiency in allocating funds between the private and public health sectors.
- To monitor changes in the financial distribution between governmental and private health sectors, compared with regional and international countries.
 Monitoring changes that occur over time will give the government and investors the information needed to gauge investment size and trends.

In successfully completing this exercise 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 look forward to continued support from all stakeholders in producing the annual HASD Report. I also invite the stakeholders to utilize the information contained in this report to support their decisions on how to better deliver healthcare for residents of Dubai.

Message



Saleh Al HashimiCEO, Dubai Health Insurance Corporation
Dubai Health Authority

As Dubai has established ISAHD (Insurance System of Advancing Health in Dubai) scheme, monitoring progress of the health financing dimension is important for decision on fiscal space for health, sustainable financing, and appropriate resource allocation.

In-line with WHO NHA standards, institutionalized Health Accounts provides key health financing indicators every year enabling critical policy reflections. It allows global comparison of select indicators enabling us to improve financing of interventions for better health accounts. HASD 2016-2017 report provides an insightful reflection of the healthcare financing indicators for Dubai.

I applaud the efforts of HASD technical team for working on the health accounts estimates by improving methodologies and rigorous efforts to get accurate data. These estimates will help us reorient our existing policies for an equitable and efficient health system.

Executive Summary

In 2013, the Emirate of Dubai implemented Law 11 to provide universal health coverage for all of its residents. Also known as Insurance System of Advancing Health in Dubai (ISAHD), the law went into effect in the first quarter of 2014 and brought significant changes to the healthcare sector. The goal of ISAHD was to achieve universal coverage by mid-2016, and increase the affordability and accessibility of health care.

It is imperative to analyze and monitor the flow of expenditure through the system to ensure that ISAHD has been properly implemented and to shape future policies. This requires reliable and standardized data collection and analysis. The Health Accounts System of Dubai (HASD) provides a factual account of health expenditures by government and private sector, by health care functions and by health care provider type.

This report is based on data collected from 2016 and 2017 and is inflation adjusted (using consumer price index (CPI) with a base of year 2014) so that it can be compared to the 2012 and 2013 findings to see how much has changed since the period before ISAHD was implemented in 2014. In keeping with prior analysis, we define the boundaries of Dubai's Health Care Spending as all health care related transactions made by or on behalf of a citizen of Dubai or a non-citizen with a work visa from Dubai regardless of domicile. We include their spending even if it occurred outside the physical boundaries of Dubai. The accounting excludes health care spending by short term tourists. Also, excluded is the health care spending inside the physical boundaries of Dubai on behalf of citizens of other emirates or by non-citizen workers with visas from other emirates.

In 2017, Dubai spent 16,773 Million AED on healthcare (4.3% of GDP), of which 16,047 Million AED was spent within Dubai and 726 Million AED was spent outside Dubai. The annual growth between 2016 and 2017 was 6% after adjusting for inflation.

The growth in health expenditure was not uniform across all sources. Compared to the 2016 estimates, the 2017 growth rates were +3%, +2%, and -5% per year for private insurance, government and household spending respectively in 2017. Compared to 2014 when household out of pocket spending accounted for 25% of healthcare spending, the 2017 share of out of pocket health spending was reduced to 13%. Private insurance spent 8,282 Million AED (49%) on healthcare compared to 6,338 Million AED (38%) spent by the government and 2,152 Million AED (13%) spent out of pocket by households.

The share of all health spending received by various providers was 45%, 24%, 15%, and 2% for hospitals, clinics, retail pharmacies and ancillary providers, respectively. There was a slight decline in the share of expenditure going to hospitals and going to providers outside of Dubai. The implementation of ISAHD could partially explain the reduction in spending on non-Dubai based providers because it made providers inside Dubai more financially affordable and accessible.

Executive Summary

The share of all health spending going to various services was 57%, 14%, 18%, 8% and 2% for curative care, ancillary services, medical goods, administration and preventive services, respectively. Over the last 5 years, curative care has accounted for the bulk of the healthcare services provided and has stayed in the range of 55% to 60% of the total costs. There has been a significant increase in expenditure on medical goods, health system and financial administration.

Compared to other OECD countries, and given the size of the healthcare market, Dubai has high expenditures for administrative and ancillary services and low spending on prevention. Future policy goals could include streamlining and efficiency as well as allocating more resources towards preventive health care while limiting the extent of out of pocket spending by those with limited resources.

Acknowledgement

The Health Account Systems for Dubai (HASD) 2016-2017 were prepared in close collaboration with the key stakeholders in order to publish a transparent report. Significant efforts were undertaken to collect, analyze and validate the data on health expenditure and its flow through Dubai's healthcare system.

We would like to gratefully acknowledge the contribution of the following:

• Mr. Saleh Al Hashimi, CEO of Dubai Health Insurance Corporation, for his support valuable insights in guiding the production of HASD.

The technical team responsible for the execution of the HASD and this report:

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We would also like to thank the senior team members from the Dubai Health Authority who provided important insights and comprehensive review of the HASD results.

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

- Finance Department, Dubai Health Authority
- Ministry of Health, United Arab Emirates
- Department of Finance, Dubai
- Dubai private health sector: Hospitals, insurance companies, polyclinics, and pharmacies.

List of Abbreviations and Definitions

Abbreviations

AED	United Arab Emirate Dirham	НР	Health care Providers
CHE	Current Health Expenditure	ISAHD	Insurance System of Advancing Health in Dubai
DHA	Dubai Health Authority	МОН	Ministry of Health
DHCC	Dubai Health Care City	МОНАР	Ministry of Health and Prevention
DHCCA	Dubai Health Care City Authority	OECD	Organization for Economic Co-operation and Development
DHIC	Dubai Health Insurance Corporation	OOP	Out-of-Pocket
DHHS	Dubai Health Household Survey	n.e.c	Not Elsewhere Classified
DM	Dubai Municipality	NCU	National Currency Unit
DoF	Dubai Department of Finance	PPP	Purchasing Power Parity
DSC	Dubai Statistics Center	PvHE	Private Expenditure on Health
FS	Funds of Financing Scheme	RoW	Rest of the World
GDP	Gross Domestic Product	SHA	System of Health Accounts
GGHE	General Government Expenditure on Health	THE	Total Health Expenditures
HASD	Health Accounts System of Dubai	UAE	United Arab Emirates
НС	Health care Functions	US\$	United States Dollars
HF	Health Financing Schemes	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.

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.

Definitions

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.

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.

Introduction

Dubai is one of the fastest growing emirates in the United Arab Emirates (U.A.E). It has a dynamic and diversified economy, with a diverse and young population. Dubai's GDP per capita was 130,833 AED in 2017.

The health sector of the Emirate of Dubai accounted for 4.3% of the GDP in 2017. The sector along with its free zones excluding Dubai Health Care City (DHCC) is overseen by the Dubai Health Authority (DHA), a public organization involved in strategic oversight of the sector and enhancing private sector engagement. This includes regulation, licensing, financing and management of facilities. There are two other organizations: The Ministry of Health and Prevention (MOHAP) and Dubai Health Care City Authority (DHCCA) that also play a role in oversight, but it is limited compared to the DHA.

In 2013, Dubai's healthcare sector underwent a significant transformation with the passage of the Health Insurance Law of Dubai (Law 11). The law paved the way for Dubai's universal health coverage by 2016 through requiring mandatory health insurance enrollment for all residents of Dubai. The mandate requiring health insurance is placed on all employers and employees, and is a requirement for all with work visas issued by Dubai government. This model ensures that Dubai's residents have financial access to healthcare and protects the financing system from adverse risk selection, where people who think they are at low risk choose to opt out of buying insurance. The private insurance contracts offer patients the choice to seek treatment with government or private health care providers. In addition, the government of Dubai provides health insurance for all its employees and their family through the ENAYA Program, and for all the citizens of Dubai through the SAADA program.

for all the citizens of Dubai through the SAADA program.

In 2017, the health providers in Dubai were employed by government, private and DHCCA organizations.

Previous HASD Reports

The successful implementation of Law 11 requires reliable data collection and analysis to monitor the impact of the law on the sector. Health accounts offer reliability and standardization of data through international acceptance of classification standards, which allows for comparison between Dubai and other regional and international counterparts.

The Health Accounts System of Dubai (HASD) provides a factual account of health expenditures by government and private sector, by health care functions and by health care provider. Conducting this process regularly provides an opportunity to monitor the health care system over time. The HASD report for 2012 and 2013 provided insights on the period before the implementation of Law 11. This 2016 and 2017 report will provide insights on the period after the implementation of Law 11.



The Health Accounts System of Dubai (HASD) follows the methodology and the international classification of System of Health Accounts (SHA) 2011 [World Health Organization, 2011]. The WHO system explains the rationale for producing the reports at a state level and requires the definition of population boundaries to accompany each system of health accounts.

Population boundaries for HASD

The population of health system users of Dubai can be classified as follows:

- 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

The Dubai Statistics Centre considers only the first two groups as part of Dubai's population. However, according to the law, government agencies and private employers in Dubai are mandated to offer healthcare coverage to all employees with Dubai employment visas regardless of their geographical residence. Thus, for the purposes of the HASD report, the first three groups will be considered. The total long-term population in 2017 within the HASD boundaries is estimated to be 4.56 million. Health spending by tourists is not included in this report. The population of short-term tourists varies seasonally.

Data Collection and Analysis

The 2016 and 2017 data for HASD were collected and analyzed in accordance with the international guidelines provided in SHA 2011. It should be noted that since the inception of the Dubai health spending report in 2012, new spending data sources have been identified and existing sources have been improved for accuracy and reliability. Furthermore, there has been a change in the methodology used for the estimation of the household out-of-pocket expenditure as described below. Therefore, trend analysis between the previous and current reports should be considered with this in mind

Data Sources

Government

Ministry of Health of U.A.E (MoH)

The MoH provided the HASD team with detailed expenditure data that were broken down by facility type and cost center, along with data on the workforce and utilization rate of each facility type. The team imputed the proportion of wages and salary included in each healthcare service using existing data from 2015. Any MoH collection of revenue from service users was not reported and has been necessarily omitted from this report (See Limitations). This will lead to a potential underestimate of total out of pocket spending if there is omitted out of pocket spending by service users at Ministry of Health facilities. It also forces the omission of small amounts of health financing contributed by other governmental units paying for MoH services via intergovernmental financial transfers.

Dubai Department of Finance (DoF)

The DoF provided the HASD team with data on health expenditures paid by the Dubai government to three recipients: Dubai Municipality, Dubai Police, and Dubai Ambulance for health services rendered. The available data included a detailed breakdown of expenditures and funds based on the Dubai Government Chart of Accounts, which includes the cost center and line item details. The breakdown was essential in accurately identifying and mapping health expenditures, and to ensure consistency with reports from the recipients of the funds. The DoF also provided data for amounts paid towards insurance claims for government employees distinguishing clearly between funds paid towards insurance premiums and health care claims. These data were adjusted based on the government claims data for ENAYA and Al-Madallah schemes in eClaim Link Data. The DoF data did not indicate which providers and health services were used.

Dubai Municipality, Dubai Police, and Dubai Ambulance service also independently reported the receipt of some revenue for health services. However, these amounts were excluded from the analysis as it could not be established whether the revenue was double counting receipts from DoF¹.

Two datasets were used to analyze DHA's activities and map them to SHA 2011 classifications.

- 1. DHA Revenue Dataset: Detailed revenue data were collected by DHA for each cost-center and type of payment. However, the details regarding the nature of the healthcare services and the sources of revenue could not be definitively established from the data. These revenue data were not included in total health spending calculations, but they were used to triangulate and validate estimates of out-of-pocket (OOP) expenditures.
- 2. DHA Expenditure Dataset: Detailed government expenditure data were collected by DHA for each cost-center by item definition, and facility type. The cost-centers were classified into outpatient, inpatient and daycare services using utilization data published by DHA Health Information and Statistics department.

Dubai Health Authority (DHA)

 $^{^{1}}$ It is possible, but less likely that the revenue reported by Dubai Municipality, Dubai Police, and Dubai Ambulance represent out of pocket payments by service users. The total amount of DoF revenue excluded in this manner accounts for less than 1% of total health spending in Dubai

eClaim Link Data

The administrative data for private health insurance in 2016 and 2017 were extracted from eClaim Link, operated by the DHA. The system records all health insurance transactions reported through the system for 2016 and 2017. The datasets included the claims transactions data for all Dubai based policies with details of the services provided, and the financial transaction information for each service episode. The patient's out of pocket share for claims was missing in 29% of service episodes. The missing data for patient share of claims was imputed by modeling first the probability of incurring any out-of-pocket cost for an episode and then multiplying this probability by an estimate of average out of pocket payment for episodes by type of facility. The data were then classified by payer type, provider type, and service type so that it could be mapped to SHA 2011. The raw and imputed patient share data were also used to triangulate OOP expenditures.

Dubai Household Health Survey (DHHS) 2018

The DHHS is the largest comprehensive household survey of healthcare and health issues carried out in the Emirate of Dubai. The survey provides a statistically accurate and representative outlook of key health and healthcare variables across the entire population of Dubai. It was first conducted in 2009, and repeated in 2014 and 2018.

The surveys of 2014 and 2018 were based on a multi-stage stratified cluster sample. The sampling was designed so that after weighting it would be representative of four sub-populations: UAE citizens, Non-Citizens living in households, Non-citizens living in collective housing, and Non-citizens living in labor camps. Surveyors per-

sonally 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 was designed and led by the Dubai Statistics Center (DSC), and 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 Dubai Statistics Center because UAE citizens were oversampled. After weighting, the sample was representative of a 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, 2,342 were Non-Citizens in Households, 1,335 were Non-Citizens in collective housing, and 288 were Non-Citizens in labor camps. The samples in 2014 and 2018 included a total of 3271 and 2200 separate household units respectively. The survey was sanctioned by the institutional review board of the Dubai Health Authority.

The surveyors each 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 dis-

cretionary 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.

The analysis calculated the probability that each of the 4 categories of household would have any discretionary, or any outpatient, or any inpatient out of pocket spending. For outpatient spending the reporter noted the number of outpatient encounters experienced in a 30-day period and the number of hospital admissions experienced in a 12-month period. Then for each type of household the probability of any spending was multiplied by a weighted estimate of the average total out of pocket expenditure for households who incurred that type of event. Estimates were adjusted for the incidence of multiple outpatient visits in a month. Only 5 households reported greater than one hospitalization, so this adjustment was negligible for hospitalization. Health care spending data can be dominated by outliers that can dramatically skew estimates of average expected spending in small samples. This was found to be true of the DHHS health spending data. Consequently, all calculations of average health spending excluded outliers above the 99th percentile to reduce the skewness of the data.

Estimates of outpatient and discretionary spending in the last 30 days were annualized to offer estimates of total annual out of pocket spending for each of the four types of households. Finally, total annual spending for each type of household in 2018 was multiplied by estimates of the proportion of these households in the population of Dubai in 2014 based on the evidence that at this time there were 8% UAE citizens, 42% UAE non-citizens living in households, 11% UAE non-citizens living in collective housing, and 39% living in labor camps.

The findings on out of pocket spending for both 2014 and 2018 were used to interpolate to 2016 and 2017 by adjusting for population growth of the total population and assuming that the proportion of each type of household remained constant. Costs were deflated from 2018 to 2016 and 2017 using the consumer price index so that costs are expressed in real AED with a baseline of 2014.

The data from the DHA revenue dataset and eClaimLink were used for triangulation to ensure the OOP expenditure estimate from the survey data was accurately captured.

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

Health Accounts Production Tool

Summary expenditure data were analyzed and tabulated first in Microsoft Excel and then validated using the HA Production Tool (HAPT). The HAPT tool was developed by Health Systems 20/20 with inputs and support from key NHA stakeholders including the WHO and World Bank. The tool streamlines and simplifies the estimation and mapping process, thereby ensuring an internationally standardized production of SHA.

Projection of Health Expenditure

The health expenditure for 2016 and 2017 was projected into the future until 2021 using two parameters: (1) the growth of health expenditure per capita, (2) the population growth. The growth rate of health expenditure per capita was estimated using linear regression. The historical growth rate of the population of Dubai was assumed to be a constant 2.7% based on previous evaluations and expert opinions.

Limitations

There are some limitations of the results from HASD. First, 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. Second, the insurance payment data obtained from some government entities did not indicate financial allocations by category of health care providers and services used. Third, the data did not reflect the portion of collected premiums for private insurance that was not

used to pay claims. Thus, the operating costs of the private insurance companies that would be attributed to the medical loss ratio or "loading" are omitted. Finally, the data needs to include more information about the precise nature of medical treatments provided outside of Dubai based on SHA definitions.



HASD 2017

As shown in Table 1, between 2016 and 2017 health expenditure grew at approximately the same rate as GDP and remains in the range of 4.2% to 4.3% of GDP. The relative shares of out of pocket, private insurance, and government health spending remained roughly similar across 2016 and 2017.

Table 1. Health Accounts Summary Indicators for 2016 and 2017 (adjusted for inflation)

	Indicators	2016	2017
1.	Health expenditure (HE) % Gross Domestic Product (GDP)	4.2%	4.3%
2.	General Government Expenditure on Health (GGHE) as % of GDP	1.8%	1.6%
3.	General Government Expenditure on Health (GGHE) as % of HE	43.3%	37.8%
4.	Private Expenditure on Health (PvHE) as % of HE	56.7%	62.2%
5.	Out-Of-Pocket expenditure as % of PvHE	19.4%	20.6%
6.	Out-Of-Pocket expenditure as % of HE	11.0%	12.8%
7.	Private Insurance Claims as % of PvHE	80.6%	79.4%
8.	Expenditure on Inpatient care as % of HE	22.5%	25.7%
9.	Government Expenditure on Inpatient care as % of GGHE	25.2%	32.4%
10.	Prevention and Public Health services as % of HE	1.5%	1.6%
11.	Medical goods as % of HE (not including IP)	18.4%	18.0%
12.	Current expenditure on health / capita at exchange rate (NCU per US\$)	1,167	1,002
13.	Current expenditure on health / capita at Purchasing Power Parity (NCU per US\$)	2,218	2004
14.	General government expenditure on health / cap x-rate	505	379
15.	General government expenditure on health / cap Purchasing Power Parity (NCU per US\$)	960	757
16.	OOPS / capita at exchange rate (NCU per US\$)	129	129
17.	Exchange Rate (NCU per US\$)	3.67	3.67
18.	PPP 2016 (NCU per US\$)	1.9	2
19.	Gross domestic product - Price index (2006=100) Million AED	378,765	390,543
20.	Financial Population*	3,700,000*	4,560,000*
21.	Current Health Expenditure – Million AED	15,851	16,773

^{*}The estimates of financial population are based on the data provided. Further explanation of the data is provided under the section Marketplace Insights – Households

Sources and flow of funds

In 2017, the biggest source of funds and financing schemes were employers who accounted for 49%, of funding followed by the government who accounted for 38%. Hospitals received less than half of the pooled funds (45%) with the majority of the funds being used towards curative care (57%) which includes inpatient, outpatient and daycare. Healthcare expenditure outside Dubai ("Import") is estimated at 4%. Expenditure for preventive care remains very low at 2%. (Preventive care not shown in Figure 1).

Figure 1. Flow of Health Funds from Source to Schemes to Providers to Services, Dubai 2017

Flow of Funds Unspecified, 1% 100% Retailers, 15% Administrative, 8% 90% Ancillary, 2% PrivateEmployers 2 Employers, 49% Medical goods 80% 49% Import, 4% 18% 000 HQ, 9% 16.77 B 70% Ancillary, 14% 16.77 B 60% Other, 3% Clinics, 24% 50% Households, 13% OOP, 13% 40% 30% Government, 38% Government, 38% Hospitals, 45% Curative, 57% 20% (16.77 B) 10% 0% **Financing Schemes** Source of Fund **Health Providers** Services Provided

Financing schemes that managed the healthcare expenditure

The current health expenditure of Dubai increased by 6% from 2016 to 2017. As shown in Table 2, private employers were the largest source of funds estimated at 8,282 M AED (49%) in 2017. The government financing schemes accounted for 6,338 M AED (38%) in 2017. Household out of pocket contribution was estimated at 2,152 M AED (13%) in 2017. Figure 1 shows that the overall flow of funds in 2017 generally resembles past financial flow patterns in the health care system.

Within the 6338 M AED in funds managed by government entities, the majority of spending was by the government of the Emirate of Dubai, estimated at 5952M AED (94%) while the federal government contributed only 386 M AED (6%).

In 2017, Dubai experienced complete implementation of Law 11 – ISAHD resulting in universal health insurance coverage. Over the last 5 years, there was a significant increase in funds from private employers and government and a decrease in funds from households. ISAHD successfully decreased the financial burden borne out of pocket and shifted that burden to collective financing operations of corporations and the government. Comparing data from 2017 to 2014 in Table 4, there was a 15.6% annual increase in government funds, a 10.6% decrease in household funds and an 18.7% increase in the health sector funds coming from corporations.

Table 2. Financing Schemes (HF) by Financing Sources (FS) in 2017 (HF X FS)

	Inflo	w funds of health care financing schemes	FS.1	FS.4.2	FS.6.1	All FS	Share of FS
		U.A.Emirates dirham (AED), Million Financing schemes	Transfers from government domestic revenue (allocated to health purposes)	Compulsory prepayment from employers	Other funds from households n.e.c		
HF.1	Government sc	hemes and compulsory contributory health care financing schemes	6,338	8,282		14,620	87%
H	HF.1.1	Government schemes	6,338			6,338	38%
	HF.1.1.1	Central government schemes	386			386	2%
	HF.1.1.2	State/regional/local government schemes	5,952			5,952	35%
H	HF.1.2	Compulsory contributory health insurance schemes		8,282		8,282	49%
	HF.1.2.2	Compulsory private insurance schemes		8,282		8,282	49%
HF.3	Household out	of-pocket payment			2,152	2,152	13%
All HF			6,338	8,282	2,152	16,773	100%
Share o	of HF		38%	49%	13%	100%	

Estimates of Health Financing by Financing Scheme (HF x FS) for 2016 are in Appendix Table 1.

Tables 3 and 4 detail the annual growth of health spending by revenue source and financing scheme indicating how there was a sudden switch away from voluntary prepayment schemes prior to 2015 to compulsory prepayment schemes after 2015. Healthcare expenditure in Dubai experienced a steady increase since 2012. Annual growth rates in health spending were 15%, 11%, 12%, and 6% in 2013, 2014, 2016, and 2017 respectively.

Table 3. Funds of Health Care Financing over Time, Dubai (2012-2017)

Inflow Funds of health care financing schemes (Million AED)						
FS.1 Transfers from government domestic revenue (allocated to health purposes)						
FS.4.2 Compulsory prepayment from employers						
FS.5 Voluntary prepayment						
FS.6.1 Other funds from households						
Total						

2012	2013	2014	2016	2017
3,242	3,299	3,816	6,858	6,338
936	1,435	1,559	7,246	8,282
3,605	3,789	4,238	0	0
2,152	2,931	3,159	1,746	2,152
9,934	11,455	12,772	15,851	16,773

 Table 4. Financing Schemes over Time, Dubai (2012-2017)

Financing schemes, Million AED						
HF.1.1 Government schemes						
HF.1.2 Compulsory contributory health care financing schemes						
HF.2 Voluntary health care payment schemes						
HF.3 Household out-of-pocket payment						
Total						

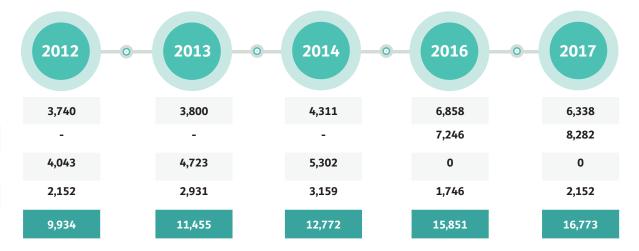
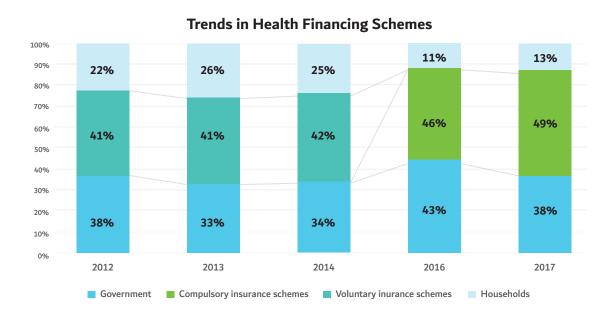


Figure 2 re-iterates the 2016 switch from voluntary to compulsory schemes as a share of total health spending.

Figure 2. Trends in Health Financing Schemes, Dubai (2012-2017)



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

As shown in Table 5, the largest amount of expenditure for 2017 went to hospitals amounting to 7,567 M AED (45%), followed by the primary health care centers 4,104 M AED (24%). Ancillary providers such as ambulance, medical and diagnostic labs, and imaging centers received 253 M AED (2%) while pharmacies received 2,511 M AED (15%). Health governance and providers of health care system administration and financing received 1,508 M AED (9%) of the funds. Households allocated 834 M AED towards discretionary health care spending. Only 726 M (4%) was given to providers outside Dubai. An insignificant share of total expenditure (1%) was classified as HP.n.e.c. since it was unclear from the data which category of provider received these funds.

The HF.1.1 column of Table 5 shows that large shares of the government scheme's spending goes towards hospitals (52%) and health system administration (24%). In comparison, private insurance schemes provide a large share of their funds to hospitals (44%) and pharmacies (19%). As noted earlier, data about private health insurance spending on administration and claims management was not available.

The estimates of HP X HF table for 2016 are provided in the Appendix (Table 2).

Table 5. Health Providers (HP) by Financing Schemes (HF) in 2017 (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 FS	Share of FS
HP.1 Hospitals	6,898	3,296	273	3,022	3,602	670	7,567	45%
HP.3 Providers of ambulatory health care	3,455	1,074	97	977	2,381	649	4,104	24%
HP.4 Providers of ancillary services	253	244		244	9		253	2%
HP.5 Retailers and Other providers of medical goods	1,677	113		113	1,564	834	2,511	15%
HP.7 Providers of health care system administration and financing	1,508	1,508	16	1,492	[a]		1,508	9%
HP.9 Rest of the world	726				726		726	4%
HP.nec Unspecified health care providers (n.e.c.)	103	103		103			103	1%
All HP	14,620	6,338	386	5,952	8,282	2,152	16,773	100%
Share of HP	87%	38%	2%	35%	49%	13%	100%	

[[]a] The available data sources had no information on internal health insurance resources devoted to administration

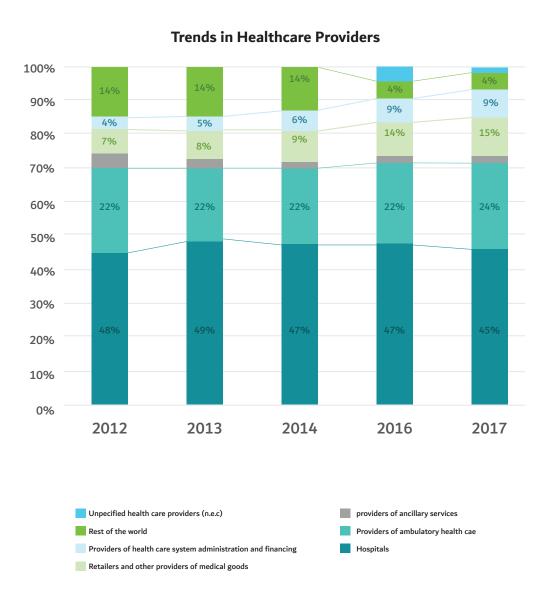
As shown in Table 6 and Figure 3 over the last 4 years there has been a slow decline in the share of expenditure towards hospitals (47% in 2014 to 45% in 2017). There was also a significant decrease in the share of healthcare expenditure outside of Dubai. The implementation of ISAHD could partially explain the shift of outside expenditure to within Dubai as providers in Dubai have become more financially affordable and accessible. Furthermore, there has been a sharp increase in the funds spent on retailers and providers of medical goods (9% in 2014 to 15% in 2017).

ISAHD has also resulted in higher government expenditures towards healthcare system administration and financing (6% in 2014 to 9% in 2016 and 2017). This measure should be monitored closely in the coming years to ensure efficiency via economies of scales. The bottom three rows of Table 6 show a reclassification away from Rest of the World and towards not elsewhere classified and towards health care system administration. These changes occurred because better data sources were added in 2016 that offered a clearer indication of funds going to the rest of the world and to administration. However, roughly 1% of spending in the new data system is going to health care providers that are not classifiable. Meaningful comparisons to past spending allocations are difficult to make.

Table 6. Funding received by Health Providers over time (Million AED), Dubai (2012-2017)

		2012	2013	2014	2016	2017
HP Code	Provider Type					
HP.1	Hospitals	4,756	5,593	5,986	7,381	7,567
HP.3	Providers of ambulatory health care	2,219	2,553	2,852	3,498	4,104
HP.4	Providers of ancillary services	368	190	219	235	253
HP.5	Retailers and Other providers of medical goods	745	868	1,184	2,160	2,511
HP.7	Providers of health care system administration and financing	379	608	706	1,410	1,508
HP.9	Rest of the world	1,434	1,643	1,826	633	726
HP.nec	Unspecified health care providers (n.e.c.)	-	-	-	534	103
All HP		9,934	11,455	12,772	15,851	16,773

Figure 3. Trends in Health Care Provider Funds Received, Dubai (2012-2017)



Health services expenditure through the various financing schemes

As shown in Table 7, in 2017, curative care received the biggest share of funds at 9,576 M AED (57%). A breakdown of curative cares indicates that inpatient care spending was 4,312 M AED (26%) and outpatient care spending was 4,851 M AED (29%). Ancillary service spending was 2,318 M AED (14%), medical goods spending was 3,021 M AED (18%) and preventative care spending was 266 M AED (2%). Health governance, administration of health system and financing represented 1,273 M AED (8%). Data on government schemes indicate that roughly 20% of the AED 6338 of government health spending was spent on health governance and administration. Data on administrative activities in private schemes was unavailable. Private insurance schemes and households contributed a majority of their funds towards outpatient care, 28% and 53% respectively. In comparison to the other two schemes, private insurance spent 20% and 22.5% on ancillary services and medical goods respectively. Estimates of HC X HF table for 2016 are provided in the Appendix (Table 3).

Table 7. Health Care Functions (HC) by Health Financing Schemes (HF) for 2017 (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 FS	Share of FS
HC.1 Curative care	8,258	3,529	293	3,237	4,729	1,318	9,576	57%
HC.1.1 Inpatient curative care	4,132	2,056	126	1,930	2,076	180	4,312	26%
HC.1.2 Day curative care	413	44		44	369		413	2%
HC.1.3 Outpatient curative care	3,713	1,429	166	1,263	2,284	1,138	4,851	29%
HC.2 Rehabilitative care	55	55		55			55	0%
HC.4 Ancillary services (non-specified by function)	2,318	631	20	611	1,687		2,318	14%
HC.4.1 Laboratory services	1,283	230	12	218	1,053		1,283	8%
HC.4.2 Imaging services	793	159	8	152	634		793	5%
HC.4.3 Patient transportation	242	242		242			242	1%
HP.5 Medical goods (non-specified by function)	2,187	321	57	264	1,865	834	3,021	18%
HP.6 Preventive care	266	266		266			266	2%
HP.7 Governance, and health system and financing administration	1,273	1,273	16	1,257	[a]		1,273[a]	8% [a]
HP.8 Unspecified health care services	261	261		261			261	2%
HC.9 Other health care services not elsewhere classified (n.e.c.)	2	0.5	0.4	0.1	1		2	0%
All HP	14,620	6,338	386	5,952	8,282	2,152	16,773	100%
Share of HP	87%	38%	2%	35%	49%	13%	100%	

[[]a] Data sources did not include information on administrative activities by private insurers. This value was not zero, and its omission renders the estimate of the total and the share for HC.7 incomplete.

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

As shown in Table 8, in 2017, hospitals received a total of 7,567 M AED of which 6,511 M AED was spent on curative care, 828 M for ancillary services, 125 M for medical goods, and 49 M for preventive care. Primary healthcare centers received a total of 4,104 M of which 2,671 M was for curative care, 991 M for ancillary, 241 M for medical goods, and 199 M for preventive care. The Rest of the World provided a wide array of services totaling 726 M AED with majority spent towards curative care (336 M).

The majority of preventive care was provided in ambulatory settings (199 M out of 266 M). Similarly, a majority of ancillary services were provided in hospitals (828 M) and ambulatory settings (991 M).

The estimates of HC X HP table for 2016 are provided in Appendix Table 3.

 Table 8. Health Care Functions by Health Care Providers in 2017

Financing schemes 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	6,511	2,671			56	336	3	9,576	57%
HC.1.1 Inpatient curative care	3,784	331			56	142		4,312	26%
HC.1.2 Day curative care	342	63				8		413	2%
HC.1.3 Outpatient curative care	2,385	2,277				186	3	4,851	29%
HC.2 Rehabilitative care	54	1						55	0.33%
HC.4 Ancillary services (non-specified by function)	828	991	253	67		180		2,318	14%
HC.4.1 Laboratory services	433	670	11	43		126		1,283	8%
HC.4.2 Imaging services	395	321		24		54		793	5%
HC.4.3 Patient transportation			242					242	1%
HP.5 Medical goods (non-specified by function)	125	241		2,444		210		3,021	18%
HP.6 Preventive care	49	199			18			266	2%
HP.7 Governance, and health system and financing administration					1,273			1,273	8%
HP.8 Unspecified health care services					161		100	261	2%
HC.9 Other health care services not elsewhere classified (n.e.c.)	0.3	1.3	0.4					2	0.01%
All HP	7,567	4,104	253	2,511	1,508	726	103	16,773	100%
Share of HP	45%	24%	2%	15%	9%	4%	1%	100%	

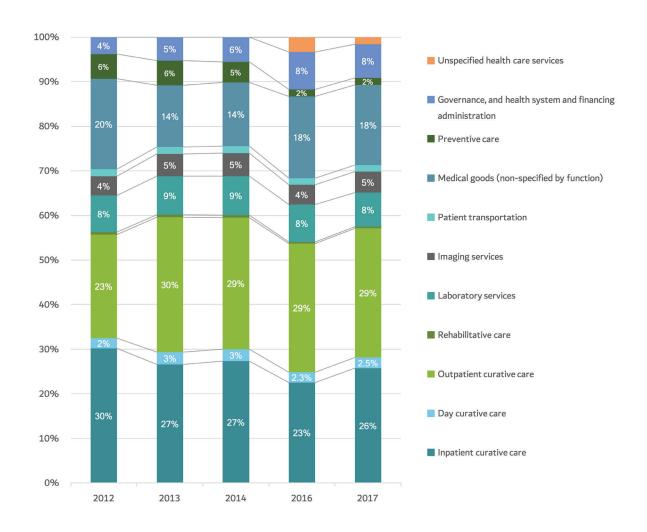
In Table 9 one can see that the aggregate of 3 categories of curative care (outpatient, day services, and inpatient) to see that over the last 5 years, curative care has accounted for the bulk of the healthcare services provided. Figure 4 shows that the aggregate of these 3 categories of curative care has stayed in the range of 55% to 60% of the total costs. The share of inpatient, outpatient and day care is relatively stable. The appearance of a decrease in preventive care could be attributed to lack of data. It is also important to note that there has been growth in the government's expenditure on governance and financing administration.

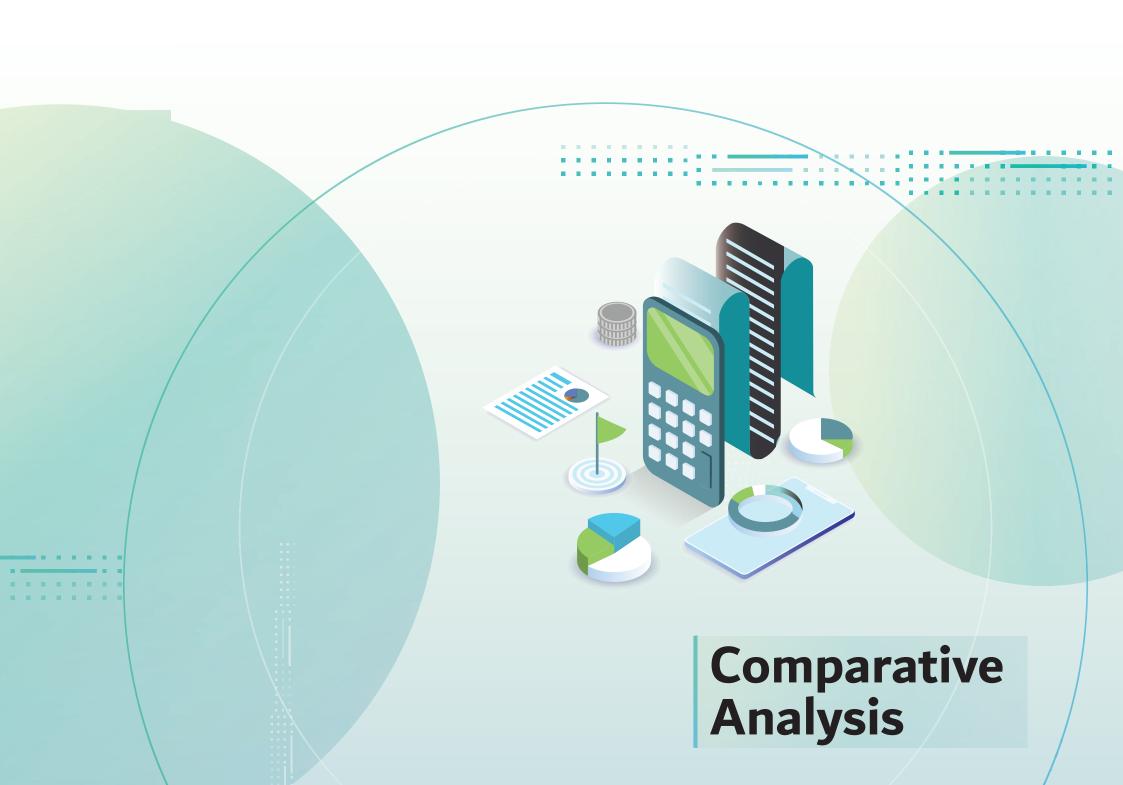
Table 9. Expenditures on Health Care Functions over Time (Million AED), Dubai (2012-2017)

HC (Code	Healthcare Service	2012	2013	2014	2016	2017
HC.1		Curative care	5,505	6,820	7,524	8,509	9,576
	HC.1.1	Inpatient curative care	2,981	3,043	3,457	3,574	4,312
	HC.1.2	Day curative care	232	318	341	363	413
	HC.1.3	Outpatient curative care	2,292	3,458	3,726	4,571	4,851
HC.2		Rehabilitative care	52	65	74	56	55
HC.4		Ancillary services (non-specified by function)	1,398	1,734	1,958	2,262	2,318
	HC.4.1	Laboratory services	812	984	1,110	1,330	1,283
	HC.4.2	Imaging services	435	574	647	708	793
	HC.4.3	Patient transportation	151	175	202	224	242
HC.5		Medical goods (non-specified by function)	2,002	1,584	1,805	2,917	3,021
HC.6		Preventive care	550	634	584	245	266
HC.7		Governance, and health system and financing administration	377	607	704	1,327	1,273
HC.8		Unspecified health care services	-	-	-	531	261
HC.9		Other health care services not elsewhere classified (n.e.c.)	49	7	122	3	2
All HC			9,934	11,455	12,772	15,851	16,773

Figure 4. Trends in Healthcare Functions, Dubai (2012-2017)

Trends in Healthcare Functions





Comparative Analysis

The aim of this section is to compare the results of the SHA analysis for Dubai with other regional and national countries (selected) from the Organization of Economic Cooperation and Development (OECD). Data from Qatar provide the closest regional comparison to Dubai's Healthcare system given that Qatar's insurance structure and population distribution is similar to that of Dubai. In addition, Qatar is the only GCC country that has produced National Health Accounts as recently as 2012. SHA 2011 is institutionalized in OECD and the data is produced regularly. This group of healthcare systems were chosen to create a basket of countries that are similar to the current or future health financing system in Dubai. These health systems are in the USA, United Kingdom, France, Canada, Germany, Switzerland, and South Korea.

The data for the analysis was obtained from the WHO Global Health Expenditure Database and the OECD Health Expenditure and Financing Statistics for the years 2016 or 2017 depending on availability.

Dubai has the lowest value among the selected countries when comparing Current Health Expenditure (CHE) per capita and General Government Health Expenditure (GGHE) as a percentage of current health expenditure (CHE). It has the second lowest value when comparing CHE as percentage of GDP and preventive care as percentage of CHE. It has the highest value among the selected countries when comparing administrative and ancillary expenditure as percentage of CHE.

Based on the comparisons shown in Figure 5 and Figure 6, given the size of the healthcare market, Dubai has substantial expenditures in the administrative and ancillary services. Future policies could explore streamlining the healthcare system to reduce the administrative burden and higher utilization of ancillary services.

Figure 7 shows how Dubai's preventive spending share is lower than many OECD countries. Dubai could consider allocating more resources towards preventive health care while reducing or maintaining the current level of OOP as share of CHE.

Additional comparison figures are provided in the Appendix.

Figure 5. Share of Administration and Financing Expenditure of Current Health Expenditure

Administrative Expenditures as % of CHE

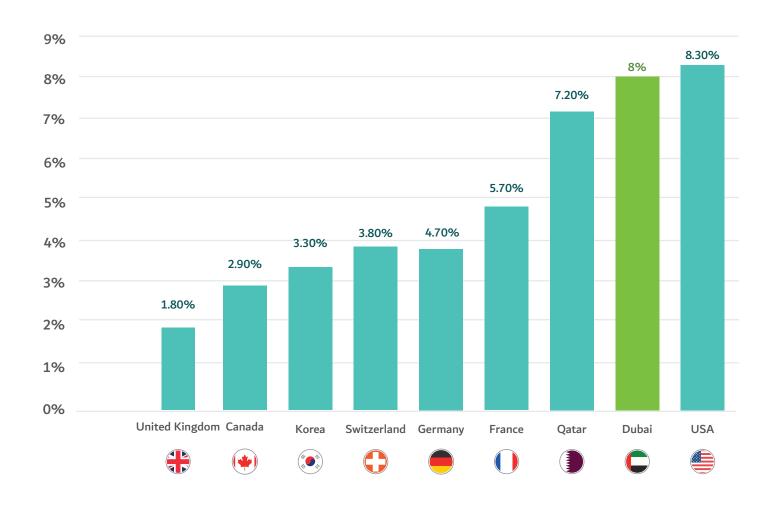


Figure 6. Share of Ancillary Services Expenditure of Current Health Expenditure (CHE)

Ancillary Expenditures as % of CHE

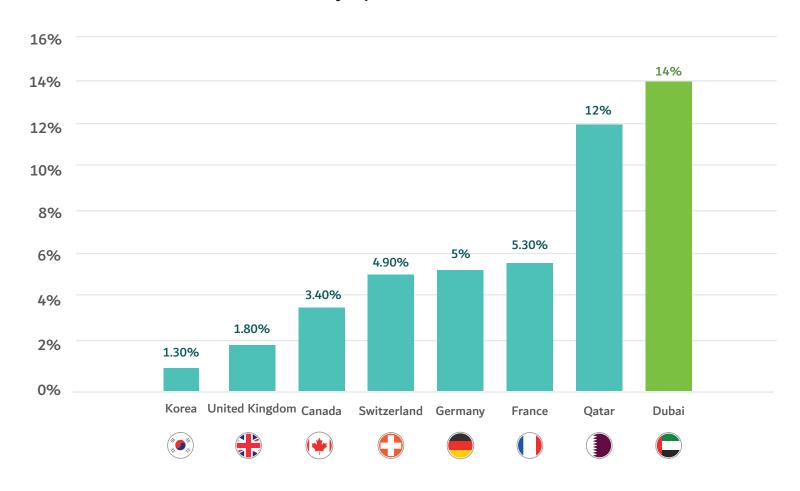
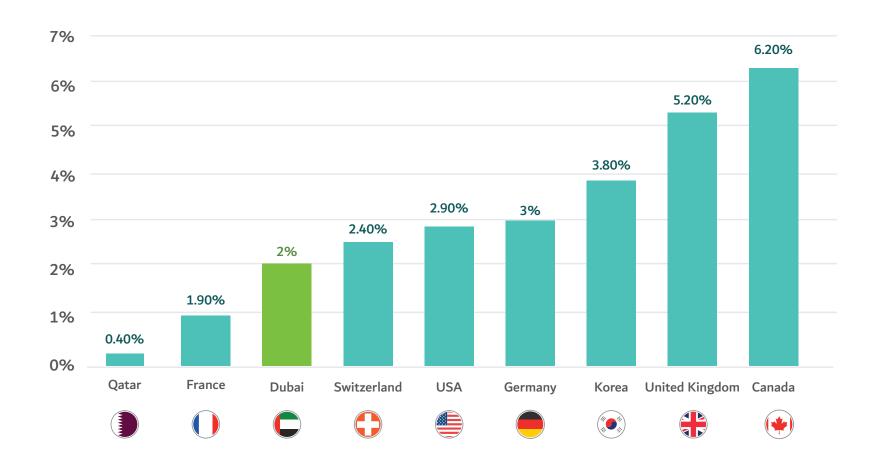


Figure 7. Share of Preventive Care Expenditure of Current Health Expenditure (CHE)

Preventive Care Expenditure as % of CHE



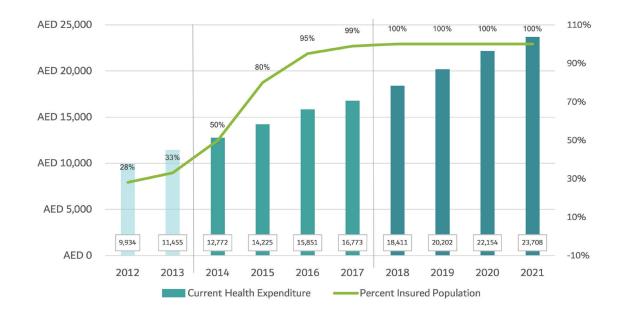


Marketplace Insights

The implementation of ISAHD in 2014 has led to many significant changes in the healthcare sector. Based on the current analysis, the annual growth rate (adjusted for inflation) of the current health expenditure has dropped has slowly declined from 7.6% 2014 to 5.8% in 2016 and 2017. There has been a clear shift of expenditure from the government to the private sector. The blue bars in Figure 8 extrapolate past growth rates to predict health expenditure to 2021.

Figure 8. Projected Growth Rate of Current Health Expenditure

Projected Growth Rate of Current Health Expenditure



Government

Our analysis of the Health Financing Schemes X Financing Sources table indicates that there has been a steady increase in the Current Health Expenditure with a decline in the share of the expenditure by the government. The decrease in the government's share of funds is matched equivalently by a higher share of funds from employers.

The government spends substantially on governance and administration of the health system and financing. Dubai places right below United States when comparing the share of CHE towards governance and administration. This is striking because our calculation of governance spending does not even include governance and administration activities inside private insurance companies. (Data limitations precluded estimating this private sector expenditure.)

The majority of government funds were allocated towards hospitals especially for curative care (inpatient and outpatient care) and medical goods. The goal of ISAHD was to make the primary care model more accessible and affordable, thereby decreasing the burden on hospitals. The evidence indicates there still are barriers to accessing primary care that need to be explored.

Health Insurance Companies and TPAs

Since the implementation of ISAHD, private health insurers and TPAs preside over a large share of current health expenditure at 49%. This share is expected to increase as the government slowly decreases its funding, and privately insured households increase their utilization of healthcare due to higher coverage than previous years. With the planned implementation of DRGs and prospective payment mechanisms,

the share of expenditure for health insurance companies is expected to stabilize in the next 3-5 years.

Funds from private insurance are spent mostly on curative care (57%), followed by ancillary services (20%) and medical goods (22.5%). Dubai currently ranks the highest in the utilization of ancillary services and has one of the lowest allocations to preventive care among all OECD countries.

Households

The main goal of ISAHD was to ensure that every resident of Dubai has access to affordable health care. In 2016, all of the residents were covered under government or private insurance. Households spent the majority of their out of pocket health care spending on outpatient care and medical goods. While the utilization of health services remained relatively stable, there was a steep increase in the purchase of medical goods as a result of the higher coverage. The presence of insurance lowered the effective out of pocket prices for medical goods and simultaneously increased utilization as well as out of pocket spending. This increase was mostly seen among Non-Emiratis in Households and Emiratis.

The insurance-induced changes in medical utilization post-implementation of ISAHD closely corroborates the experimental results of the RAND experiment conducted in the US that showed how more insurance coverage stimulates more utilization for the above-mentioned populations.

It is important to note that a growth of the financial population from 3.7 million to 4.56 million represents the addition of 860,000 new people to the financial protection system in Dubai in 2017. This represents an extremely high rate of growth of 23% between 2016 and 2017. This population growth rate is not aligned with the

6% growth of health expenditure over the same period seen in Table 1.

This apparent anomaly where the financially covered population suddenly grows in a year could be due to the heavily transient population of the blue-collar workers. Often, there is a large population of workers temporarily immigrating to Dubai when there is a high demand in the construction and infrastructure sectors and emigrating when the projects are completed. It is also important to note that the employer mandate to insure all workers began to apply to firms under 100 employees in July 2017 and this led to a surge in new insurance contracts in the middle of the year.

The data show that based on the numbers of insurance contracts, many new blue-collar workers did become covered by health insurance policies as mandated by Law 11. However, blue collar workers did not increase their per capita use of health services (See Figure 9). Potential explanations would be continued barriers to utilization. These range from low awareness of new insurance benefits, obstacles in scheduling, transport, and logistics, cultural and social barriers, fear of stigma, privacy concerns, and residual financial barriers from the co-payment levels. If the intent of Law 11 was to extend a safety net of effective health care coverage to all residents of the Emirate, then understanding the remaining barriers to care for Dubai's blue-collar workers should become a priority.

Figure 9 (a). OOP Expenditure Trend for Each Population Group

OOP Expenditure Trend for Each Population Group

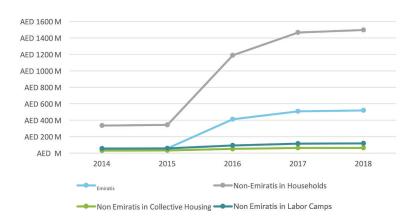
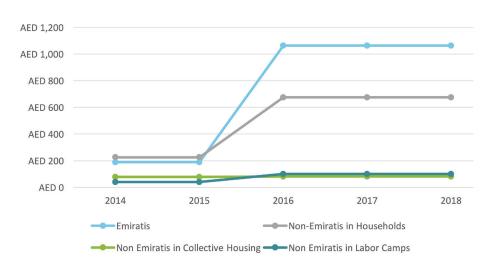
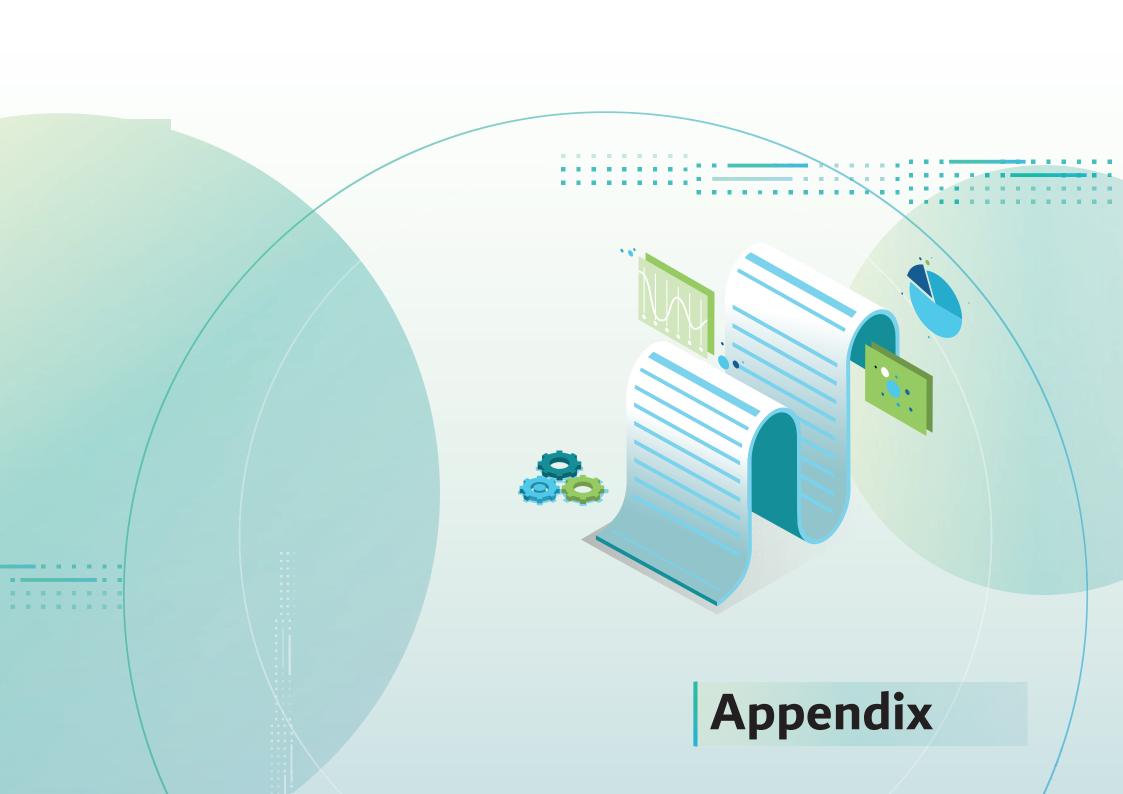


Figure 9 (b). OOP Expenditure per capita Trend for Each Population Group

OOP Expenditure per capita Trend for Each Population Group

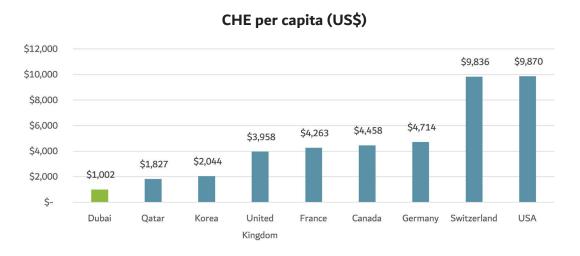




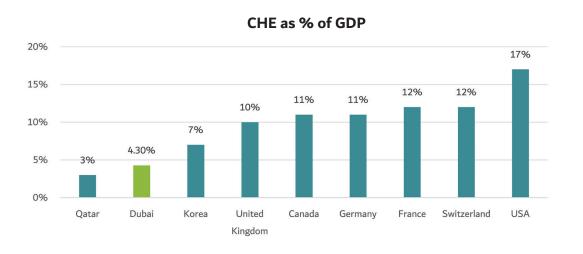
Appendix

Comparative Analysis with OECD Countries

Appendix Figure 1. Current Health Expenditure (CHE) per Capita (US\$)

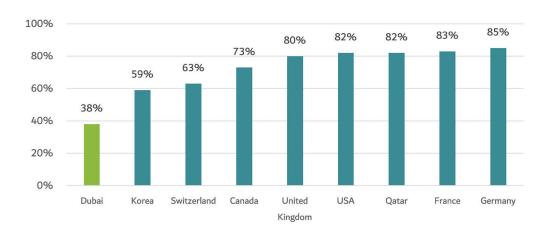


Appendix Figure 2. Current Health Expenditure (CHE) as Percentage of GDP



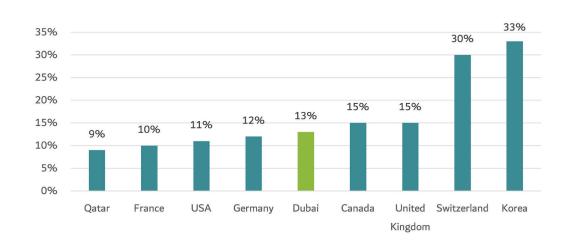
Appendix Figure 3. General Government Expenditure on Health (GGHE) as Percentage of Current Health Expenditure (CHE)

GGHE as % of CHE



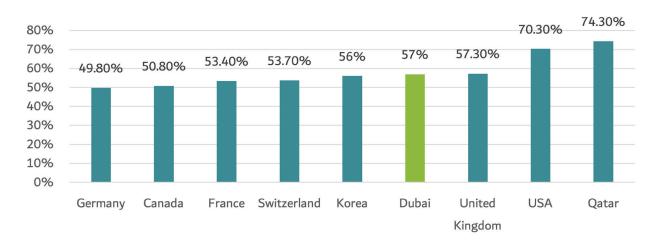
Appendix Figure 4. Share of Out of Pocket Expenditure of Current Health Expenditure (CHE)

OOP as % of CHE



Appendix Figure 5. Share of Curative Care Expenditure of Current Health Expenditure (CHE)

Curative Care Expenditures as % of CHE



SHA Tables for 2016

Appendix Table 1. Health Financing Schemes X Funds Of Health Care Financing Schemes

Inflow Funds of health care financing schemes U.A.Emirates dirham (AED), Million Health care providers	FS.1 Transfers from government domestic revenue (allocated to health	FS.4.2 Compulsory prepayment from employers	FS.6.1 Other funds from house-holds n.e.c.	All FS
HF.1 Government schemes and compulsory contributory health care financing schemes	6,858	7,246	0	14,104
HF.1.1 Government schemes	6,858	0	0	6,858
HF.1.1. Central government schemes	380	0	0	380
HF.1.1.2 State/regional/local government schemes	6,478	0	0	6,478
HF.1.2 Compulsory contributory health insurance schemes	0	7,246	0	7,246
HF.1.2.2 Compulsory private insurance schemes	0	7,246	0	7,246
HF.3 Household out-of-pocket payment	0	0	1,746	1,746
All HP	6,858	7,246	1,746	15,851

Appendix Table 2. Health Providers X Health Financing Schemes

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 FS
HP.1 Hospitals	6,754	3,471	198	3,273	3,283	627	7,381
HP.3 Providers of ambulatory health care	3,055	1,124	149	975	1,931	443	3,498
HP.4 Providers of ancillary services	235	226	0	226	9	0	235
HP.5 Retailers and Other providers of medical goods	1,483	93	0	93	1,390	677	2,160
HP.7 Providers of health care system administration and financing	1,410	1,410	33	1,377	0	0	1,410
HP.9 Rest of the world	633	0	0	0	633	0	633
HP.nec Unspecified health care providers (n.e.c.)	534	534	0	534	0	0	534
All HP	14,104	6,858	380	6,478	7,246	1,746	15,851

Appendix Table 3. Health care Functions X Health Financing Schemes

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 FS
HC.1 Curative care	7,439	3,197	213	2,984	4,242	1,070	8,509
HC.1.1 Inpatient curative care	3,428	1,729	56	1,673	1,699	146	3,574
HC.1.2 Day curative care	363	64	0	64	299	0	363
HC.1.3 Outpatient curative care	3,648	1,404	157	1,247	2,243	923	4,571
HC.2 Rehabilitative care	56	56	0	56	0	0	56
HC.4 Ancillary services (non-specified by function)	2,262	762	52	710	1,501	0	2,262
HC.4.1 Laboratory services	1,330	368	35	333	963	0	1,330
HC.4.2 Imaging services	708	170	17	153	538	0	708
HC.4.3 Patient transportation	224	224	0	224	0	0	224
HC.5 Medical goods (non-specified by function)	2,240	739	82	657	1,501	677	2,917
HC.6 Preventive care	245	245	0	245	0	0	245
HC.7 Governance, and health system and financing administration	1,327	1,327	33	1,294	0	0	1,327
HC.8 Unspecified health care services	531	531	0	531	0	0	531
HC.9 Other health care services not elsewhere classified (n.e.c.)	3	1	0	0	2	0	3
All HP	14,104	6,858	380	6,478	7,246	1,746	15,851

Appendix Table 4. Health care Functions X Health Providers

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	5,910	2,225	0	0	75	294	3	8,509	57%
HC.1.1 Inpatient curative care	3,297	91	0	0	75	111	0	3,574	26%
HC.1.2 Day curative care	294	65	0	0	0	5	0	363	2%
HC.1.3 Outpatient curative care	2,320	2,069	0	0	0	179	3	4,571	29%
HC.2 Rehabilitative care	56	1	0	0	0	0	0	56	0.33%
HC.4 Ancillary services (non-specified by function)	910	885	234	70	0	163	0	2,262	14%
HC.4.1 Laboratory services	528	635	10	42	0	115	0	1,330	8%
HC.4.2 Imaging services	382	250	0	27	0	48	0	708	5%
HC.4.3 Patient transportation	0	0	224	0	0	0	0	224	1%
HP.5 Medical goods (non-specified by function)	412	232	0	2,090	7	175	0	2,917	18%
HP.6 Preventive care	92	153	0	0	0	0	0	245	2%
HP.7 Governance, and health system and financing administration	0	0	0	0	1,327	0	0	1,327	8%
HP.8 Unspecified health care services	0	0	0	0	0	0	531	531	2%
HC.9 Other health care services not elsewhere classified (n.e.c.)	0	2	0	0	0	0	0	3	0.01%
All HP	7,381	3,498	235	2,160	1,410	633	534	15,851	100%



المقدمة



معالي/ حميد القطامي الـمـديـر الـعـام هيئــة الصحــة بدبــي

في ظل القيادة الرشيدة لصاحب السمو الشيخ محمد بن راشد آل مكتوم – نائب رئيس الدولة، رئيس مجلس الوزراء، حاكم دبي – تشهد كافة القطاعات الحيوية في إمارة دبي تطورا ملحوظا وتقدما يفوق التوقعات وخاصة في القطاع الاقتصادي. ويرتكز الهدف الأساسي لهذا التقدم في بناء بيئة اقتصادية واجتماعية مستدامة قادرة على تلبية كافة المتطلبات والاحتياجات الصحية لجميع قاطني إمارة دبي.

وتزامنا مع إكتمال تطبيق قانون الضمان الصحي الإلزامي رقم 11 لسنة 2013، شهد القطاع الصحي في إمارة دبي تطورا ملموسا وسريعا. حيث كرست هيئة الصحة بدبي جميع الامكانيات المتاحة لضمان استمرارية وجودة وسهولة الحصول على الخدمات الصحية لكافة سكان إمارة دبي وزوارها.

يشكل توفير مصادر تمويل مستدامة وكافية حجر الأساس لنجاح أي نظام صحي

ومن دواعي سرورنا أن نطلق النسخة الثالثة على التوالي لتقرير الحسابات الصحية في إمارة دبي للأعوام المالية 2017-2016. حيث يعكس نتائج التقرير ما تم تحقيقه في ظل تطبيق التغطية التأمينية الشاملة، والتي ساهمت بشكل فعال في دعم عملية اتخاذ القرار المستند على الأدلة وذلك لجعل الرعاية الصحية في متناول الجميع وبذات جودة عالية. كما يعد هذا التقرير المعيار الأساسي لإنتاج نظام الحسابات الصحية الوطنية لدولة الإمارات العربية المتحدة، بما يتماشى مع المنهج العالمي لتصنيف الإنفاق على الصحة.

وقد استند إصدار هذه النسخة من التقرير على حاجتين أساسيتين:

- قياس الأبعاد المالية لنظام الرعاية الصحية في إمارة دبي والذي بدوره سيتيح الفرصة لتوزيع
 مبالغ التمويل بين القطاع الصحي الحكومي والخاص بكفاءة وفعالية عالية.
- مراقبة التغيرات في توزيع الموارد المالية بين القطاع الصحي الحكومي والخاص وإتاحة المجال للمقارنات المعيارية مع باقي دول العالم، حيث مراقبة التغيرات المالية على مدى الأعوام القادمة والفائتة ستوفر البيانات اللازمة لقياس حجم الاستثمار الصحي في المستقبل لكل من الحكومة والمستثمرين.

وبعد النجاح اللافت الذي حققه إصدار تقرير الحسابات الصحية لإمارة دبي؛ تتقدم هيئة الصحة بدبي بجزيل الشكر والعرفان لجميع الجهات الخارجية المشاركة لمساهمتهم الفعالة والمهمة لتحويل نظام دبي الصحي إلى نظام كفء وفعال.

وبالختام، نتطلع قدما لاستمرار التعاون مع جميع الجهات المشاركة والحصول على الدعم المستمر والمنشود لإصدار التقرير السنوي "حصد". كما أدعوهم للاطلاع على المعلومات الواردة في هذا التقرير لدعم اتخاذ القرارات التي ستمكنهم من تقديم وتأمين أرقى أنواع الخدمات الصحية فلإمارة.

ا الرسالة



المدير التنفيذي

صالح الهاشمي مؤسسة دبي للضمان الصحي

تزامنا مع إطلاق وتطبيق برنامج اسعاد (منظومة الضمان الصحي بدبي) ونظرا لهذه الخطوة فإنه من المهم مراقبة تطور التمويل الصحي لاتخاذ أي قرار بشأن الحيز المالي الصحي ومن أجل توفير تمويل مستدام وتخصيص الموارد المناسبة.

وتماشيا مع معايير منظمة الصحة العالمية والهيئة الوطنية للصحة، فإن الحسابات الصحية توفر مؤشرات رئيسية للتمويل الصحى كل عام، الامر الذي ينعكس على القرارات والسياسات ذات الصلة. كما تسمح الحسابات الصحية بإنشاء مقارنة عالمية لمؤشرات تم اختيارها، مما يمكننا من تحسين مدخلات التمويل لحسابات صحية أفضل. وبالإضافة إلى ذلك، يقدم تقرير الحسابات الصحية لإمارة دبي حصد للأعوام المالية 2017-2016 نظرة ثاقبة لمؤشرات تمويل القطاع الصحى لدبي.

كما أود أن أثني على جهود فريق حصد الفني لعملهم على تقرير الحسابات الصحية من خلال تبني وتطوير المنهجيات، ولجهودهم المكثفة للحصول على بيانات دقيقة والتي بدورها ستساعدنا على اعادة توجيه سياساتنا الحالية نحو نظام صحي عادل وفعال.

شكر وتقدير

تم توفير التقرير الشامل للحسابات الصحية لإمارة دبي (حصد) لأعوام المالية 2016-2017 بجهود كبيرة من قبل فريق مؤسسة دبي للضمان الصحي و بالتعاون مع الجهات المشاركة، حيث تطلب عملية جمع موثوقة للبيانات المتعلقة بالإنفاق الصحي المتدفقة عبر نظام الرعاية الصحية في دبي والتحقق من صحتها وتحليلها علميا وذلك بهدف نشر تقرير يتصف بالوضوح والشفافية ووضع الخطط والاستراتيجيات المطلوبة. ونخص بالشكر:

• **السيد/ صالح الهاشمي** – المدير التنفيذي لمؤسسة دبي للضمان الصحي – على إشرافه ودعمه المباشر في إطلاق النسخة الثالثة من الحسابات الصحية لإمارة دبي

الفريق الفني المسؤول عن تنفيذ "حصد" وإصدار التقرير ضم كل من:

• د. مینو مهاك

أخصائي، مؤسسة دبي للضمان الصحي

• السيدة / خديجة محمد المندوس

رئيس مكتب المدير التنفيذي، مؤسسة دبي للضمان الصحي

• السيد/ فيليب سواني

أخصائي أول، مؤسسة دبي للضمان الصحي

• د. الضو عبدالله سليمان

مستشار، قطاع الاستراتيجية والتطوير المؤسسي

• د. دیفید بیشای

استشاري اقصاديات الصحة رئيسي، جامعة جونز هوبكنز

• السيدة/ شرينا مالافيا

استشاري اقتصاديات الصحة، جامعة جونز هوبكنز

الملخص التنفيذي

في عام 2013 طبقت إمارة دبي القانون رقم 11 بشأن الضمان الصحي في إمارة دبي لتزويد جميع المقيمين لديها بتغطية تأمينية عالمية، والذي يطلق عليه كذلك منظومة الضمان لتعزيز الصحة في دبي (اسعاد)، حيث أصبح القانون قيد التنفيذ في الربع الأول من 2014 و أحدث تغييرات كبيرة لقطاع الرعاية الصحية. وقد كان الهدف من اسعاد هو تحقيق التغطية الشاملة بحلول منتصف 2016 وزيادة القدرة على تحمل تكاليف الرعاية الصحية وتسهيل الحصول عليها. وعليه لابد من تحليل ومراقبة سريان الانفاق خلال النظام لضمان تطبيق منظومة اسعاد بشكل جيد ولتشكيل سياسات مستقبلية، وذلك يتطلب جمعا وتحليلا معتمدا للبيانات بناء على المعايير المعتمدة.

يقدم نظام الحسابات الصحية لدبي (حصد) حسابا واقعيا للنفقات الصحية من قبل الحكومة والقطاع الخاص، من خلال مهام الرعاية الصحية ونوع مقدم الرعاية الصحية.

حيث يستند التقرير على البيانات التي تم جمعها بين عامي 2016 و 2017 مع التعديل القائم على معدل التضخم باستخدام مؤشر سعر المستهلك مع خط اساس سنة 2014 حتى تتم مقارنته بنتائج 2012 و 2013 ولملاحظة كمية التغيرات منذ الفترة التي سبقت تطبيق منظومة اسعاد في 2014. وتماشيا مع التحليل السابق ذكره نقوم بتعريف حدود إنفاق القطاع الصحي لدبي التي تمت من قبل مواطني امارة دبي أو غير المواطنين حاملي تأشيرات صادرة من دبي بغض النظر عن موطنهم، علما بأن التقرير شمل نفقات حتى خارج الحدود الجغرافية للإمارة. كما يستثني الحساب نفقات الرعاية الصحية الخاصة بالسياح الذين اقاموا في دبي لفترة زمنية قصيرة، إلى جانب ذلك تم استثناء نفقات الرعاية الصحية ضمن الحدود الجغرافية لإمارة لدبي التي تم انفاقها بالنيابة عن مواطني الامارات الاخرى أو من قبل العاملين غير المواطنين حاملي تأشيرات صادرة من إمارات أخرى.

وبناء على التحليلات القائمة على أسس ومعايير عالمية تبين بأن إمارة دبي أنفقت في 2017 مبلغ 16,773 مليون درهم على قطاع الرعاية الصحية (4.3% من اجمالي الناتج المحلي) منها 726 مليون درهم تم انفاقها خارج دبي. حيث بلغ معدل النمو السنوي 6% بين 2016 و 2017 بعد التعديل الذي تم بناء على معدل التضخم.

ولم يكن النمو في الانفاق الصحي متماثلا على مستوى جميع المصادر، ومقارنة بتقديرات 2016، كانت معدلات النمو التي تم رصدها في 2017 كالآتي: 3+% ، 2+% و 5-% في العام الواحد لشركات التأمين والضمان الصحي الحكومي والتكاليف المدفوعة من قبل الافراد وذلك على التوالي خلال 2017. وبالمقارنة مع حسابات2014 التي شملت %25من المبالغ التي تم دفعها من قبل الافراد للحصول على الرعاية الصحية، تم تخفيض حصة النفقات الصحية التي تم تغطيتها من قبل الافراد والاسر لسنة 2017 لتصل الى ما نسبته %13. كما انفق قطاع الضمان الصحي الخاص 8,282 مليون درهم (%49) على الرعاية الصحية مقارنة ب8,338 مليون درهم (%49) على الرعاية التي تم تحملها من قبل الافراد والتي وصلت الى 2,152 مليون درهم أي (%13).

وبلغت نسب حصص جميع النفقات الصحية التي تم استقبالها من قبل شتى مقدمي الخدمة الطبية %45، %45، %51 و %2 لكل من المستشفيات والعيادات وصيدليات البيع بالتجزئة ومقدمي الخدمات المساعدة على التوالي. حيث شهدت هذه النفقات انخفاضا طفيفا في حصة الانفاق الصادر الى المستشفيات وذلك الصادر الى مقدمي الخدمة الطبية خارج امارة دبي. وقد يفسر بشكل جزئي هذا الانخفاض في نسبة النفقات الواردة لمقدمي الخدمة الطبية خارج امارة دبي كنتيجة لتطبيق برنامج اسعاد الذي كان السبب في جعل مقدمي الخدمة الطبية داخل امارة دبي أكثر سهولة بالنسبة للعملاء في الحصول على الرعاية الصحية وبتكاليف معقولة.

