Understanding the private health sector
in Oman

World Health Organization Eastern Mediterranean Region · unicef for every child · USAID FROM THE AMERICAN PEOPLE · UNFPA · UNAIDS · UNHCR The UN Refugee Agency · Wonca EAST MEDITERRANEAN

Understanding the private health sector
in Oman

World Health Organization
Eastern Mediterranean Region

unicef
for every child

USAID
FROM THE AMERICAN PEOPLE

UNFPA

UNAIDS

UNHCR
The UN Refugee Agency

Wonca
EAST MEDITERRANEAN

WHO Library Cataloguing in Publication Data

Names: World Health Organization. Eastern Mediterranean Region

Title: Understanding the private health sector: in Oman / World Health Organization. Eastern Mediterranean Region

Description: Cairo: World Health Organization. Eastern Mediterranean Region, 2024

Identifier: ISBN 978-92-9274-225-6 (pbk.) I ISBN 978-92-9274-226-3 (online)

Subjects: Private Sector I Health Status Indicators I Health Care Sector - organization & administration I Health Services I Health Expenditures I Healthcare Financing I Public-Private Sector Partnerships I Universal Health Insurance I Health Workforce I Oman

Classification: NLM WA 540

© World Health Organization 2024

Some rights reserved. This work is available under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 IGO licence (CC BY-NC-SA 3.0 IGO; https://creativecommons.org/licenses/by-nc-sa/3.0/igo).

Under the terms of this licence, you may copy, redistribute and adapt the work for non-commercial purposes, provided the work is appropriately cited. In any use of this work, there should be no suggestion that WHO endorses any specific organization, products or services. The use of the WHO logo is not permitted. If you adapt the work, then you must license your work under the same or equivalent Creative Commons licence. If you create a translation of this work, you should add the following disclaimer along with the suggested citation: "This translation was not created by the World Health Organization (WHO). WHO is not responsible for the content or accuracy of this translation. The original English edition shall be the binding and authentic edition".

Any mediation relating to disputes arising under the licence shall be conducted in accordance with the mediation rules of the World Intellectual Property Organization.

Suggested citation. Understanding the private health sector in Oman. Cairo: WHO Regional Office for the Eastern Mediterranean; 2024. Licence: CC BYNC-SA 3.0 IGO.

Sales, rights and licensing. To purchase WHO publications, see http://apps.who.int/bookorders. To submit requests for commercial use and queries on rights and licensing, see http://www.who.int/about/licensing.

Third-party materials. If you wish to reuse material from this work that is attributed to a third party, such as tables, figures or images, it is your responsibility to determine whether permission is needed for that reuse and to obtain permission from the copyright holder. The risk of claims resulting from infringement of any third-partyowned component in the work rests solely with the user.

General disclaimers. The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by the World Health Organization to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization be liable for damages arising from its use.

Contents

Acknowledgements v

Executive summary vi

1. Introduction and methodology 1

2. Country context 3
2.1 Health status and health indicators 4
2.2 The rising burden of illness 6
2.3 The rationale for involvement of the private sector 6

3. Health system organization and resources 9
3.1 Organization of the health system 10
3.2 Facilities and beds 10
3.2.1 The public sector 10
3.2.2 The private sector and its contribution to health services in Oman 12
3.3 Health workforce 15
3.3.1 MoH workforce 16
3.3.2 Private sector workforce in comparison to MoH workforce 17
3.4 Volume of services and utilization 19
3.4.1 Utilization of MoH services 19
3.4.2 Private sector utilization in comparison to the public sector 20

4. Health sector finances and expenditures 23
4.1 Health financing 24
4.2 Health expenditure 25
4.3 Financial accessibility 26

5. Private sector analysis and stakeholder perspectives **27**
5.1 Private sector growth and its determinants 28
5.1.1 Introduction of PPP law and authority 28
5.1.2 Increasing demand for quality care 28
5.1.3 Plans for universal health insurance 29
5.2 Private health sector resources 30
5.3 Legal and regulatory framework and governance 32
5.3.1 Registering, contracting and licensing private health facilities 32
5.4 Registering, contracting and licensing private health care workers 33
5.5 Quality, accreditation and oversight 34

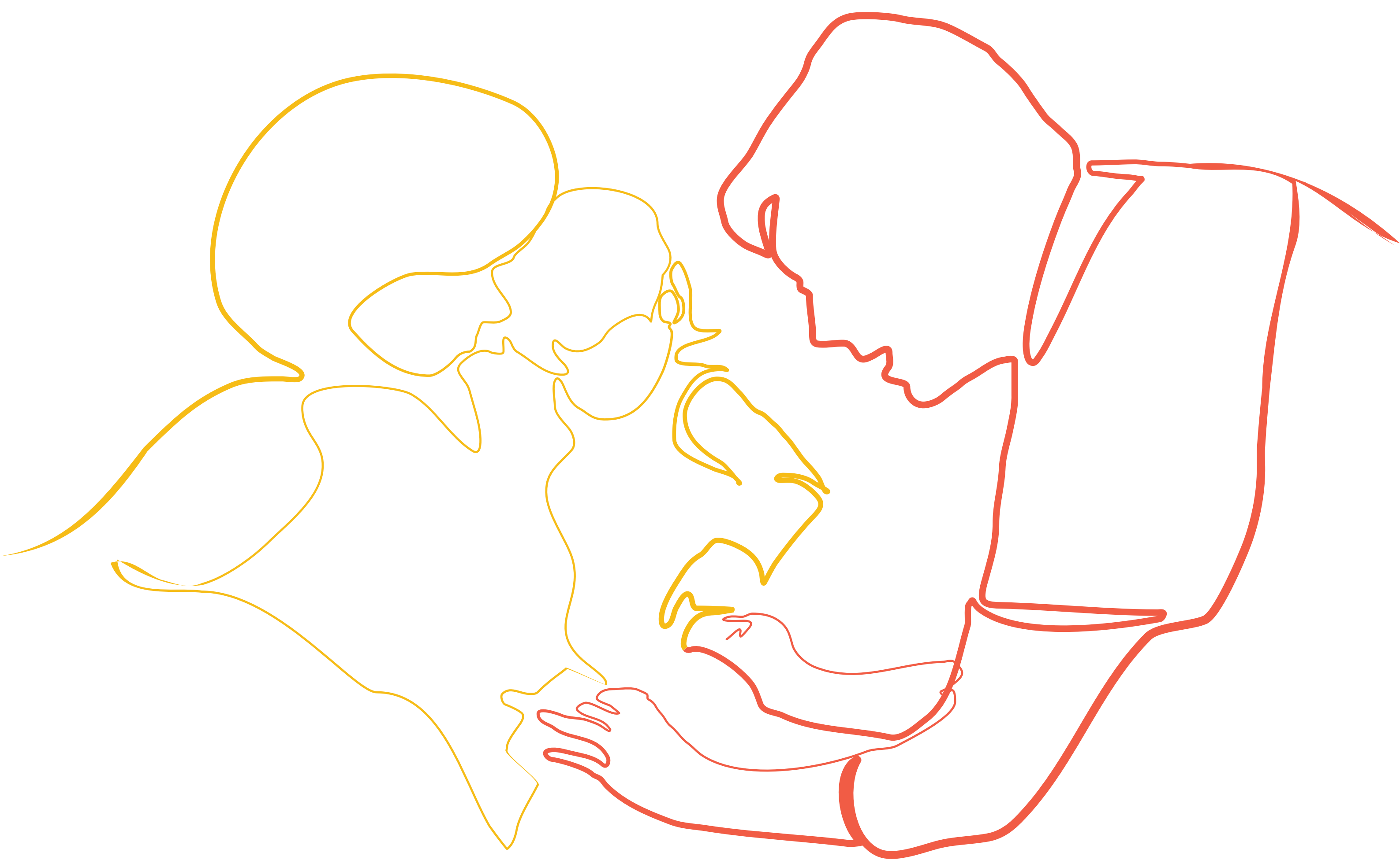
6. PPPs in health service delivery **35**
6.1 The legal and institutional environment for PPPs 36
6.2 Scope and priority areas for PPPs in the future 37

7. Recommendations for the private sector and UHC **39**
7.1 Short-term strategic priorities 40
7.2 Long-term strategic priorities 41
7.3 Recommendations 42

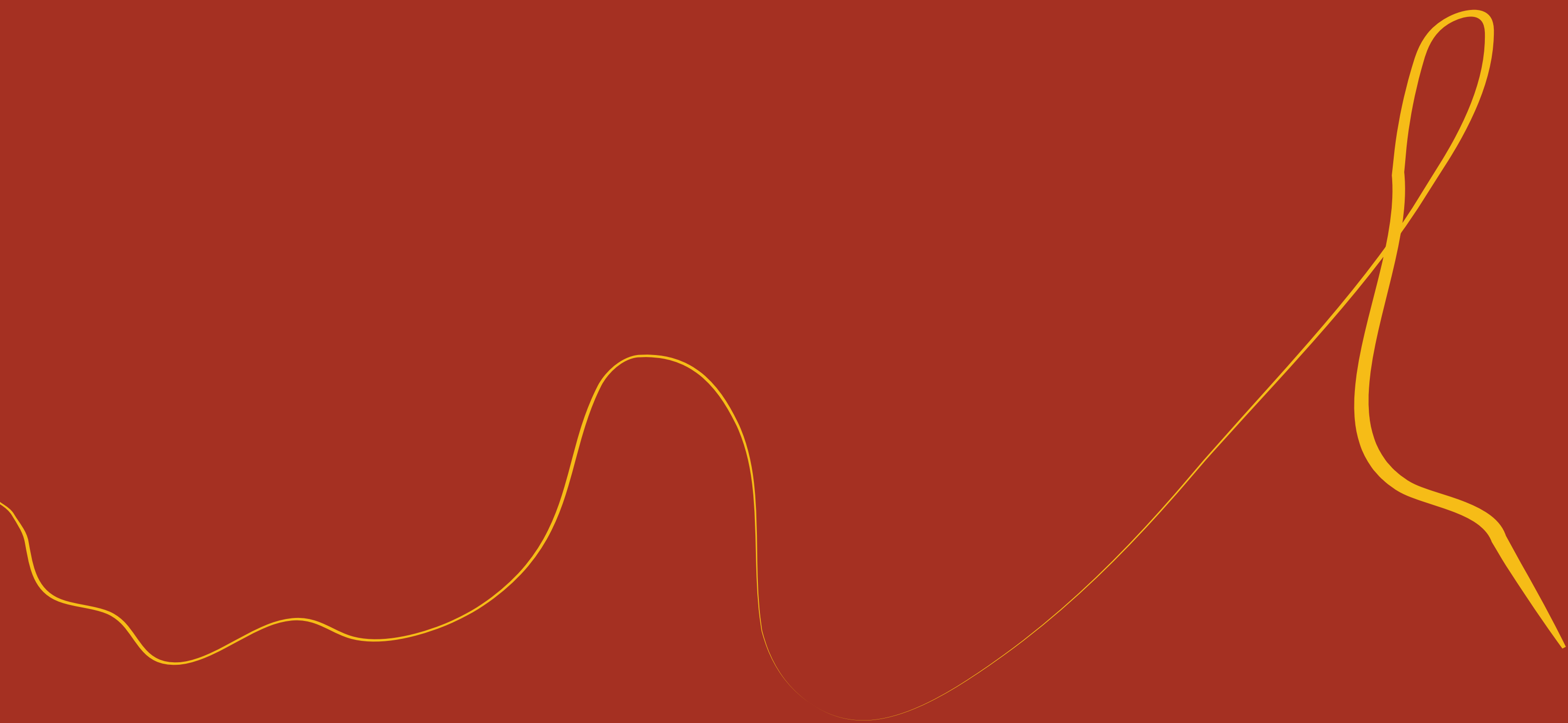
References **43**
Annex **47**

Acknowledgements

This report was developed by Dr Deena Al Asfoor (WHO consultant), Dr Saif Mohammed Al Nabhani (advisor in the Ministry of Health of Oman and chairman of Oman's Medical Compensation Board) and Ms Aya Thabet (WHO consultant), under the supervision of Dr Hassan Salah (Regional Adviser, Primary and Community Health Care, WHO Eastern Mediterranean Region) in response to a request by the WHO Regional Office for the Eastern Mediterranean. The structure and methods used in this study follow the guidelines and assessment tools developed by the Regional Office in 2018.



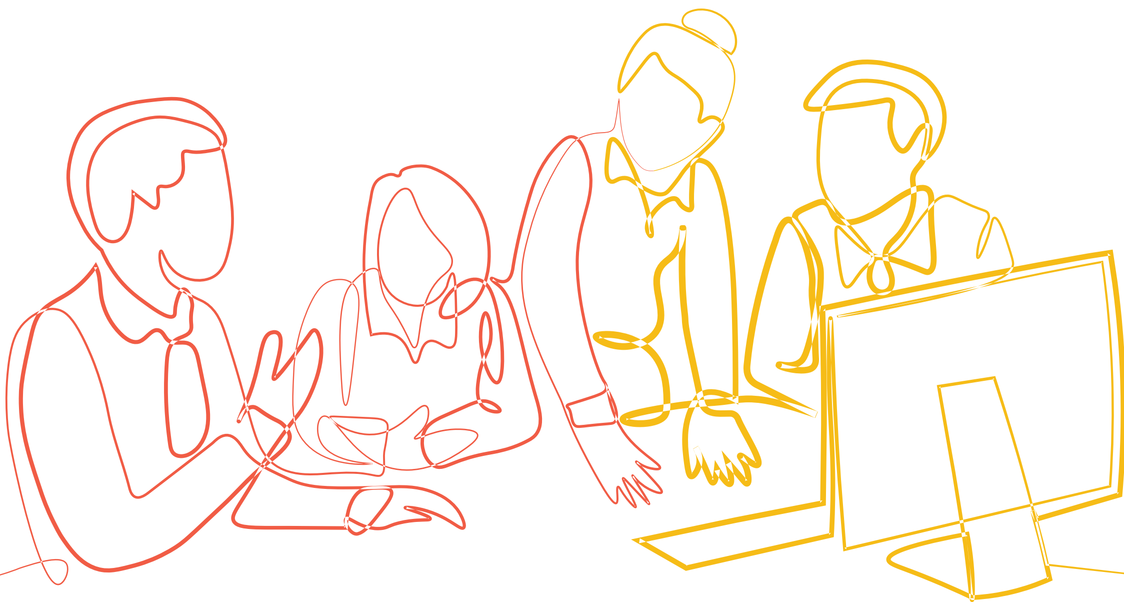
Executive summary



Countries around the globe are struggling to provide health care for all their citizens. The global economic crisis and the COVID-19 pandemic, coupled with growing and ageing populations, are putting a strain on health care financing. New solutions are needed to overcome the challenge of health care provision. One solution is enhancing private sector engagement and harnessing long-term relationships between the public and private sectors to improve the health of communities through public–private partnerships (PPPs).

This report uses a scoping review methodology to investigate the organization and resources of both the public and private health sectors in Oman. It outlines the context, health status and burden of illness in Oman, before exploring the health system's organization and resources, as well as health financing and expenditure. The report then focuses on private sector engagement by discussing the findings of stakeholder interviews and the role of PPPs in providing health services in Oman. Finally, the report outlines short- and long-term recommendations for moving forward.

The private sector in Oman is flourishing and has the potential to contribute significantly to health care. Establishing a PPP unit within the Ministry of Health and the procedures to ramp up private sector engagement through extended, monitored contractual agreements have the potential to accelerate the implementation of Oman Vision 2040 and to enhance efforts towards universal health coverage.



1

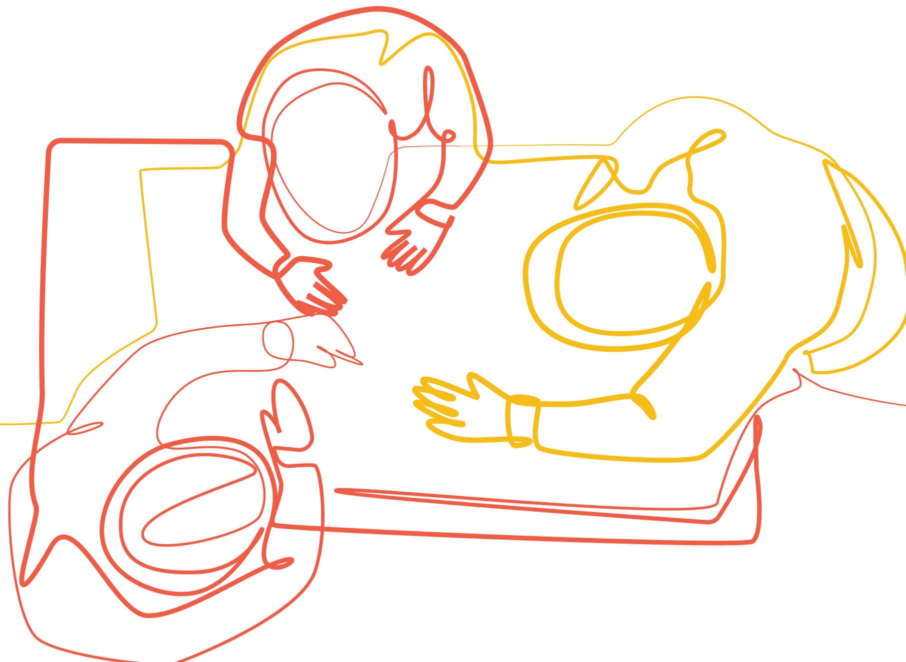
Introduction and methodology

Mobilization of public funding through taxes, revenues from natural resources and social health insurance are the most common ways of funding health care

Reliable health care infrastructure is essential for the survival and economic stability of individuals and populations. The World Health Organization (WHO) has adopted the health for all strategy, and many countries have joined the quest to achieve universal health coverage (UHC). However, limitations on the human and financial resources of governments are significant obstacles to achieving this end. Mobilization of public funding through taxes, revenues from natural resources and social health insurance are the most common ways of funding health care. However, tax increases may not be viable amid the global financial crisis and social health insurance requires significant contributions from the government and citizens.

A public–private partnership (PPP) can be a tool to provide quality health care, improve the efficiency of the health sector and maximize value for money in health care. PPPs could accelerate the implementation of UHC. For example, in the design-build-operate model of PPP, the private sector takes charge of constructing and operating a health facility based on a long-term contract with the government. This arrangement has the potential to capitalize on the perceived innovation capability, flexibility and efficiency of the private sector and could result in a triple-win situation where the government saves money, the patients receive quality health care and the private sector flourishes *(1)*.

This report uses a scoping review methodology to explore the status of and opportunities for PPPs in the health sector in Oman. Each section answers one question through a combination of literature reviews, data exploration and stakeholder interviews *(2)*. Sections 2 and 3 discuss the country context and the health system organization and resources, moving on to explore finances and expenditures in section 4. Section 5 presents the PPP analysis and discussions with stakeholders about the nature and level of engagement between the public and private sectors in Oman. Section 6 discusses the legal and institutional arrangements of PPP and priority areas for future action. Finally, Section 7 outlines short- and long-term recommendations.



2
Country context

Oman had a GDP of

US$ 15 630

per capita in 2017 which dropped to

US$ 14 992

in 2019 due to the oil crisis that started in 2013

Oman is a Middle Eastern country located in the south-eastern corner of the Arabian Peninsula. It has over 4.5 million inhabitants and is divided into 11 administrative governorates. Public services are available in all governorates of Oman and well-maintained roads connect the mountainous areas to the coast and the capital, Muscat.

Oman had a gross domestic product (GDP) of US$ 15 630 per capita in 2017, which dropped to US$ 14 992 in 2019 due to the oil crisis that started in 2013 *(3–8).* Following the drop in oil prices in 2014, per capita expenditure on health fell from US$ 720 in 2014 to US$ 587 in 2017 *(7, 9).*

On 23 September 2020, the National Centre of Statistics and Information in Oman estimated that 38.5% of the residents of Oman are non-Omanis, most are males between the ages of 29 and 50 years and the resident population with Omani citizenship was approaching 2.74 million. The percentage of people living in urban areas has witnessed a consistent yet gradual increase *(10, 11).*

The health system in Oman has witnessed impressive gains over the last two decades. Yet, the rising burden of illness from noncommunicable diseases (NCDs) and emerging communicable diseases threaten the sustainability of the health services. In Section 3, a description of the Omani health system is provided, followed by a discussion of the epidemiology of diseases in the country.

2.1 Health status and health indicators

The fertility rate in Oman increased from 3.25 children per woman in 2010 to 4.0 children per woman in 2017, then decreased marginally to 3.7 children per woman in 2019. Still, the population size continued to grow from 3.24 million in 2010 to 4.62 million in 2019 *(12).*

The national health system in Oman is composed of a network of primary health care (PHC) facilities, secondary health care facilities in all governorates and tertiary care hospitals in Muscat. With excellent immunization coverage and other health indicators, life expectancy has increased by 10 years since 1990 (Table 1) *(13)*. Nevertheless, longer life expectancies and an ageing population coupled with increasing prevalence, morbidity and mortality from NCDs necessitates immediate health service improvements to cope with rising demand.

Table 1. Population and health status indicators in Oman

Indicators	1990	2005	2017	2019
Population size	1 592 000	2 509 000	4 560 000	4 618 000
Crude birth rate (per 1000 population)	44.7	24.5	33.5	30.3
Total fertility rate (children per woman)	–	3.14	4.0	3.7
Life expectancy at birth	65.9	74.3	76.9	77.2
GDP per capita (Omani rials)	2411	4736	6964	6679
GDP per capita (US$)	6448	12 377	15 130	15 474
Ministry of Health per capita health expenditure (% of government expenditure)	4.9	4.7	6.4	6.2
Health expenditure (% of GDP)	–	2.6	3.8	–
Total number of doctors (per 10 000 population)	9.0	16.7	20.0	20.8
Immunization coverage	96%	99%	99%	100%
Low birthweight (<2.5 kg per 10 000 live births)	8.7	8.3	11.2	11.7
Crude death rate (per 1000 population)	7.6	2.53	2.9	2.7
Infant mortality rate (per 1000 live births)	29	10.2	9.5	8.0
Under five mortality rate per 1000 live births	35	11.05	11.6	10.2
Maternal mortality rate (per 100 000 live births)	NA	15.4	20.2	10.3

Source: Annual Health Report 2018 *(14)*.

2.2 The rising burden of illness

In 2017, the leading causes of death in Oman, according to the Global Burden of Disease study *(14)*, were ischaemic heart diseases, road injuries, stroke, diabetes and lower respiratory infections. Of every 100 000 premature deaths in 2017, the study showed 3324 were attributable to ischaemic heart diseases, 2057 to road injuries and 1010 to stroke. Despite Oman's continuous investments in health, these rates are higher than other countries with similar sociodemographic indices *(15).*

The proportion of ischaemic heart disease deaths increased from 20.8% of total deaths in 1990 to 25.4% in 2017 at an annual rate of 0.17%

The Global Burden of Disease study also showed that the proportion of communicable disease deaths went down from 21% of total deaths in 1990 to 10.9% in 2017. In contrast, the proportion of NCD deaths increased from 56.8% of total deaths to 67.3% over the same period. Meanwhile, the rate of death from injuries remained constant at around 21% *(16)*. NCDs are long-term conditions requiring continuous management over the lifetime of the patient; they are therefore gaining importance in health planning as the population of Oman increases in number and age.

The Global Burden of Disease study shows that proportion of ischaemic heart disease deaths increased from 20.8% of total deaths in 1990 to 25.4% in 2017 at an annual rate of 0.17% *(16)*. Also, a review by Al-Lawati et al. in 2013 reported an alarming age-standardized incidence of acute coronary heart disease at 779.7 per 100 000 for males and 674.3 per 100 000 for females *(17)*. These observations explain the increased demand for financial and human resources such as facilities, beds and health workforce and flag coronary heart disease as a significant public health problem that could be a severe burden on the health system in the future.

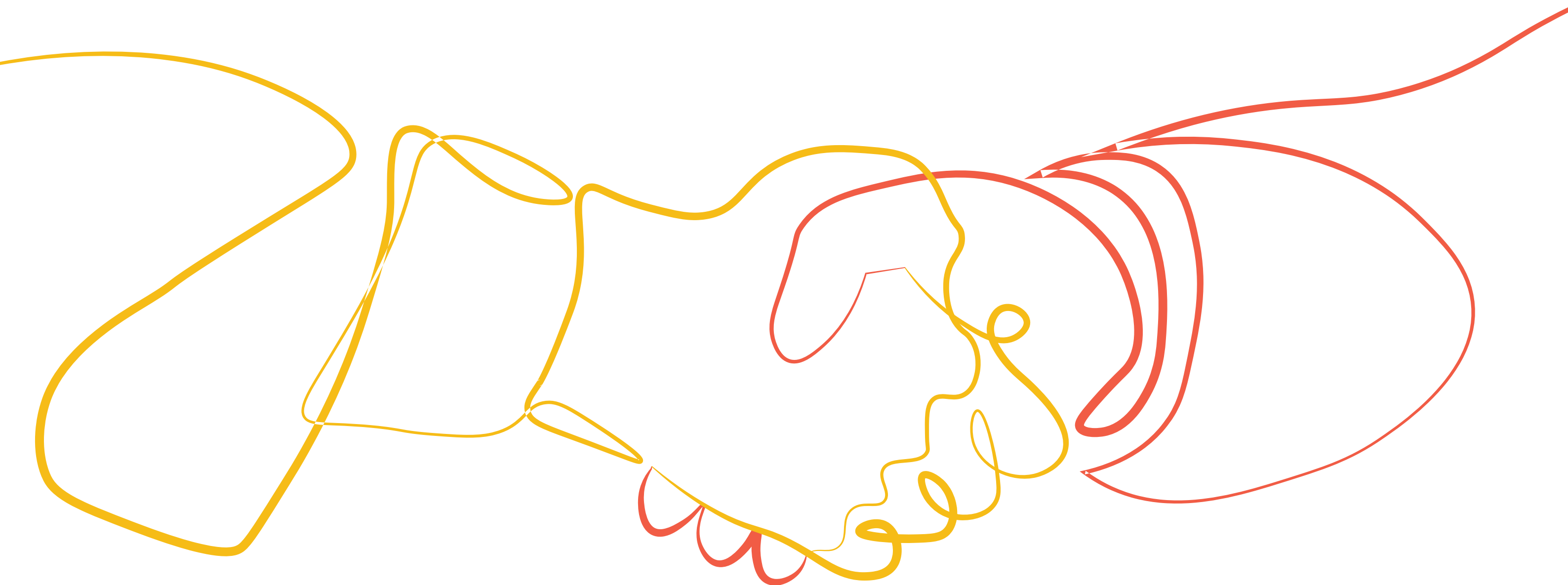
Another issue of public health concern for Oman is the increasing frequency of diabetes mellitus. Ministry of Health (MoH) records show that 54 599 diabetes cases were treated in MoH institutions in 2005 and that this number rose to 71 625, 94 921 and 105 317 in 2010, 2017 and 2019, respectively *(18–21)*. Al-Lawati et al. estimated in 2015 that the number of cases of type II diabetes mellitus would reach 128 786 in 2017and predicted that it would climb to 352 000 in 2050 *(22)*. Diabetes is a serious public health issue because it is usually a lifetime illness with many complications that are detrimental to the quality of life and survival of the patients. The rising number of diabetes cases and associated complications point towards a projected ever-increasing burden on the health care system.

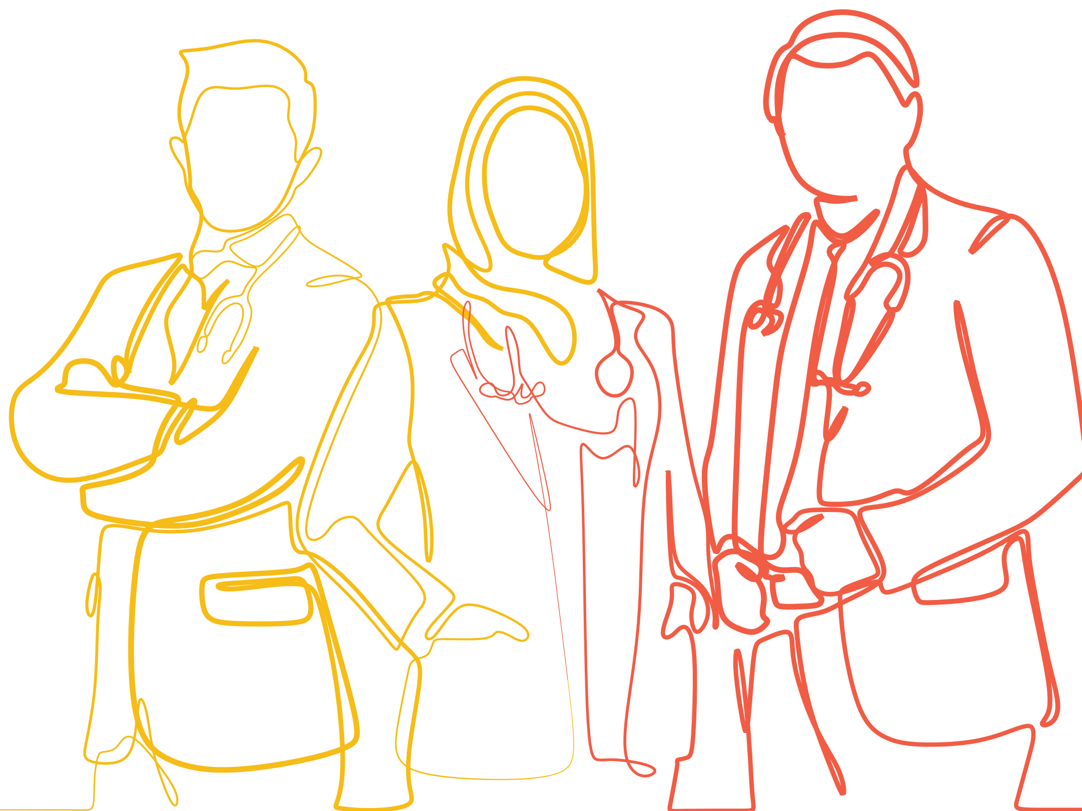
2.3 The rationale for involvement of the private sector

A change in the health financing system in Oman is much needed, as it will help overcome financial challenges associated with the rising burden of illnesses and scarce resources as well as sustain the Omani health system and preserve achievements made over the last few decades. Involvement of the private sector has shown promising results in many countries because it has the potential to alleviate some governmental financial burden, distribute financial risk and accelerate UHC implementation.

Private-sector involvement could be an efficient way to absorb the rising demand for more and higher quality health care. However, services categorized under common goods for health are best managed by the government because they offer limited financial gain for the private sector. For instance, regulations, public education for health, community engagement, sewage treatment, immunization and environmental programmes, among others, are not attractive business opportunities, but are essential from a public health point of view. Therefore, financing and managing such initiatives should be the responsibility of the government *(23).*

Oman has taken the necessary steps to institutionalize PPPs. In 2019, his late Majesty Sultan Qaboos Bin Said issued Royal Decree 52/2019 promulgating the PPP law, which lays the important legal foundation for PPPs in Oman *(24).* However, establishing a fully-fledged system for private-sector involvement in health care provision requires fiscal and organizational adjustments, which is a focus of this report.



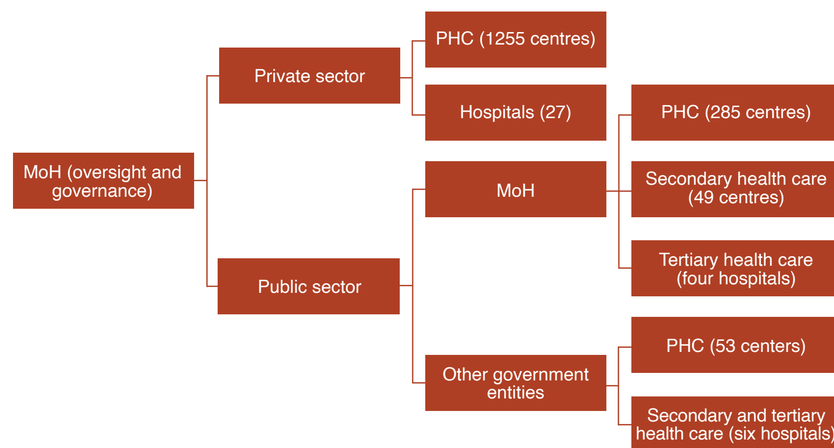


3
Health system organization and resources

3.1 Organization of the health system

Both the public and private sectors deliver health services in Oman. As shown in Fig. 1, the public health service is composed of primary, secondary and tertiary care provided by the MoH and other governmental entities – namely, the services of the Royal Oman Police, Royal Diwan Court, armed forces and Sultan Qaboos University. By the end of 2019, the total number of institutions run by both the public and private sectors were around 80 hospitals and 1501 primary and secondary care facilities *(25, 26).* As per the MoH terms of reference, it is solely responsible for health policies, strategic directions, prevention and control, and health education and training as well as overseeing and monitoring various components of the health services in Oman *(27).*

Fig. 1. Structure of health care delivery in Oman



3.2 Facilities and beds

3.2.1 The public sector

The leading provider of health care in Oman is the MoH, followed by services provided by other governmental entities and, to a lesser extent, the private health sector. The following paragraphs describe in detail the structure of the health services provided by the MoH and other governmental agencies of the public health sector.

Except for the Knox Memorial Hospital opened by the American Arabian Mission and the Muscat Charitable Hospital built by the British Consulate, as well as traditional medicine, health services were non-existent in Oman before 1976 *(28).* Between 1976 and 1990, the Omani health system started to take shape. During that period, the number of hospitals increased from two to 47, and the number of beds from 12 to 3419. In general, the health system evolved in phases, the first from 1972 to 1990 and the second from 1991 to 2005, which focused on the development of various components of the health system with plans developed at a central, governorates and local level. The current third

The MoH offers the complete range of primary, secondary and tertiary services through

285

primary care centres

49

secondary care facilities and

4

tertiary hospitals

phase that started in 2005 targets UHC and is using high-level strategic planning to pinpoint areas of weakness and place the health care system on a world-class level *(29).* The efforts continue under Oman Vision 2040, which prioritizes health and identifies a strategic direction for leading the health system towards adopting global standards. Oman Vision 2040 is a national plan to improve the Government based on national consensus and scientific evidence; implementation started in 2021 *(30)*.

The MoH offers the complete range of primary, secondary and tertiary services through 285 primary care centres, 49 secondary care facilities, and four tertiary hospitals *(26).* In 2019, MoH facilities had 9602 doctors and 20 323 nurses in addition to other support staff *(31).* The governorate of Muscat houses four hospitals: The Royal Hospital, Khoula Hospital, An Nahdha Hospital and Al Masarra Hospital. Additionally, 10 hospitals serve as governorate hospitals (secondary care) in each of Musandam, Al-Buraymi, Al-Dakhliya, North Al Batinah, South Al Batinah, South Ash Sharqiyah, North Ash Sharqiyah, Ad Dhahira and Al Wosta. The remaining 36 hospitals were smaller provincial and local hospitals distributed across all governorates and had bed capacities ranging from between nine and 96 beds *(26).* The total number of MoH hospital beds in 2019 was 5049 beds, in addition to 85 beds in PHC facilities *(26)*.

The ratio of beds to population is an indicator of inpatient care availability. The average number of MoH beds in 2019 was 15 beds per 10 000 population *(31, 32).* However, this ratio varies between governorates in the remote enclave of Musandam and the sparsely populated Al Wosta, where the ratio was 36.8 and 17.4 per 10 000 population, respectively. These two governorates have the lowest population density and the highest bed-population ratio. Siting large and to some extent well-equipped hospitals in remote areas of the country reflects the Government of Oman's commitment to providing health care to all segments of the population.

The lowest ratio was found in governorates adjacent to the capital, such as North Al Batinah and South Al Batinah with 6.0 and 6.9 beds per 10 000, respectively *(33)*. Most patients from North Al Batinah and South Al Batinah can travel to hospitals in Muscat governorate by car in one hour or less. Also, there are five private hospitals in each of these governorates. Nevertheless, the Government's five-year plan of action includes constructing more hospitals in these two governorates. To that end, the Government of Oman has established an agreement with the International Hospitals Group to establish three tertiary care facilities in South Al Batinah, Zufar and Musandam *(34)*.

Each of the 50 MoH hospitals and the six non-MoH Governmental hospitals in Oman includes medical laboratories which range from large, sophisticated laboratories like that of the Royal Hospital, to laboratories offering essential medical functions. In addition, there are 21 centres for disease control scattered across the country *(26)* (Al Qasmi A, Ministry of Health, personal communication, 2020).

Government hospitals operated by entities other than the MoH are the Sultan Qaboos University (423 beds), Royal Oman Police (82 beds) and the armed forces (344 beds) hospitals. The Royal Oman Police and armed forces hospitals are reserved primarily for members of the police or army and their relatives, whereas the Sultan Qaboos University Hospital is the main teaching hospital in Oman *(25)*. An overview of facilities by governorate is given in Table 2.

Table 2. Number of facilities providing health services in the private and public sector in Oman in 2019 *(25, 26)*

Governorate	PHC		Hospitals		Hospital beds	
	Public	Private	Public	Private	Public	Private
Muscat	34	559	12	17	2035	654
Zufar	34	91	8	3	660	69
Musandam	4	13	3	0	167	0
Al-Buraymi	7	33	2	0	159	0
Al-Dakhliya	26	88	6	1	556	28
North Al Batinah	25	178	5	2	469	101
South Al Batinah	17	76	5	3	303	112
South Ash Sharqiyah	20	42	4	0	404	0
North Ash Sharqiyah	15	37	6	0	369	0
Ad Dhahira	17	89	2	1	269	21
Al Wosta	12	48	3	0	86	0
Total	**211**	**1254**	**56**	**27**	**5477**	**985**

3.2.2 The private sector and its contribution to health services in Oman

The public sector MoH and non-MoH hospitals provide most health care in Oman, but the private sector also plays an important role, and it is being encouraged by the Government to expand in size and scope. For example, in 2000, there was only one hospital and 51 beds, compared with 27 hospitals and 985 beds in 2019 *(25)*. The availability of private beds is estimated to increase at a rate of 100 beds per year (Fig. 2).

Fig. 2. Trends in number of public and private sector facilities, beds and outpatient visits in Oman, 1990–2019 (compiled from annual health reports) *(3–6, 25, 35–40)*

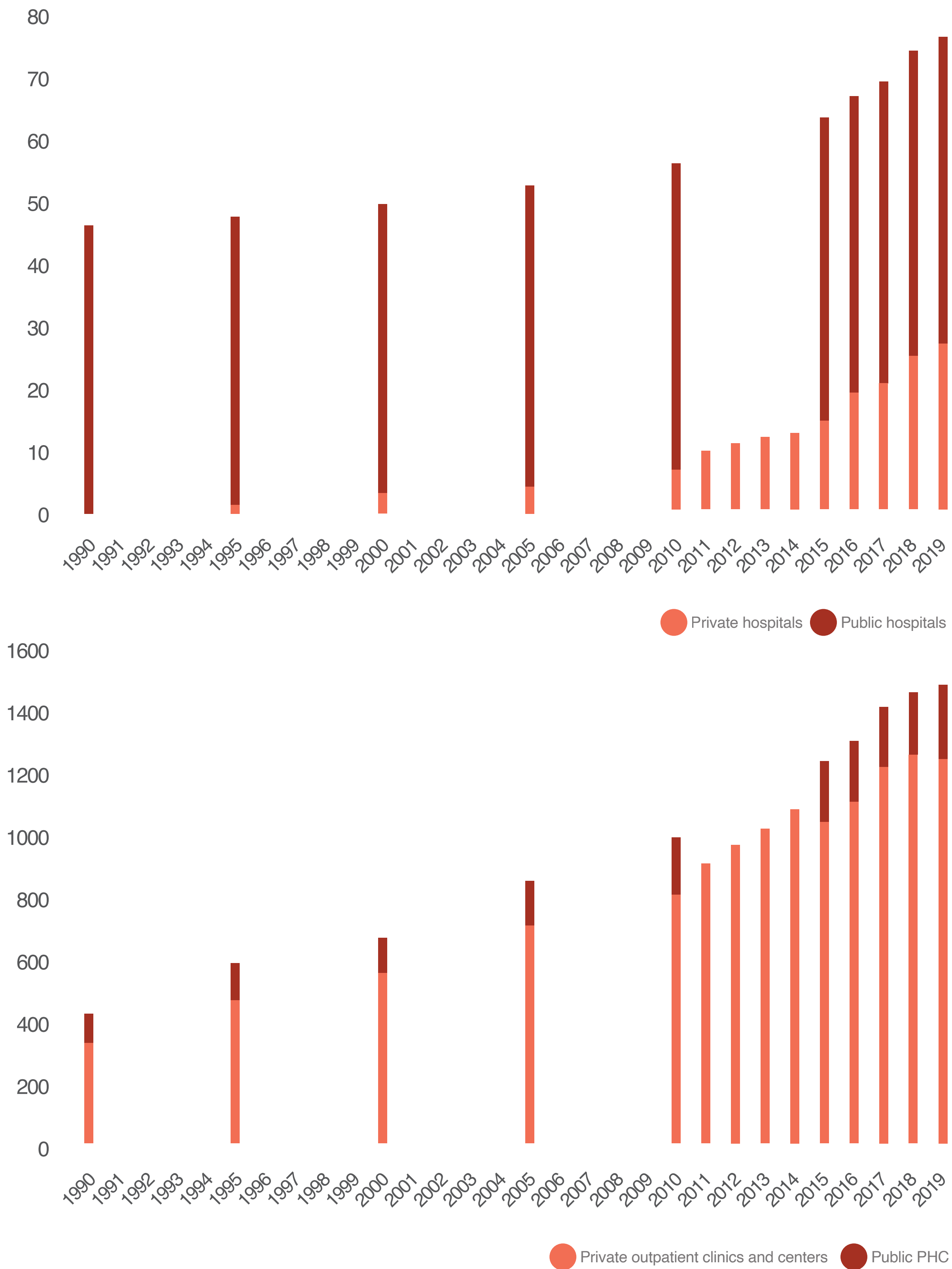
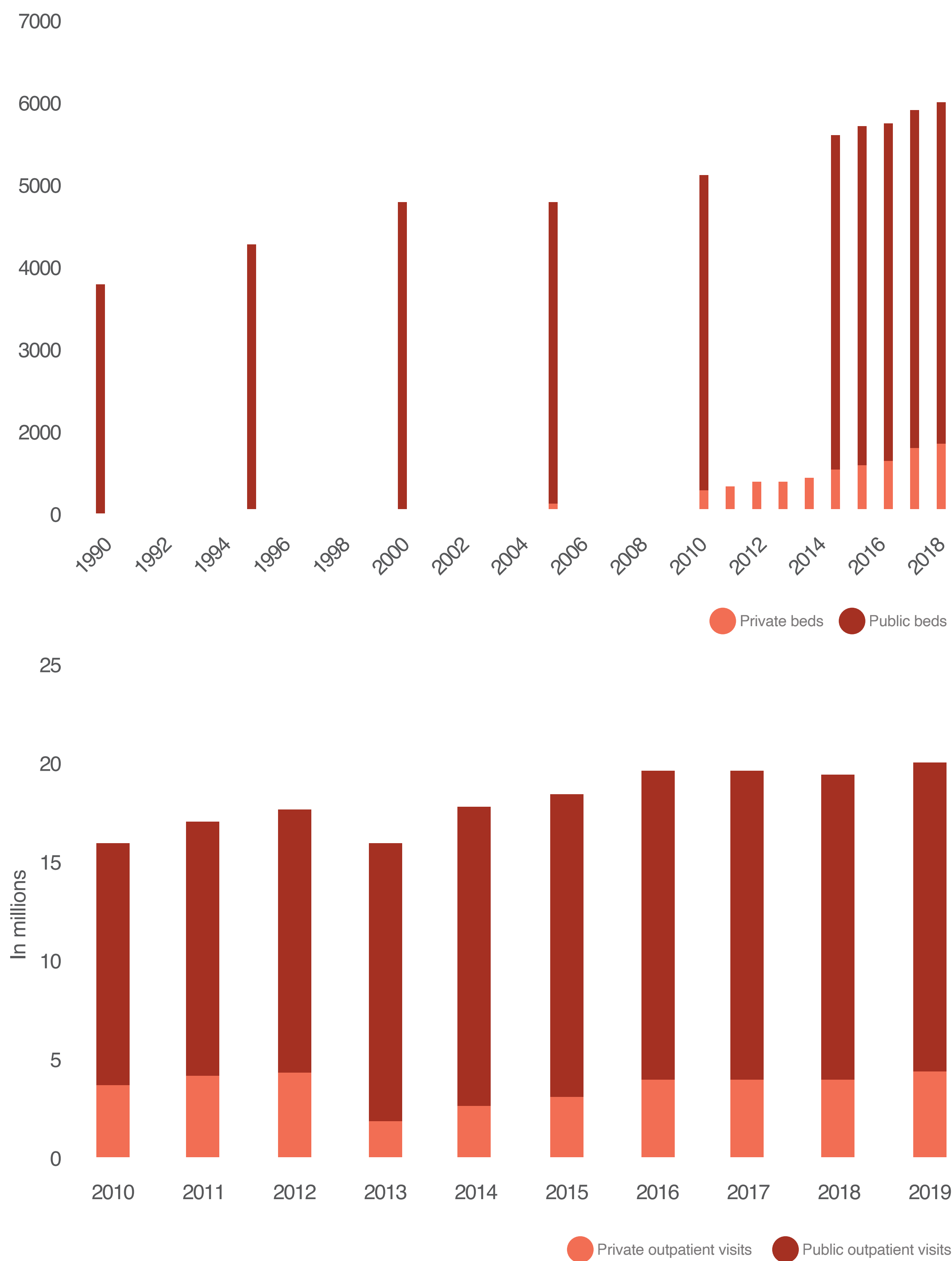


Fig. 2. (cont'd) Trends in number of public and private sector facilities, beds and outpatient visits in Oman, 1990–2019 (compiled from annual health reports) *(3–6, 25, 35–40)*



PHC is the first level of contact with the health system to promote health, prevent illness, care for common diseases and manage ongoing health problems

In 2019, the private sector employed 2557 doctors and 4078 nurses *(25).* Most private clinics provide basic health care services, including some PHC services such as maternity and childcare services, while a small number provide hospital care. For example, the Badr Al Samaa Group of Hospitals is the largest private health care provider in Oman and, in 2019, owned five hospitals and five speciality clinics and provided services in 25 different medical specialities *(41).* There is also a small contribution from the not-for-profit private health sector, namely, from the Association of Early Intervention for Children with Disability, which has provided rehabilitation services for disabled children since 2000 *(42).*

To adequately explore the contribution of the private sector to various levels of care, we should start with a clear definition of PHC, but a universal definition is contentious. Here we will use a WHO definition, which states that PHC is the first level of contact with the health system to promote health, prevent illness, care for common diseases and manage ongoing health problems *(43)*. Using this definition, outpatient services offered by the private sector can be categorized as PHC.

As shown in Fig. 2, the contribution of the private sector to the number of hospitals, beds and clinics is consistently increasing. However, the number of visits seems to fluctuate over the years. This fluctuation indicates that despite the increase in the number of private facilities, most PHC visits are to public sector facilities. For instance, in 2019, the number of private outpatient clinics was 1255 compared to 285 MoH PHC clinics, However, the former received 4.3 million visits, a fraction of the 15.7 million visits made to the MoH PHC centres *(25, 35).* On the other hand, the private sector offers some services that are unavailable or difficult to access using the public sector. For example, in 2017 the public sector had five magnetic resonance imaging machines in the Muscat governorate, one in North Al Batinah, one in South Al Batinah and one in Al-Dakhliya; therefore, the small number of instruments means residents in remote areas of Oman have limited access *(44).*

3.3 Health workforce

A competent workforce is the backbone of any health system. Physicians, nurses and other health professionals are valuable and indispensable; therefore, a clear plan for their management and appropriate deployment is of paramount importance. In the past, WHO has suggested that having fewer than 23 physicians, nurses and midwives per 10 000 population would lead to countries failing to achieve the Millennium Development Goals for immunization *(45)*. In contrast, the International Labour Organization (ILO) set 34.5 health workers per 10 000 population as a benchmark for an adequate health workforce *(46).* Section 3 discusses health workforce availability in the public and private sectors and compares the two in terms of numbers and geographic distribution.

3.3.1 MoH workforce

In Oman, 9602 physicians and 20 323 nurses were on the MoH payroll in 2019, indicating a workforce ratio of 69 per 10 000 population, a figure that is considerably higher than the minimum threshold set by both WHO and ILO *(31).* Moreover, this ratio is an underestimate since it does not include physicians and nurses reporting to other Government health and private-sector establishments. On the other hand, the salaries for this large number of skilled workers consumed about 78% of the annual health budget in 2019, which resulted in limited resources to support other functions of the MoH.

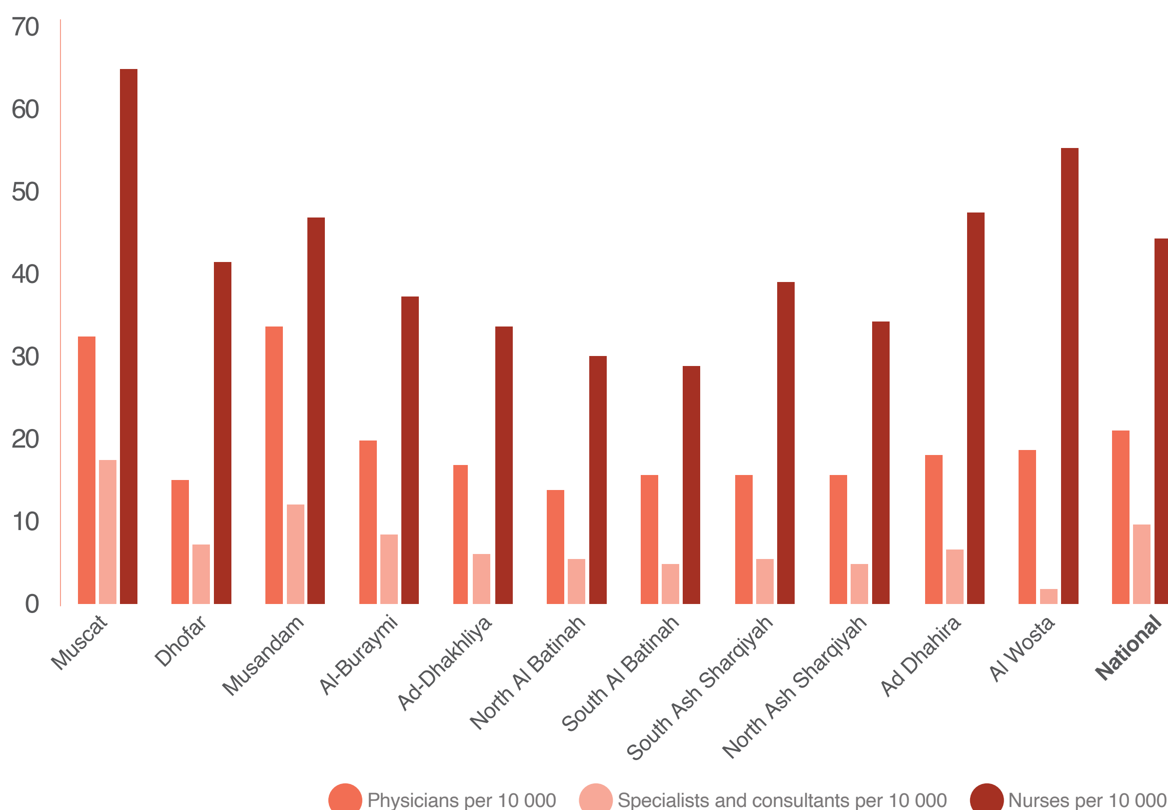
In addition to considering the adequacy of the workforce on the national level, it is essential to consider the adequate distribution of the health workforce. We will explore the ratio of specialists and consultants to the population in various governorates as an example of health workforce distribution (Fig. 3).

9602 physicians and **20 323** nurses were on the MoH payroll in 2019

In 2019, the ratio of specialists and consultants to the population in Muscat governorate was 7.5 per 10 000, whereas both North Al Batinah and South Al Batinah had a ratio of 3.5 per 10 000. The highest ratio of specialists and consultants to the population was in Musandam (11.7 per 10 000), and the lowest was in Al Wosta at 1.6 specialists and consultants per 10 000. These rates show an uneven distribution of the health workforce, but the greater specialists and consultants to population ratios in Musandam and Al-Buraymi (7.1) show the Government's commitment to provide health services to remote areas with small populations. Nonetheless, Al Wosta remains a governorate that needs future attention *(47, 48).*

Another core health system workforce indicator is the number of nurses per 10 000 population. This ranged from 29.7 in North Al Batinah to 64.0 in Muscat governorate, indicating variability in the distribution of nurses between governorates *(47, 48).*

Fig. 3 Ratio of physicians, specialists and consultants, and nurses per 10 000 population in 2019 in governorates of Oman *(47)*



3.3.2 Private sector workforce in comparison to MoH workforce

The private sector contributes to the national health system primarily through its workforce. This section compares the private-sector and MoH workforces to understand the nature of private sector engagement in the Omani health system.

The public sector is the main employer of health care workers. The 2019 MoH annual health report shows that 82% of health administrators were on the MoH payroll in that year, while other government agencies employed 9% and the private sector employed 8%. With regards to medical staff, 67% of the physicians and 71% of the nurses were MoH staff in 2019. In comparison, 7% and 9% of physicians and nurses, respectively, reported to other governmental agencies and 27% of physicians and 20% of nurses were in the private sector *(47).*

Not only do health workers in the public sector outnumber those in the private sector, the majority are also in the capital city, Muscat. For example, 1523 physicians and 2441 nurses report to private hospitals and clinics in Muscat, with each contributing to about 59% of the total number of private-sector physicians and nurses in all governorates *(25)*. In comparison, 1994 physicians and 4822 nurses report to the MoH facilities in Muscat, and these constitute 33% of the total MoH workforce *(47).*

Examining the ratio of public to private-sector physicians and nurses in various governorates reveals that there are significant variations (Figs. 4 and 5). The lowest ratio of MoH to private-sector physicians and nurses are 56.6% and 65.8%, respectively, in Muscat. The highest was 94.1% for physicians and 95.7% for nurses, in Musandam *(25, 47).*

There is one exception to the dominance of the public sector on health services: dental services. In this category, there are many more providers and establishments in the private sector. The MoH data show that the number of private dental practitioners increased from 375 in 2010 to 1123 in 2019. The number of dental clinics run by the private sector increased from 134 to 299 in the same period. Thee were only 145 dentists based at MOH facilities at the end of December 2019 *(25, 47).*

Fig. 4. Ratio of MoH physicians to private sector physicians in governorates of Oman, 2019 *(25, 47)*

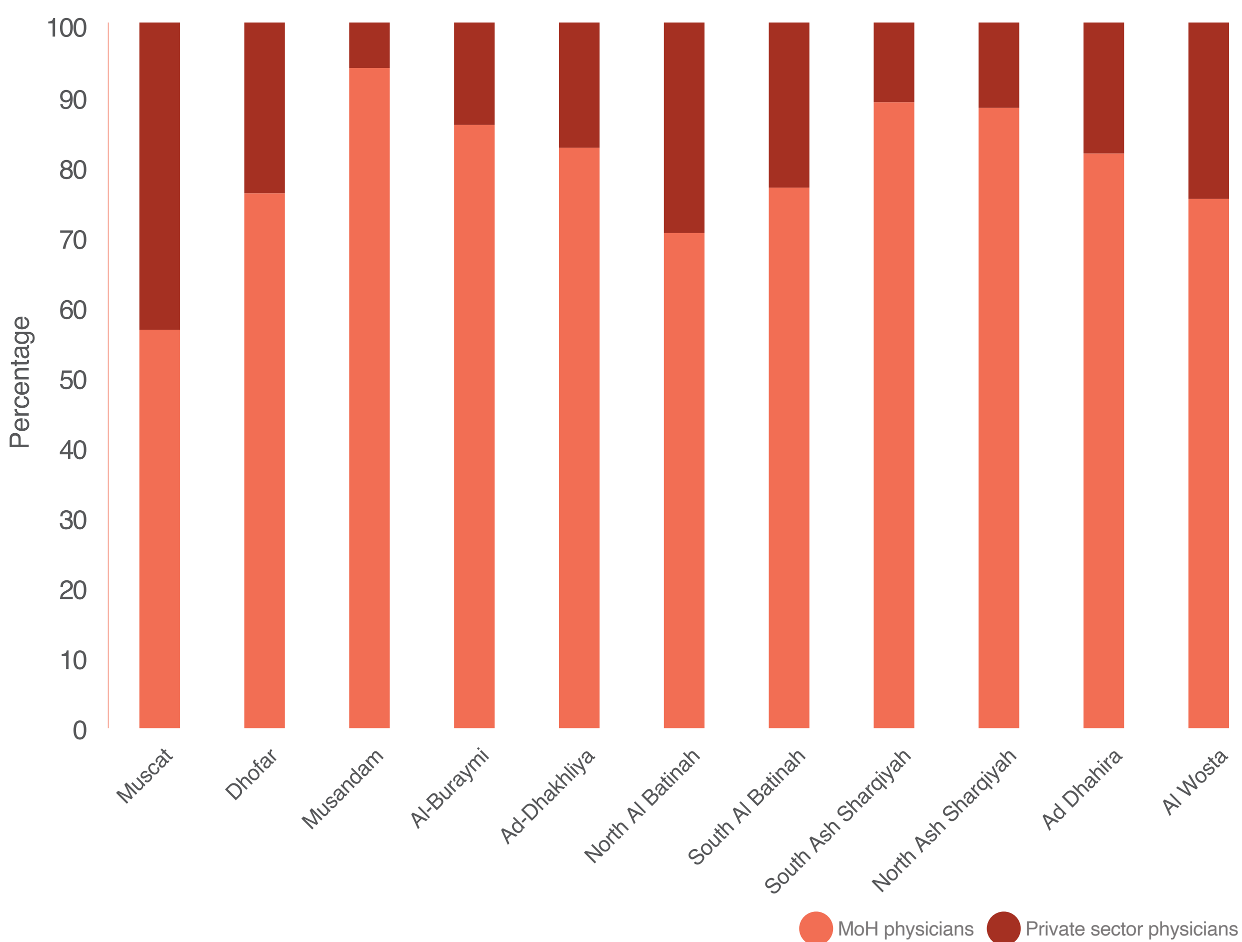
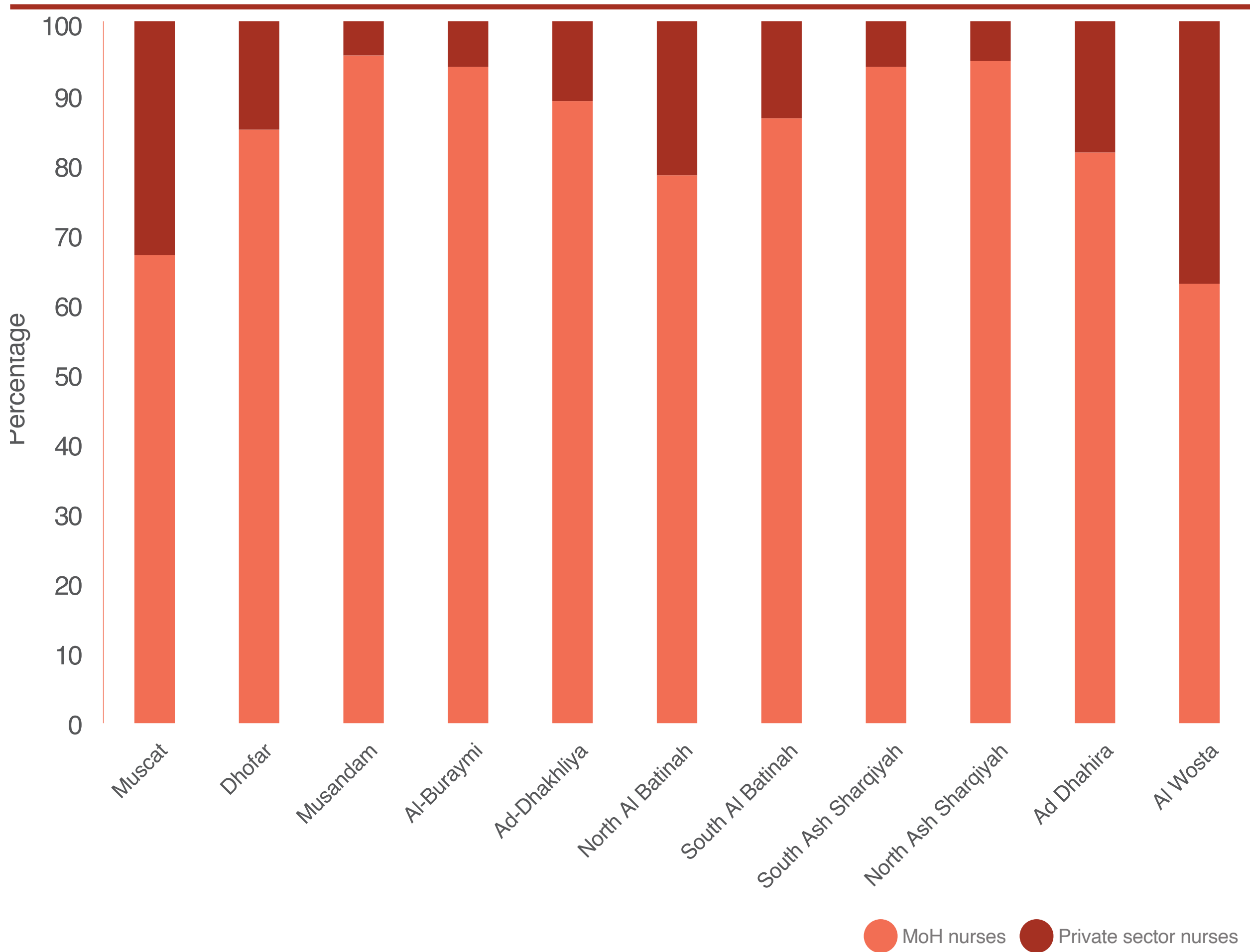


Fig. 5. Ratio of MoH nurses to private sector nurses in governorates of Oman, 2019 *(25, 47)*

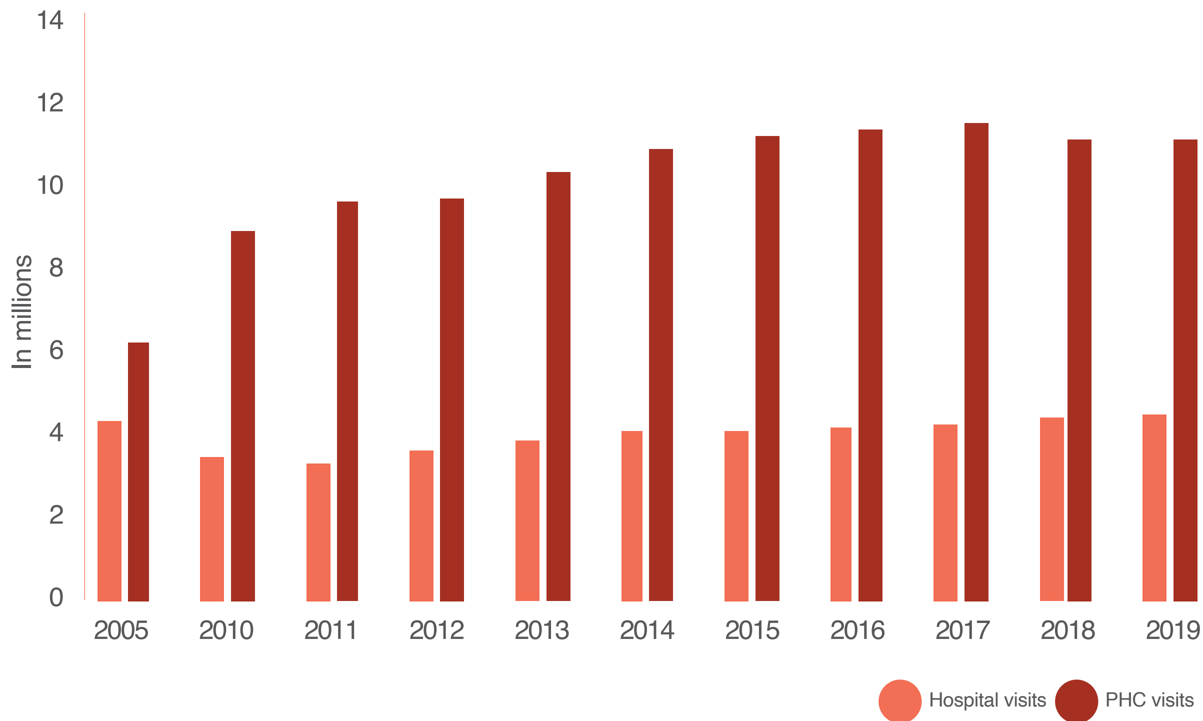


3.4 Volume of services and utilization

3.4.1 Utilization of MoH services

In 2019, there were 5.6 million visits to MoH institutions. Between 80% and 90% of the visits were by Omani nationals. PHC visits have nearly doubled since 2005, whereas hospital visits remained roughly the same. This shift towards PHC services indicates a well-functioning PHC system (Fig. 6).

Fig. 6. Trends in hospital and PHC visits in MoH institutions *(49)*

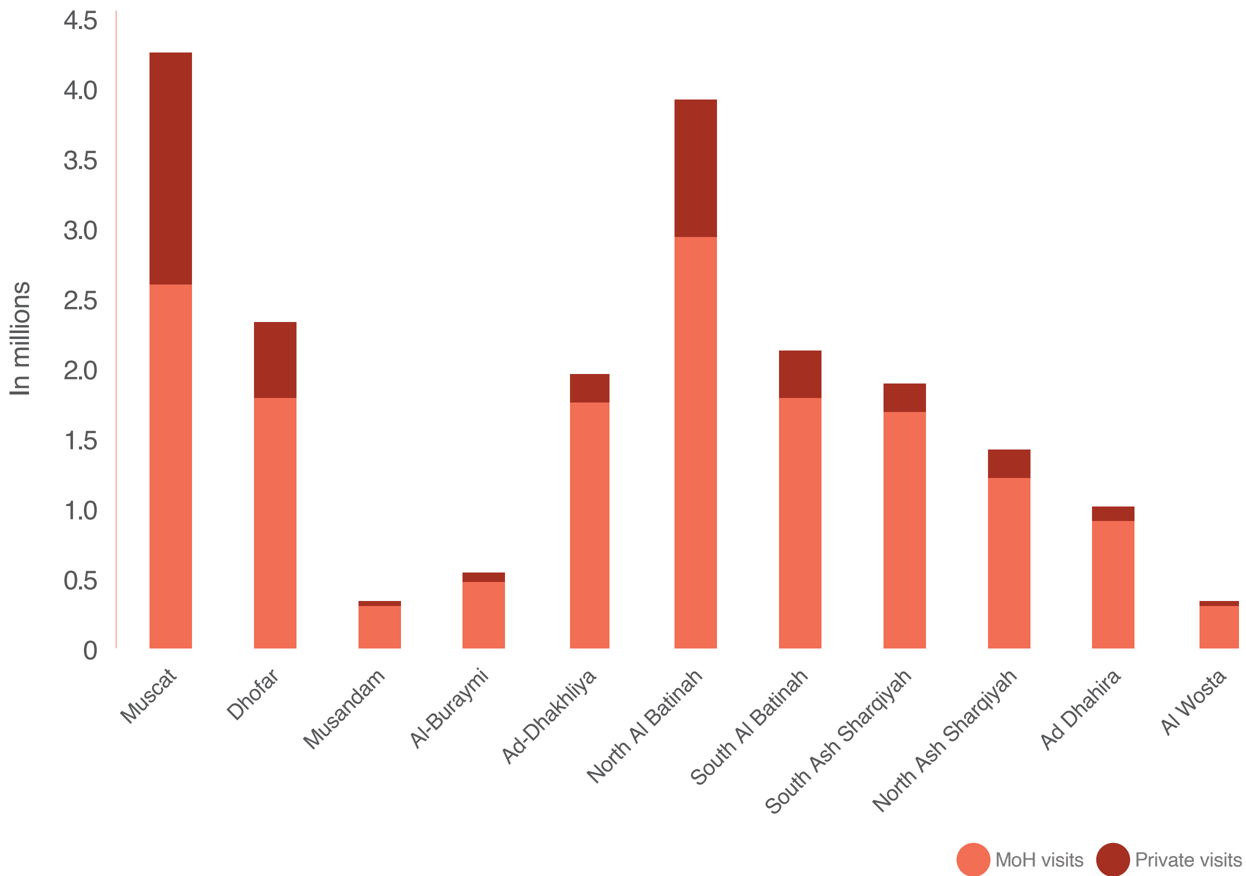


3.4.2 Private sector utilization in comparison to the public sector

As shown in Fig. 6, most medical visits in 2019 were to MoH facilities *(25).* Nevertheless, health care utilization increased across the levels and sectors. For example, deliveries went up from 42 000 in 2005 to 67 069 in 2019, of which 19.8% were caesarean sections and 10% took place in private hospitals *(35)*. In 2010, 92 219 surgeries were performed, whereas in 2019 this rose to 117 890 surgeries, of which 42.0% were major procedures. In 2019, 49 514 significant surgeries were performed in MoH facilities, whereas only 3748 were performed in non-MoH hospitals *(21, 25)*.

With regards to the private-sector contribution to medical services in Oman, there were 4 345 865 visits to private-sector outpatient clinics in 2019; of those, 1 687 629 (38.8%) were made in Muscat governorate. In other governorates, the ratio of private to public health visits is lower than in Muscat. However, reporting from governorates other than Muscat is not complete; therefore, private visits are likely to be underestimated. It is noteworthy that this distribution is consistent across age groups, barring adult males whose visits to the private sector constitute 50% of all adult male outpatient visits in Muscat governorate (Fig. 7) *(25, 35).*

Fig. 7. Visits to MoH and private sector facilities in governorates of Oman, 2019 *(25, 35)*



In a short survey, we asked a group of interviewees about their perceptions of the health services in Oman. Many respondents said that appointment waiting times are shorter in the private sector but that MoH clinics and hospitals are more advanced and better equipped to deal with complicated cases.

A national policy stipulates that all pregnant women are required to register with the nearest PHC centre and that each child be issued a government child health card. This is one factor increasing visits to the MoH compared with the private sector. There are no data available on why patients prefer to visit private over public hospitals. Reporting from the private sector on the number of and reasons for visits is incomplete, which makes it hard to understand the private sector's role in health care in Oman (Al Qasmi A, Ministry of Health, personal communication, 2020).

In summary, there is increasing demand for health services in Oman, but the capacity of the private sector in terms of outpatient visits, surgeries and procedures is limited. Therefore, there is much room for private-sector offerings to be solidified and improved in value. It is crucial that the Government and private sector provide the same level of care and that legislation is in place to enhance the financial accessibility of the private sector for all citizens and residents.

4

Health sector finances and expenditures

The main source of public health financing is government funding generated from natural resources, mainly oil and gas (70%), and other sources such as taxation, tariffs, services, tourism and fisheries *(50)*.

4.1 Health financing

The value of the Omani health sector was estimated at US$ 2 billion in 2015, and private health insurance contributed 7% of the health expenditure in that year *(51)*. In this section, we discuss how government financing and private contributions impact health service delivery.

The Government of Oman finances the health sector through an annual budget, of which 793 million Omani rials were allocated to the MoH in 2019. Also, United Nations agencies such as WHO provide technical assistance in specialized programme areas, and some nongovernmental organizations (NGOs) contribute financially towards the purchasing of equipment and buildings *(51, 52)*.

Hospital managers reported that they face “challenges in maintaining an adequate quality of service while upgrading with new technologies and know-how”

The establishment of medical care institutions requires significant financial and technical resources. In many countries, the government provides support to improve the chances of private-sector endeavours to be successful and profitable. In Oman, this support is provided in the form of land plots for the construction of new private hospitals. However, interviews with the private health sector hospital managers and local Omani investors revealed that individual investors fund most private health sector ventures and smaller clinics are self-funded through bank loans *(41)* (Al Khonji A, Ministry of Health, personal communication, 2020). Hospital managers also reported that they face “challenges in maintaining an adequate quality of service while upgrading with new technologies and know-how” *(53)*. It is possible that investors are not aware of the resources available to them. More coordination with the private sector is needed; improved financial subsidies and specialized schemes to attract interested individuals and companies are recommended.

MoH services are highly subsidized for Omani nationals, as they have access to all MoH health facilities for a nominal annual fee of 1.0 Omani rials, the equivalent of US$ 2.50, plus a fee of 0.2 Omani rials (the equivalent of US$ 0.52) for each visit. Each primary, secondary and tertiary health care facility charges these fees independently. Paying these, the patient can have access to services and procedures, including major operations in the respective facilities, except for private hospital rooms, which are charged on a fee-per-night basis *(54)*.

Private insurance companies provide health insurance for almost 43% of the expatriate population; otherwise, expatriates are required to make payment at the point of care in both private and MoH medical facilities. Private hospitals often refer non-Omanis with complicated conditions to MoH hospitals, in which case the patients are required to pay an unsubsidized fee *(54)*. Only 10% of the expatriates are covered by voluntary health insurance, and there are plans to mandate health insurance for the private sector and expatriates in the future *(53)*.

Individual Government bodies such as the Public Authority for Radio and Television have taken the initiative to purchase health insurance coverage for their employees. Most of the schemes are basic coverage through private health insurance on a fee-for-service basis, whereby large corporations purchase fleet health insurance (Al Khonji A, Ministry of Health, personal communication, 2020; Al Nabhani S, Ministry of Health, personal communication, 2020).

Government financing of health care has showed remarkable results so far; however, fluctuation in oil prices may force the Government to reduce MoH allocations. Consequently, this system's sustainability is threatened. There is also a risk of unfair distribution of health services given that high-quality MoH services are essentially free for Omanis. At the same time, expatriates visit private-sector facilities, which are regarded as being of lesser quality. Improvement of the private sector through financing new ventures and supporting health care for expatriates should be considered to ensure a sustainable health care system in Oman.

4.2 Health expenditure

The MoH expends more than 793 million Omani rials, which is almost 88% of all health expenditure in the country. This budget does not include allocations to the Royal Omani Police, armed forces or private-sector institution health services *(55).* Oman has one of the lowest out-of-pocket expenditures compared to similar economies, and WHO estimated that out-of-pocket spending as a percentage of current health expenditure in Oman reached its highest point in 2008 at 12.4% but declined gradually to reach 6.7% in 2017 *(7, 56).* This indicates that the public health sector has been absorbing the health care needs of Omani citizens; however, it is forecasted that this is not sustainable *(56).*

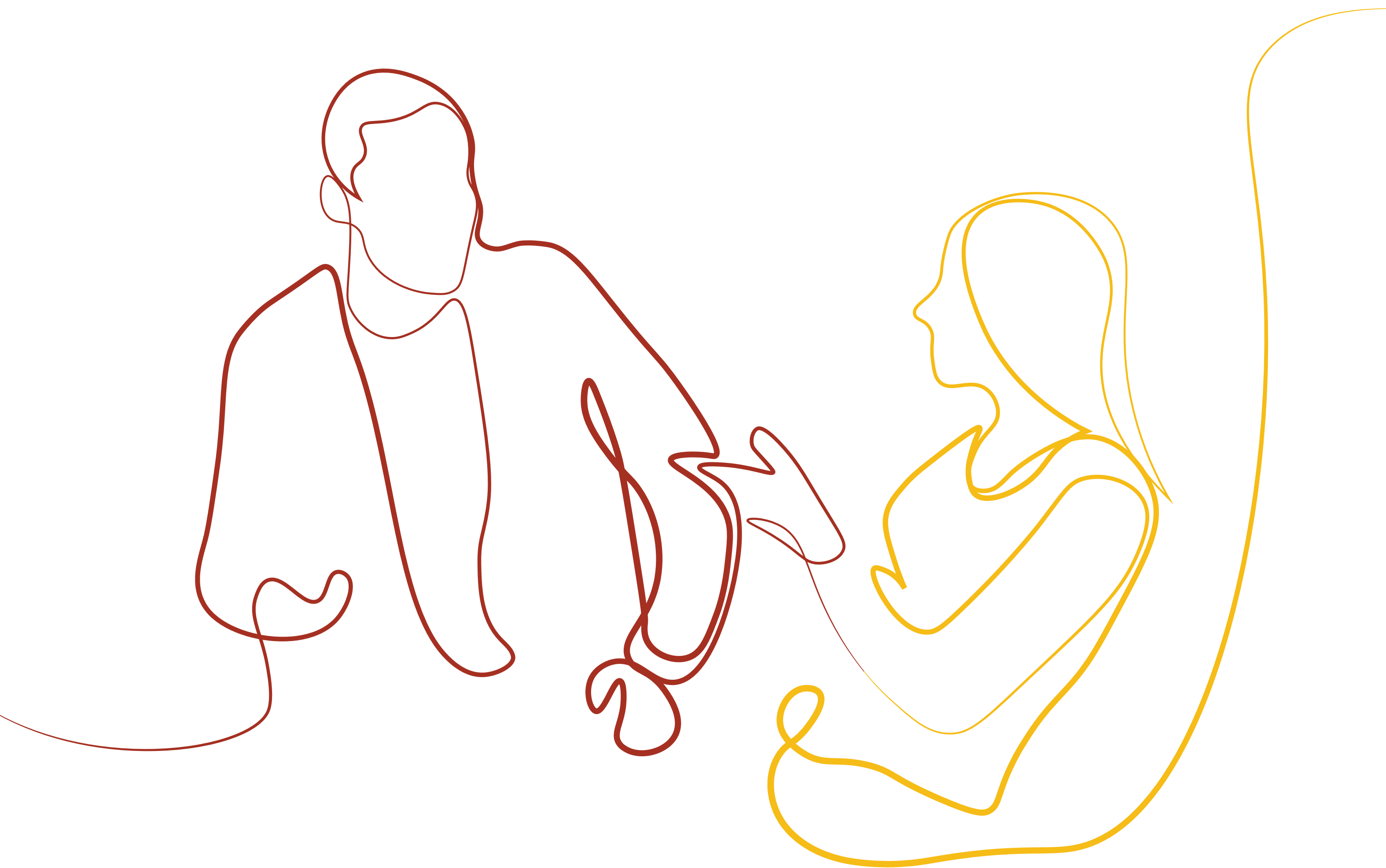
The drop in oil prices forced the Government to limit the annual increase in the MoH budget and halt investment in major health projects such as the medical city and hospitals in South Al Batinah and Zufar.

The MoH handles budget allocation, human resources, infrastructure and medicines for all its medical establishments but outsources some logistic functions such as catering, cleaning, pest control and transport *(33).* Similarly, the other government entities that provide medical services are responsible for the financing, budget allocation and logistics of their respective hospitals and health centres.

4.3 Financial accessibility

Publications on financial accessibility for citizens and residents are limited, but as mentioned above, all Omani citizens have access to MoH medical services for a minimal fee *(54)*. Many companies and some government entities provide health insurance for their employees, which can be considered complementary insurance for Omanis. The low out-of-pocket expenditure indicates high levels of financial accessibility. Also, a cross-sectional study in 2019 showed that 95% of patients attending PHC services in Oman reported that not having any problems with financial accessibility. Still, there were some variations between governorates *(57).*

To improve financial accessibility for expatriates, in April 2019 the Capital Market Authority of Oman announced a proposal for a Unified Health Insurance Plan. The proposal includes the mandatory provision of medical health insurance for all employees in the private sector *(58)*.



5 Private sector analysis and stakeholder perspectives

5.1 Private sector growth and its determinants

The private health sector in Oman is small and includes hospitals, health centres, specialized health centres, laboratories and one drug-manufacturing facility. There has been a gradual and consistent increase in the number of private hospitals and beds, mostly in the capital Muscat, where the numbers of private health care facilities are the largest. As shown in Fig. 2, the number of private sector beds quadrupled from 2005 to 2017 compared to a 10% increase in the public sector. However, the public sector continues to provide more than 85% of the national bed capacity in all governorates *(44).*

The health sector in Oman, including public and private service providers, is expected to expand even further over the coming years. According to Alpen Capital, the annual growth of the health sector in terms of current health care expenditure will be 9.1% between 2017 and 2022 *(59).* The private sector components of this expansion, according to stakeholders, are described below.

5.1.1 Introduction of PPP law and authority

In an effort to boost the economy and improve the participation of the private sector in national development, two relevant Royal Decrees were issued on 1 July 2019. Royal Decree No. 52/2019 on PPP law outlined provisions related to the allocation of projects, contractual agreements, the commitment and responsibilities of each party, and oversight and monitoring *(24)*. Royal Decree No. 54/2019 focused on establishing a general authority for privatization, PPPs and their bylaws *(60).* These steps should support the private-sector growth in the country and harness PPPs.

5.1.2 Increasing demand for quality care

In preparation for this report, a short survey of was conducted, which asked private-sector managers and patients to report on their perceptions of health services in Oman. When asked about the reason for high demand in the private sector, some managers from private hospitals said that the public sector is unable to cope with the increased demand for quality health care. At the same time, only 50% of patients pointed to better quality of care as a reason for seeking out private clinics (Fig. 8). The most important reasons for seeking care in private clinics were to avoid crowding (92.4%), convenience and location (69.9%), and cordial treatment by staff (65%). It is expected that these factors will continue to be relevant in the future, possibly to a greater extent, because of the increase in population and the expected higher demand for health care. Survey respondents mentioned that one other reason they visited the private sector was for dental care because it was more convenient and better run. Others said that appointments are more readily available at private clinics. One critical influencing factor for seeking private medical care could stem from the fact that 43% of respondents benefited from health insurance coverage.

Another study showed that dissatisfaction with care was the main reason for seeking health care abroad *(61).* The growing number of patients seeking health care in the local private sector and abroad reflects the limitations of the public sector, as identified by the interviewed patients.

Fig. 8. Reasons for seeking private-sector health care in Oman

5.1.3 Plans for universal health insurance

Health insurance premiums can vary widely based on the selected benefit plan and on the risk profile of the insured member

As part of its efforts to review fiscal policies and insurance arrangements, the MoH in Oman sought advice from various agencies, including the World Bank, which provided a review and plan for public health expenditure reform *(56),* and Korea Medical Holdings Company, which provided a strategy study of social health insurance *(62)*. These reports, in addition to Oman Vision 2040, are guiding the development of a reformed fiscal policy and insurance scheme *(30).* Incorporated in that plan is a compulsory health insurance proposal that is expected to drive the growing demand for the private health sector *(63).*

In addition to patients and representatives of the private sector, representatives of insurance companies were interviewed; they shared their process for health claims, stating that providers' claims are settled on a reimbursement basis. Major insurance providers revealed that their insurance schemes cover benefits such as outpatient services, including physician consultations, laboratory investigations and pharmacy services as well as inpatient and surgical services. HIV/AIDS and family planning services are not usually covered unless agreed upon with the client .

Insurance companies have stated that their role is limited; however, it can be supported through various models that would ensure adequate funding, a healthy environment and competition to ensure the quality and affordability of services. Insurance companies have also alluded to, for instance, the importance of protection from fraud, waste and abuse and of cost-containment *(62).*

Health insurance premiums can vary widely based on the selected benefit plan and on the risk profile of the insured member. As relayed by the insurance company interviewees, the yearly maximum limit of coverage also varies depending on the product chosen; for example, standard products offer annual limits in the range of 25 000 to 1 million Omani rials, and co-payments vary by policy and can range from 0% to 20%.

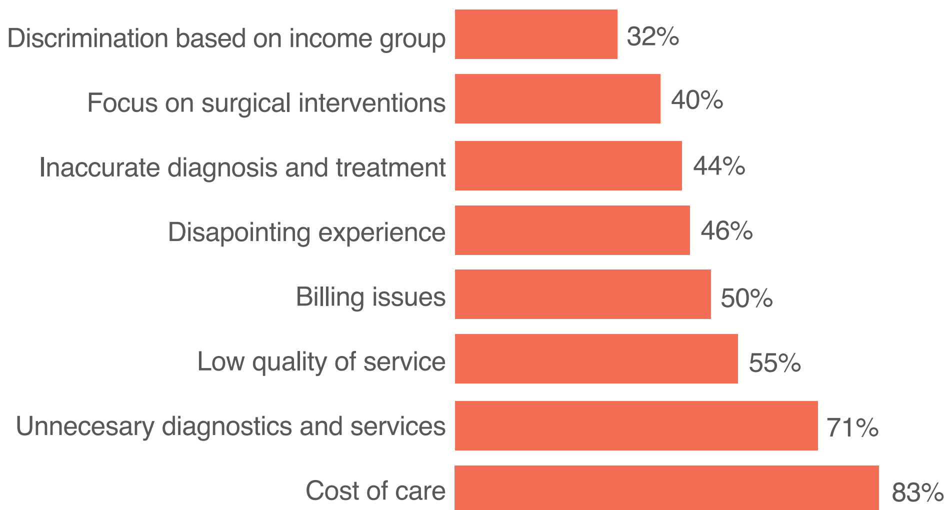
Insurance agencies had no involvement with national or social health insurance in Oman at the time of writing. However, the agencies expressed interest in becoming involved in local health insurance schemes and believed they could play a vital role in achieving UHC, especially in geographically remote governorates.

5.2 Private health sector resources

In 2019, Muscat governorate was home to 100 private general clinics out of 240 nationally, whereas North Al Batinah, South Al Batinah and Ad-Dakhliya had 53, 19 and 19 general clinics, respectively. Similarly, there were 79 specialized private clinics in Muscat governorate – more than any other governorate. In comparison, there were 23 in North Al Batinah and one in each of North Ash Sharqiyah and Musandam. The distribution of private hospitals in the governorates was uneven as there were 17 in Muscat and none in Musandam, Al-Buraymi, South Ash Sharqiyah or North Ash Sharqiyah *(25)*. This geographical imbalance shows a need to encourage the private sector in less populated areas.

Patients in Oman view the public sector at all levels of care in high regard compared with the private sector. Although in this survey (a random sample of 151 people conducted online) patients reported that the private sector had advantages. Their main complaints regarding private health care was the high cost (82.6%), unnecessary diagnostics and treatment (70.8%) and a quality of care that is below expectations (55.1%) (Fig. 9).

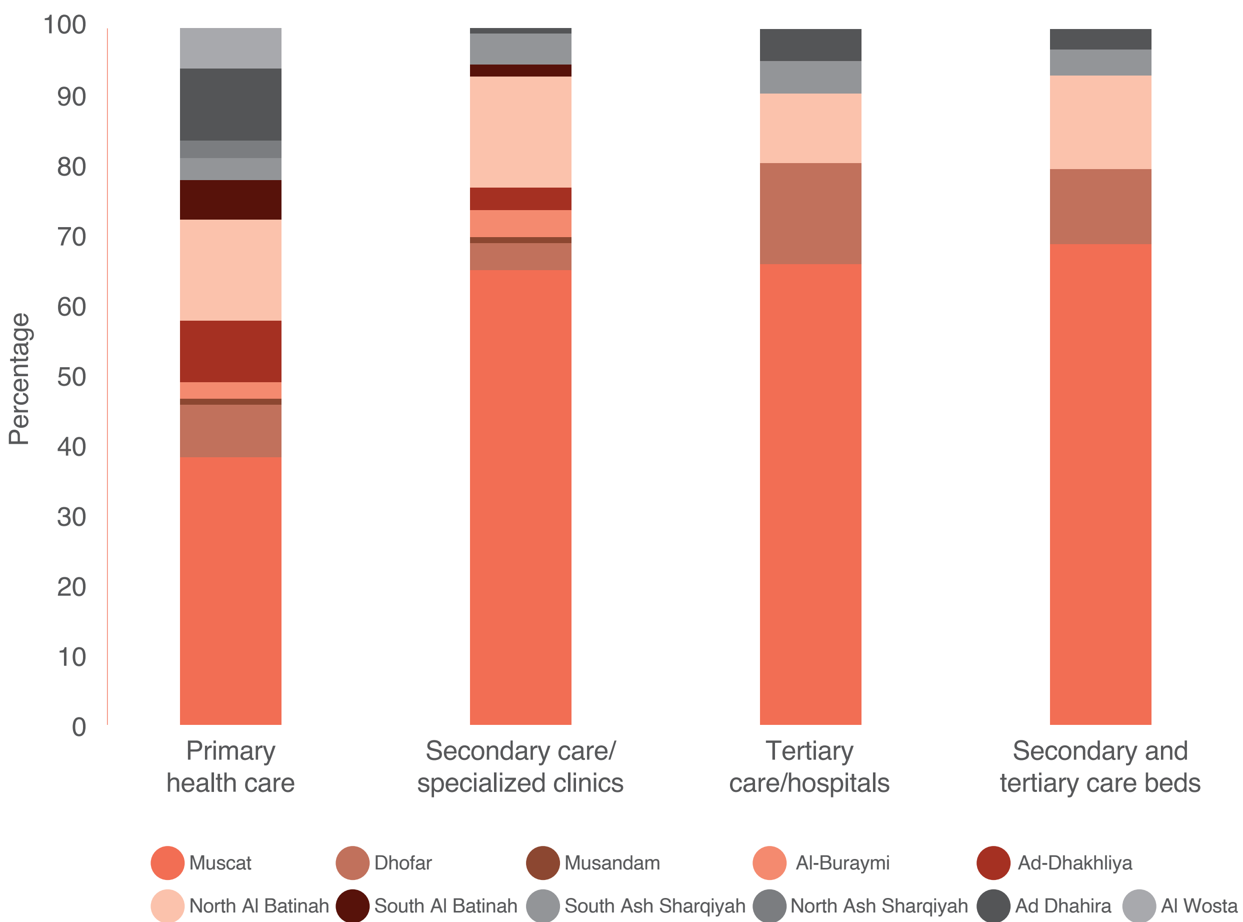
Fig. 9. Reasons for patient dissatisfaction with private medical services in Oman (random sample of 151 patients, online survey)



The private sector provides a wide range of medical and surgical services that are evolving gradually. The Badr Al Samaa Group of Hospitals, Muscat Private Hospital and the facilities of Starcare Oman are Joint Commission International accredited, whereas KIMS (Kerala Institute of Medical Sciences) Hospital is accredited by Australian Healthcare Standards International *(64–67)*. These offer services based on point-of-care payment and for insured individuals, mostly corporate employees. Still, the private sector does not offer the same quality of care available in MoH facilities or at other public health care providers. One of the main reasons is that because of the low demand, the private sector does not have a competitive financial advantage to compete with the workforce, resources and organization of the public sector. Investment in high technology or a high-calibre workforce is a challenge given the low demand in the private sector. Recently, several private multispecialty polyclinics operated by Omani doctors reported financial challenges, which led to the closure of their services.

Fig. 10 shows the distribution of private primary, secondary, specialized and tertiary care hospitals and beds in the governorates of Oman.

Fig. 10. The distribution of private primary, secondary, specialized and tertiary care hospitals and beds in governorates of Oman, 2017 *(38)*



5.3 Legal and regulatory framework and governance

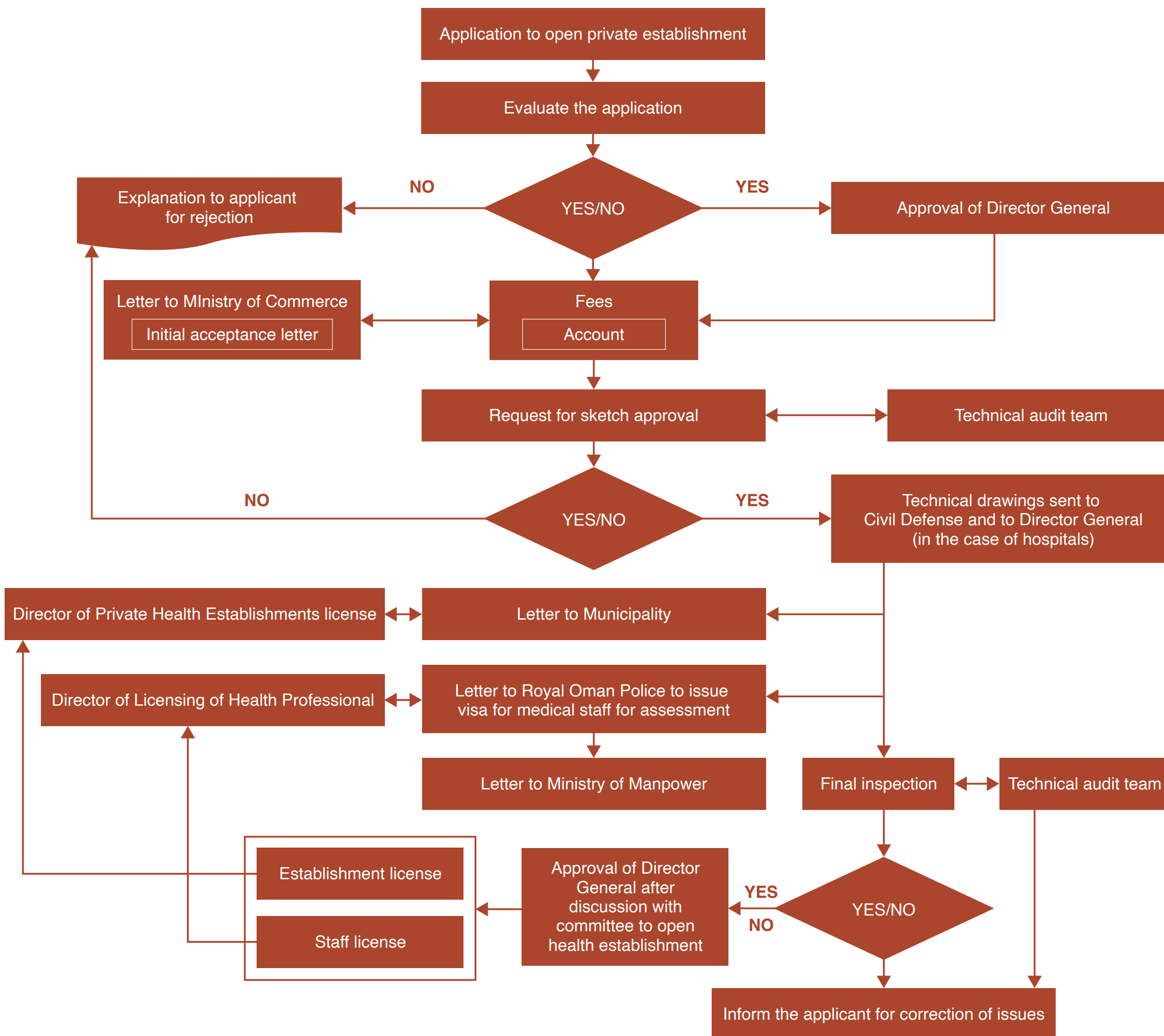
In each governorate, the respective directorate general of health services is responsible for the governance and oversight of health care. Each directorate general is also responsible for running all MoH operations and implements health programmes, human resources management, training, and reporting to MoH headquarters. Another task of the directorate general of health services in various governorates is the construction and operations of health facilities. The MoH allocates funds, develops clinical guidelines and resources, and initiates and delegates the implementation of national programmes to the directorate generals of governorates, as well as developing quality and safety norms and standards. The MoH is also responsible for drug procurement and distribution, staff recruitment, and the development and implementation of national training programmes *(44).*

5.3.1 Registering, contracting and licensing private health facilities

The licensing of private health clinics and hospitals requires approvals by the Directorate General of Private Health Establishments (DGPHE), Ministry of Labour, Ministry of Commerce and Industry as well as the municipality (Fig.11).

The Ministry of Commerce and the municipalities provide the commercial registration and authorization for the practice. The Ministry of Labour authorizes personnel according to the Omanization Policy, a national policy aimed at ensuring a fixed proportion of Omanis to non-Omanis in the workforce. In the medical sector, this regulation is relaxed because there are not enough Omani medical staff *(68, 69).*

Fig. 11. Approval process for private health establishments in Oman



The approval process includes commercial registration, after which the application is registered within the DGPHE. Once registered, the applicant is required to develop sketches and designs according to the specifications and standards required. The sketches must be approved by the Directorate General of Engineering in the MoH *(70).*

5.4 Registering, contracting and licensing private health care workers

All health workers are licensed by the Oman Medical Specialty Board. Initially, the relevant employer applies for a certificate equivalence or verification of certificates. The Oman Medical Specialty Board verifies the certification and experience of the applicant and licenses them accordingly. All medical specialities are required to register with the board and undergo a test for licensing.

5.5 Quality, accreditation and oversight

The MoH information system includes programme and quality indicators of the private sector such as numbers of institutions, beds, laboratories, pharmacies, human resources, visits and medical procedures

The primary agency responsible for licensing and regulating the private sector is the DGPHE in the MoH. All private health sector providers are subject to an application and approval process. The applicant submits the scope of service, staffing schedule, key patient safety policies and architect narrative outlining the building standards used. The designated project manager contact detail is presented along with all other required information to the technical and audit team. The latter provides the necessary regulations and procedures to the applicant and, after inspection, the team submits approval recommendations *(70).*

The MoH licenses all formal private-sector clinics and hospitals. Compliance data are not published; however, the DGPHE has a set of guidelines and procedures. Visits to each establishment by the DGPHE or relevant department in the governorates are made regularly. Noncompliant establishments are given fines and a grace period for corrective action *(71)*. If the medical practice does not comply with recommendations, the facility could be temporarily or permanently closed and its license withdrawn *(71)*. Major noncompliance issues are dealt with by a specialized committee that investigates the situation and takes measures for temporary or full closure of the establishment *(71).*

The MoH information system includes programme and quality indicators of the private sector such as numbers of institutions, beds, laboratories, pharmacies, human resources, visits and medical procedures *(39).* According to the Department of Health Information and Statistics, and the MoH, about 30% of private health establishments are fully compliant with the reporting requirements and most of these are in the Muscat governorate *(38).*

The clinical establishment act was issued in 1998, and it needs to be updated *(72).* There are several regulations that govern registration and the enforcement of standards that are published by various relevant parties. Patient complaints are processed through an independent Higher Medical Committee, which investigates each case individually and refers established misconduct to the public prosecutor, as indicated by the chair of the Higher Medical Committee.

The Oman Chamber of Commerce established a temporary committee in 2017 to serve as a platform for public and private-sector dialogue. The committee's role is to coordinate between the public and private sector and communicate the privatesector issues to the Government *(73).*

6

PPPs in health services delivery

6.1 The legal and institutional environment for PPPs

As stated in the national statute, the Government of Oman recognizes public health as a fundamental human right. This right is also expressed in the Law of the Child and other relevant legislation. Article 12 of the national statute states:

> The state is responsible for public health and for the prevention and treatment of diseases and epidemics, the state also strives to provide health care for all citizens and encourages private hospitals and health care institutions under government supervision and according to the law. The state works towards preservation and protection of the environment, and prevention of pollution *(74).*

In the Law of the Child, Article 14 states: "Every child has the right for preventive and curative health care, and the state ensures that he is provided with the highest attainable free medical care" *(75).*

The MoH in Oman is responsible by law for health policies, strategic planning and providing preventive and curative health services as well as supervising the private health sector, licensing, and accrediting private health institutions, and providing and ensuring the quality of medical supplies and drugs *(27).*

In 2014, the MoH led an initiative to plan for the health sector up to 2050 entitled Vision 2050 *(76)*. The vision's analysis and plan were developed through a broad consultative effort with national and international organizations and entities, including private-sector representatives. One of the main components of the vision is to enhance the private-sector role in the country's health system. Some of the actions proposed in the vision are listed below.

- Perform health system studies to find an appropriate role for the private sector in health care delivery and not only for the outsourcing of services.
- Consider outsourcing of ancillary and curative services and production of pharmaceuticals based on appropriate regulations.
- Enhance the development of health system research to develop means the Government can use to encourage the private sector to invest in health care and strengthen PPPs.
- Develop public regulations for the private health sector.
- Review and assess the decision that allows public health personnel to be engaged in private practice *(76).*

In 2014, the MoH led an initiative to plan for the health sector up to 2050

WHO reports that private sector engagement will help reduce the number of Omani patients seeking costly care outside the country and will ensure the availability of a broad range of specialities, including long-term rehabilitation care and advanced technology. The same report states that the challenges when working with the private sector include quality monitoring, regulation, rapid and uncontrolled growth of the informal market and unbalanced geographical distribution of private facilities. Significant regulatory and policy changes are required to engage the private sector *(77).*

There are currently very few contractual agreements in the health sector. There have been attempts to engage the private sector since the early 1990s, when the catering, cleaning, pest control and laundry of all hospitals were assigned to the private sector through a service agreement. According to those contracts, MoH provides the venue and facilities, and the contractor provides the service required.

More recently, renal dialysis has been outsourced to reduce waiting times. Also, there are discussions about delegating the operations of newly built dialysis and prosthesis centres to the private sector. Outsourcing of support services such as catering, cleaning, pest control and laundry of public health facilities had been ongoing for the last 20 years *(78, 79).*

6.2 Scope and priority areas for PPPs in the future

Given the impact on the economy of the fluctuation of oil prices, PPPs would be a viable solution for providing health care and spreading the cost of providing the service while accelerating the pace towards UHC.

The public health sector in Oman has been providing health care for Omanis with recognized macro-efficiency. However, a more collaborative effort is needed between the government, private sector and NGOs to achieve UHC *(80).*

Both the Government and private sector see the importance of engaging the sector for improving health service delivery in the country

The private sector have been described as eager to increase their contribution, which would assist the MoH in meeting the demands for some specialized and secondary care services. For that reason, it is essential to engage the private sector and NGOs in developing a model that will address the needs and concerns of both parties. According to WHO, this would entail reinforcing regulatory, managerial and information capacity in the Omani MoH for the private sector to contribute to national health policy *(77).* There are modest efforts to establish some PPP projects that need to be enhanced. With a lack of private sector engagement, these attempts will remain vulnerable from a business standpoint, and investment contributions will be limited. Long-term engagement of the private sector will require policy decisions for the extension of the contractual period between the Government and the private sector from the current two to three years to more standard contract durations for PPP projects of no less than 20 years *(81).* Also, simplifying the lengthy licensing and workforce certification process would be an essential requirement.

Ideally, an entity would be created, reporting to the Minister of Health, that communicates, supports and engages the private sector. This entity could reenforce a national PPP policy and ensure that the interests of the private sector, the Government and patients are all met in PPPs and private sector engagement agreements and projects.

Both the Government and the private sector see the importance of engaging the sector for improving health service delivery in the country. Engaging the private sector to a greater extent would enable the Government to focus its resources towards providing free primary care for underprivileged groups and underserved areas. We also propose purchasing specialist services from the private sector. Some private health providers think that the Government should only engage NGOs.

For that option to be effective, a framework and operational guidance are needed.

It could be helpful to conduct a gap analysis of key services and products, existing coverage of each service nationwide and the available capacities in the public, private and NGO sectors. In addition to highlighting gaps in the services, this analysis should support a collaborative, complementary approach to working within the parts of the health system that are under Government supervision.

Some efforts are underway to explore PPP opportunities. For example, the MoH is investigating PPPs for the prosthetics centre in Muscat and renal dialysis units all over the country. Other potential areas are rehabilitation and palliative care. Establishing new facilities may require much effort and cost; however, purchasing the service on a fee-for-service basis could be more cost-effective, especially in remote areas where smaller, specialized facilities are located.

Table 3 provides a SWOT (strengths, weaknesses, opportunities, threats) analysis of PPP in the health care sector in Oman.

Table 3. SWOT analysis of PPP in the health care sector in Oman

	Internal influence	External influence
Positive impact	**Strengths** ▪ MoH/DGPHE ▪ Availability of high-calibre Omani doctors and investors who can strengthen the private sector ▪ Existence of a medical association and chamber of commerce forum	**Opportunities** ▪ Market demand ▪ New sovereign's focus on the economic agenda of the country ▪ National policies encourage small and medium enterprises ▪ Interest from the private sector ▪ Medical tourism
Negative impact	**Weaknesses** ▪ No PPP framework ▪ No documented PPP experiences ▪ Private sector not organized ▪ Human resources are limited ▪ Unclear vision on PPP role and potential ▪ Quality of service is sometimes inadequate ▪ Lack of data on resources, equipment and supplies ▪ Lack of collaboration with the government reporting system	**Threats** ▪ Small market for specialized care ▪ Competition from the international health sector (Omanis travelling abroad for care) ▪ Public sector views the private sector as a competitor ▪ Lack of protective laws and regulations ▪ Unclear public funding to PPP projects

7

Recommendations for the private sector and UHC

With unpredictable oil prices and competing Government priorities, it is necessary to bring together the private and public sectors as partners for health

PPPs are being adopted by many governments to deliver health care with reduced costs and waiting times. For example, 81 PPP projects finance 32% of the health budget in the United Kingdom of Great Britain and Northern Ireland, while the Republic of Korea ranks second in the list of countries with PPP contribution at 24% and Australia comes third at 11% *(82).* PPP projects were found to be delivered on time and with good quality. The cost savings of these projects were estimated to reach up to 17% *(81).*

It is essential to recognize the caveats to the general success of PPP projects; these include organizational particularities, interpersonal relationships between partners and the suitability of the PPP model to the context *(83).* These schemes remain vulnerable to waste, fraud and corruption and require close monitoring by the government *(84).*

Despite these considerations, PPPs are an essential approach for improving value for money for Oman. With unpredictable oil prices and competing Government priorities, it is necessary to bring together the private and public sectors as partners for health. Establishing PPPs to improve the scope and geographical coverage of health services will not only advance national health goals but also empower the private sector and create jobs.

The MoH will ideally set a national policy and strategic direction for the future of the private sector and its interface with the public sector *(77).* This policy could be initiated by a policy dialogue among decision-makers and various stakeholders and reaffirm the normative role of the MoH in the future development of the private sector. It should also ensure seamless collaboration between the public and the private sector, including PPPs *(77).*

It is also vital that the national policy address the challenges identified. For example, enacting PPP legislation and a national PPP unit will motivate the private sector to actively contribute to the national health plan and secure more resources to that end. Providing support through tax redemption and low-profit loans and easing approval and licensing procedures could accelerate the growth of the private sector. Establishing a national social health insurance scheme could improve demand and profitability for the private sector while reducing the pressure on the public sector. Facilitating and supporting local production of medications and medical equipment could lessen the financial burden, encourage the private sector and create jobs.

In Sections 7.1–7.3, short- and long-term strategic priorities are suggested in addition to recommendations for future actions.

7.1 Short-term strategic priorities

1. Establish and disseminate to all stakeholders a national policy and guidelines for PPPs in health through an interactive process. The policy would ideally outline the major roles and responsibilities for each party, areas of possible collaborations, context-specific mechanisms and PPP options, and the procedures for engaging in such projects for the private sector

2. Establish a PPP unit within the MoH. This unit would be responsible for facilitating communication between the public and private sector, establishing contractual agreements and addressing issues and concerns from all stakeholders, including patients. The unit should also conduct a priority-setting exercise through a national situation analysis. This analysis should include the available and required services, the available resources and projected needs of each PPP area.

3. Review Ministerial Decree 53/98 *(85)* on private clinics and hospitals and licensing and accreditation procedures to encourage the growth of documented and quality private health services.

4. Create a public–private national committee involving representatives of all health sectors in the country. This committee would be charged with assessing the PPP environment, enablers and facilitators of private sector engagement, and addressing the gaps in UHC from a PPP point of view.

5. Initiate one or two pilot PPP projects in a selected service and institution. For example, adopt a build-operate-transfer model for new hospitals (Muscat Hospital), sign a service agreement for the prosthesis unit in Khoula Hospital with the private sector and contract the private sector to operate the newly built renal dialysis unit in Sur.

7.2 Long-term strategic priorities

1. Increase the financial contribution of PPPs in health to 20–30%, taking into consideration the fair distribution of services and the national plan of action. Equal geographic distribution of primary, secondary, rehabilitation and palliative care would be the primary goal.

2. Empower NGOs and not-for-profit businesses as health and medical service providers. Establishing service agreements and improving referral and back referral to those organizations could fill a vital service gap.

3. Establish a national social health insurance scheme that involves the private sector as an integrated health care provider. A national health insurance scheme could pool the resources available to the Government. Patients under the scheme should have access to public, private and PPP hospitals according to available specialities and waiting times.

4. Create a Government-supported medical industry city aimed at the manufacturing of pharmaceuticals and medical supplies for the private and public sector alike. Local production of medical supplies and pharmaceuticals should help control price and nurture the local industry.

5. Establish a field of evidence-based regulations, quality assurance standards and clinical guidelines for the public and private sector, and ensure privatesector involvement in the development, training and implementation of health programmes and services.

7.3 Recommendations

1. Develop a national framework. An operational manual for PPPs in health is recommended to establish a common ground for understanding the nature, scope and objectives of health PPPs in Oman.

2. Develop PPP capacity in the public sector. Coordinate training on PPPs for stakeholders within the MoH and other relevant agencies. Training could cover areas such as: finance; economic and technical feasibility studies; the process for determining the value for money; risk identification, mitigation and allocation among parties involved in a PPP project; and the design, implementation and monitoring of PPP programmes.

3. Conduct a national survey to assess PPP opportunities and challenges in Oman, and coordinate policy dialogues to confirm the results and propose policy decisions.

4. Review Decree 53/98 (85) on private clinics and hospitals and licensing and approval procedures. There is also a need to improve workforce accreditation procedures for the private sector.

5. Initiate pilot PPP projects employing various models. For example, there is an established need to operate a regional hospital in Muscat that will serve as a secondary care facility. It is suggested to pretest a build-operate-transfer model for this hospital.

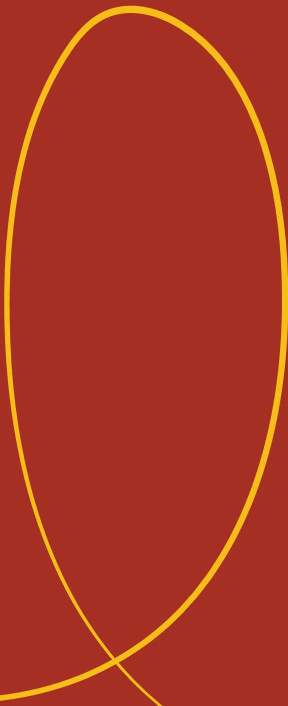
6. Allocate adequate funds for PPPs and private sector engagement for training, development of procedures and guidance, and legal support for PPP projects.

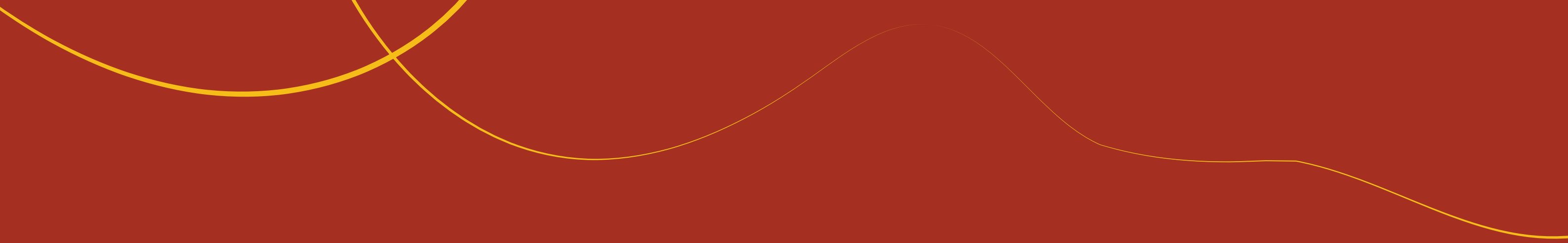
7. Harmonize quality assurance standards, standard operating procedures and regulations in the private and public sector and develop guidelines and policies to improve PPPs and private sector engagement, such as purchasing and outsourcing mechanisms for health services and goods.

8. Establish a national social health insurance scheme that covers all nationals and expatriates, and benefits from the resources available to the private sector while ensuring the pooling of funds and resources.

9. Initiate a medical industry city to engage private pharmaceutical manufacturers in providing drugs and supplies for Oman and the Eastern Mediterranean Region.

References





1. Recommendation for the use of PPP in universal health care delivery in support of the United Nations Sustainable Development Goals, proposed draft. Geneva: United Nations Economic Commission for Europe Working Party on Public-Private Partnerships (WP PPP); 2018.
2. Munn Z, Peters MDJ, Stern C, Tufanaru C, McArthur A, Aromataris E. Systematic review or scoping review? Guidance for authors when choosing between a systematic or scoping review approach. BMC Med Res Methodol. 2018;18(1):143. doi:10.1186/s12874-018-0611-x.
3. Chapter 10: Health services by other health care providers. In: Annual Health Report 2011. Muscat: Ministry of Health; 2012.
4. Chapter 10: Health services by other health care providers. In: Annual health report 2013. Muscat: Ministry of Health; 2014.
5. Chapter 10: Health services by other health care providers. In: Annual health report 2014. Muscat: Ministry of Health; 2015.
6. Chapter 10: Health services by other health care providers. In: Annual health report 2015. Muscat: Ministry of Health; 2016.
7. GDP per capita (constant 2010 US$) - Oman. World Bank national accounts data, and OECD National Accounts data files 2020 [website]. Washington, DC: World Bank; 2020 (https://data.worldbank.org/indicator/NY.GDP.PCAP.KD?locations=OM&-view=chart, accessed 22 September 2020).
8. Oman's economic Outlook - April 2018 [website]. Washington, DC: World Bank; 2018 (https://www.worldbank.org/en/country/gcc/publication/economic-outlook-april- 2018-oman , accessed 21 August 2018).
9. Khan, MI. Falling oil prices: Causes, consequences and policy implications. J Petroleum Sci Eng. 2017;149: 409–427.
10. Data portal [website]. Muscat: National Center of Statistics and Information; 2018 (https://data.gov.om/OMPOP2016/population, accessed 22 September 2020).
11. World development indicators [website]. Databank 2020 . Washington, DC: World Bank; 2020 (https://databank.worldbank.org/source/world-development-indicators, accessed 22 September 2020).
12. Health status indicators. In: Annual Health Report 2019. Muscat: Ministry of Health; 2020.
13. Chapter 2: Health status indicators. In: Annual health report 2016. Muscat: Ministry of Health; 2017.
14. Findings from the Global Burden of Disease Study 2017. Seattle, WA: Institute for Health Metrics and Evaluation; 2018.
15. Oman [website]. Muscat: Institute of Health Metrics and Evaluation; 2018 (http://www.healthdata.org/oman. , accessed 22 September 2020).
16. Oman, both sexes, all ages, 2017, deaths. GBD compare, viz hub [website]. Muscat: Institute of Health Metrics and Evaluation; 2020 (https://vizhub.healthdata.org/gbd-compare/., accessed 22 September 2020).
17. Al-Lawati J, Sulaiman K, Panduranga P. The epidemiology of acute coronary syndrome in Oman: Results from the Oman-RACE study. Sultan Qaboos Univ Med J. 2013;13(1):43-50. doi:10.12816/0003194.
18. Chapter 8: Health domains. In: Annual health report 2005. Muscat: Ministry of Health; 2006.
19. Chapter 8: Health domains. In: Annual health report 2011. Muscat: Ministry of Health; 2012.
20. Chapter 8: Health domains. In: Annual health report 2017. Muscat: Ministry of Health; 2018.
21. Chapter 8: Health domains. In: Annual health report 2019. Muscat: Ministry of Health; 2020.
22. Al-Lawati JA, Panduranga P, Al-Shaikh HA, Morsi M, Mohsin N, Khandekar RB et al. Epidemiology of diabetes mellitus in Oman: Results from two decades of research. Sultan Qaboos Univ Med J. 2015;15(2):e226-e233.
23. Gaudin S, Smith PC, Soucat A, Yazbeck AS. Common goods for health: Economic rationale and tools for prioritization. Health Syst Reform. 2019;5(4):280– 292. Doi:10.1080/23288604.2019.1656028.
24. Oman, Royal Decree 52/2019 promulgating the Public Private Partnership Law (issued 1 July 2019, published 7 July 2019) Official Gazette 1300.
25. Chapter 10: Health services in other health care providers. In: Annual health report 2019. Muscat: Ministry of Health; 2020.
26. Chapter 3: Distribution of Health Services. In: Annual health report 2019. 2020, Muscat: Ministry of Health.
27. Oman, Royal Decree 36/2014 determining the competences of the Ministry of Health and adopting its organisational structure (issued 19 July 2014, published 20 July 2014) Official Gazette 1064.
28. Bosch DT. The American Mission Hospital in Oman 1893-1974; 81 Years. Muscat: Ministry of Health; 2002.
29. Oman's health care system increasingly ready to meet the population's needs [website]. The Report: Oman 2017.London: Oxford Business Group; 2018 (https://oxfordbusinessgroup.com/overview/rise-growing-population-finds-health-care- system-ready-meet-its-needs, accessed 14 November 2018).
30. Vision document. Muscat: Ministry of Finance; 2019.
31. Chapter 2: Health status indicators. In: Annual health report 2019. Muscat: Ministry of Health; 2020.
32. World health statistics 2014, Indicator Compendium. Geneva: World Health Organization; 2014.
33. Chapter 1: Introduction. In: Annual health report 2019. Muscat: Ministry of Health; 2020.
34. World Construction Network Editorial Team. IHG secures contract to build three hospitals in Oman [website]. Bournemouth: World Construction Network; 2020 (https://www.worldconstructionnetwork.com/news/ihg-secures-contract-tobuild-three-hospitals-in-oman. , accessed 28 September 2020).
35. Chapter 7: Utilization of health services. In: Annual Health Report 2019. Muscat: Ministry of Health; 2020.
36. Chapter 10: Health services by other health care providers. In: Annual health report 2010. Muscat: Ministry of Health; 2011.
37. Chapter 10: Health services by other health care Providers. In: Annual health report 2012. Muscat: Ministry of Health; 2013.
38. Chapter 10: Health services by other health care providers. In: Annual health report 2016. Muscat: Ministry of Health; 2017.
39. Chapter 10 Health Services in other health care providers. In: Annual health report 2017. Muscat: Ministry of Health; 2018.
40. Chapter 10: Health services by other health care providers. In: Annual health report 2018., Muscat: Ministry of Health; 2019.
41. Muhammed S. Badr Al Samaa, About Badr Al Samaa – A brief introduction. Ruwi: Badr Al Samaa Hospital; 2018 .
42. About [website]. Muscat: Association of Early Intervention; 2020 (http://www.earlyintervention.om/about-us /, accessed 4 October 2020).
43. Rawaf S, Allen L, Dubois E. Primary health care: closing the gap between public health and primary care through integration. In: Technical series on primary health care. Geneva: World Health Organization; 2018.
44. Annual health report 2017. Muscat: Ministry of Health; 2017.
45. Establishing and monitoring benchmarks for human resources for health: the workforce density approach. In: Spotlight on health

workforce statistics. Geneva: World Health Organization; 2008.
46. Scheil-Adlung X. Health workforce benchmarks for universal health coverage and sustainable development. Bull World Health Organ. 2013; 91(11): 888. doi: 10.2471/BLT.13.126953.
47. Chapter 4: Human resources for health. In: Annual health report 2019. Muscat: Ministry of Health; 2020.
48. Global reference list of 100 core health indicators (plus health-related SDGs). Geneva: World Health Organization; 2018.
49. Chapter 7: Utilization of MoH health services. In: Annual health report 2019. Muscat: Ministry of Health; 2020.
50. Guide to reading the general state budget. Muscat: Ministry of Finance; 2015.
51. Country cooperation strategy for WHO and Oman 2018–2022. Cairo: WHO Regional Office for the Eastern Mediterranean-Egypt; 2017.
52. Oman national health accounts. Muscat: Ministry of Health; 2015.
53. How much are you paying for medical care in Oman? Ruwi: Y Magazine; 2018 (https://web.archive.org/web/20190602131706/https://www.yoman. com/2018/08/how-much-are-you-paying-for-medical-care-in-oman/, accessed 17 October 2023).
54. Health services fees. Muscat: Ministry of Health: 2022 (https://www.moh.gov.om/en/treatment-fees, accessed 1 January 2022).
55. Chapter 6: Expenditures. In: Annual health report 2019. Muscat: Ministry of Health; 2020.
56. Oman health sector public expenditure review. Washington, DC: World Bank: 2017.
57. Al Asfoor, D. Exploring access to primary health care among type-2 diabetes patients attending primary health care in Oman. In: Nuffield Department of Population Health. Oxford: University of Oxford; 2020.
58. Nair, V. Details of mandatory health insurance in Oman revealed [website]. Muscat: Oman Daily Observer; 2019 (https://www.omanobserver.om/details-ofmandatory- health-insurance-in-oman-revealed/, accessed 1 March 2020).
59. GCC health Care industry 2018. Dubai: Alpen Capital; 2018.
60. Oman, Royal Decree 54/2019, establishing the Public Authority for Privatisation and Partnership and promulgating its system (issued 1 July 2019, published 7 July 2019) Official Gazette 1300.
61. Al-Hinai SS, Al-Busaidi AS, Al-Busaidi IH. Medical tourism abroad: A new challenge to Oman's health system - Al Dakhilya region experience. Sultan Qaboos Univ Med J. 2011; 11(4):477-484.
62. Strategic study for social health insurance in the Sultanate of Oman. Seoul: Korea Medical Holdings; 2015.
63. GCC health Care industry 2018. Dubai: Alpen Capital; 2018.
64. The future of medical care is at Badr Al Samaa group of hospitals and medical clinics [website]. Ruwi: Badr Al Samaa Hospital; 2010 (https://badralsamaahospitals.com/about. , accessed 2 June 2019).
65. Largest JCI accredited healthcare facility. Muscat: Muscat Private Hospital; 2019 (https://muscatprivatehospital.com/about-mph/, accessed 17 October 2023).
66. About Starecare Oman [website]. Oman: Starcare Oman; 2019 (https://starcarehospital.com, accessed 2 June 2019).
67. KIMSHEALTH Oman Hospital. Muscat: KIMSHEALTH; 2019 (https://www.kimshealth.om/about-us/, accessed 2 June 2019).
68. Oman, Ministerial Decree 151/2015, Ministerial Decision 151/2015 amending Ministerial Decision 26/2012 regarding the controls for allowing doctors working in civil government health establishments to work in private health establishments (issued 18 November 2015, published 22 November 2015) Official Gazette 1124.
69. N. Shruthi. More Omani doctors needed, says Oman Medical Association president [website]; Ruwi: Times of Oman; 2017 (https://timesofoman.com/article/43479-more-omani-doctors-needed-says-omanmedical- associationpresident#:~: text=%E2%80%9CWe%20have%20around%207%2C000%20doctors,the %20health%20sector%20in%20Oman.&text=Currently%2C%20there%20is%20no%20set%20Omanisation%20rate%20for%20the%20health%20sector, accessed 20 November 2018).
70. Request for licence to operate a private healthcare center [website]. Muscat: Ministry of Health; 2023 (https://omanportal.gov.om/wps/wcm/connect/en/site/home/gov/gov1/gov5gover nmentorganizations/moh/healthcom#:~:text=Complete%20a%20Mobilization%20Application%20Form,upon%20approval%20of%20the%20request, accessed 20 November 2018).
71. Resources [website]. Muscat: Ministry of Health; 2017 (https://www.moh.gov.om/en/web/directorate-of-private-healthestablishments/resources. , accessed 19 November 2018).
72. Firiikh, M. Assessment of the private sector in Oman, assessment final report. Muscat: WHO Country Office Oman; 2009.
73. Chamber of Commerce and Industry Sultanate of Oman. Temporary Committees. Muscat: Oman Chamber of Commerce and Industry; 2020 [website]; (https://web.archive.org/web/20220223111135/https://chamberoman.om/committees-councils/temporary-committees/, accessed 11 October 2020).
74. Oman, Royal Decree 101/96 promulgating the basic statute of the State (issued 6 November 1996, published 16 November 1996) Official Gazette 587A.
75. Oman, Royal Decree 22/2014 promulgating the law of the child (issued 19 May 2014, published 25 May 2014) Official Gazette 1058.
76. Health Vision 2050, Main Document. Muscat: Ministry of Health; 2014.
77. Country cooperation strategy for WHO and Oman. Cairo: WHO Regional Office for the Eastern Mediterranean; 2010.
78. Al Asfoor D, Khonji AA. Public and Private partnership for the prosthetic center in Khoula Hospital, a cost comparison analysis (policy brief). Muscat: Ministry of Health; 2020.
79. Privatisation of renal dialysis services in the Sultanates, comprehensive report. Muscat: Ministry of Health; 2020.
80. Chahine G, Bitar J, Indnani N. Harnessing the power of public-private partnerships in healthcare - Imperatives for GCC governments. McLean, VA: Booz & Company; 2012.
81. Sadeghi A, Barati O, Bastani P, Jafari DD, Etemadian M. Experiences of selected countries in the use of public-private partnership in hospital services provision. J Pak Med Assoc. 2016; 66(11):1401–1406.
82. Navarro-Espirages JL, Hernandez-Torres E. Public–private partnership as a new way to deliver healthcare services. Granada: University of Granada; 2015.
83. Whyle EB, Olivier J. Models of public-private engagement for health services delivery and financing in Southern Africa: a systematic review. Health Policy Plan. 2016; 31(10):1515–1529. doi:10.1093/heapol/czw075.
84. Saussier, S., Public–private partnerships. J Econ Behav Organ. 2013; 89:143– 144.
85. Oman, Ministerial Decision 53/98 issuing the regulation governing private clinics and hospitals (issued 6 June 1998, published 15 June 1998) Official Gazette 625.

Annex

Annex 1. List of private-sector stakeholders

1.	Dr Sijou
2.	Dr Shafeek Badr, CEO, Badr Al Samaa Group
3.	Mr Anis Vitan Wong, Muscat Private Hospital
4.	Faiza Al Busaidy, AXA insurance company