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Study

Assessment of Healthcare Services Provided by the Jordanian Ministry of Health 2023/2024

Performance Index Center | KAFA'A

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Introduction

The right to healthcare is one of the most essential rights affirmed by international human rights law, including several international documents such as the Universal Declaration of Human Rights, the two International Covenants on Human Rights, and the International Covenant on Economic, Social, and Cultural Rights in particular. This right was also emphasized in the Jordanian Constitution and the country's laws derived from it.

The continuous increase in population, along with industrial, and technological developments, economic challenges, and surrounding geopolitical circumstances, has significantly contributed to the growing pressure on the public healthcare sector and the problems escalate over time. This places a burden on the responsible authorities to intensify efforts to address existing issues and try to avoid future risks.

According to the **2024** Sustainable Development Report, Jordan ranks **85**th globally, showing positive leaps in some health-related aspects while highlighting challenges in some sub-indicators, such as universal health coverage and life expectancy. This study aims to assist decision-makers and stakeholders in improving Jordan's ranking in the overall Sustainable Development Index, particularly in health-related sub-indicators, and to reflect this on the quality of life of Jordanians.

This study covers key aspects that represent the backbone for evaluating healthcare services, their outcomes, and implementation mechanisms to maintain high service standards. Evaluation axes were chosen based on an extensive review of local and international literature and reports. It aims to provide a critical scientific review supported by updated facts and figures from reliable sources, which will help present a comprehensive view of the services provided by the Ministry of Health, highlight sector challenges, and propose developmental strategies that align with citizens' needs.

It is worth mentioning that the Ministry of Health has shown a clear direction and persistent effort over the past two years to improve healthcare services. It is working effectively and tangibly in partnership with other health sectors and following the royal visions for modernization as a guide to track work and measure progress, which reflects a genuine will to reform and improve the public healthcare sector.

Methodology

Data and information used in this study were gathered from several sources, which are as follows:

1. Reports issued by the Jordanian Ministry of Health.
2. Data from the World Health Organization: Used to provide an international perspective and compare Jordan's performance with neighboring countries in several health areas, such as healthcare provision, chronic disease rates, and doctor-to-population ratios.
3. Reports and articles from local and international research centers offering in-depth analyses of healthcare performance and challenges.
4. Review of health laws and regulations: Including public health law and health insurance.

These reports, which cover the period from **2023** until mid-**2024**, were studied by the research team and followed by several meetings and discussions with the general supervisor to agree on the elements to be discussed and the method of presenting them with the study's objectives.

Overview of the Jordanian Healthcare Sector

The Jordanian healthcare sector is generally considered vital and active despite its multiple references and lack of uniformity. It provides healthcare services to the population in Jordan through:

1. The public health sector, which includes services provided by the Ministry of Health, the Royal Medical Services, and university hospitals, covers approximately 65-68٪ of the population based on insurance categories.
2. The private health sector, which includes private hospitals and medical centers, covers about 12-15٪ of the population.
3. International and charitable institutions and organizations, covering approximately 4-6٪ of the population.

It should be noted that there are overlaps between these sectors in terms of service provision through agreements or the variety of insurance schemes available to citizens (some statistics suggest that 8٪ of citizens have multiple insurance plans), so it is difficult to accurately determine the percentage of uninsured citizens, which is estimated to range between 15-18٪.

Healthcare spending in Jordan is within the upper range (compared to global averages), amounting to approximately 6.2٪ of GDP and reaching around 2.4 billion dinars in 2022. This expenditure covers all aspects of healthcare, including treatment, interventions, and infrastructure development (both individuals and infrastructure). However, what detracts from this level of spending is the waste percentage, which will be discussed later regarding services provided by the Ministry of Health in particular.

When discussing international indicators and reports related to the healthcare sector, it should be noted that these indicators and figures result from the healthcare services provided by all concerned sectors. No detailed studies show the contribution of each sector to these indicators, either positively or negatively, which makes some review processes and corrective plans less targeted and effective.

According to the Sustainable Development Index, Jordan ranks 85th in 2024 among 167 countries, based on Jordan's performance in various fields according to the 17 Sustainable Development Goals (SDGs) and the associated sub-indicators.

The third SDG, which is directly related to this report (Sustainable Development Goal Report), is "Good Health and Well-Being," which includes 14 sub-indicators. Here, we will focus on the main indicators highlighted in the report either negatively or positively:

1. **Maternal Mortality:** The goal is to reduce maternal mortality to less than 70 per 100,000 live births. Jordan has made progress in this regard, and it is now on track to maintain this progress with a maternal mortality rate of 41.3 per 100,000 live births in 2023.
2. **Births Attended by Qualified Health Personnel:** The report shows that the percentage of births attended by qualified health personnel reached 99.9٪ in 2023. This indicates that Jordan has achieved the target of increasing the proportion of births attended by skilled medical staff, although the direction of the indicator (whether it is increasing or decreasing) was not specified due to a lack of information.

3. **Preventable Neonatal and Under-5 Mortality:** The report shows that Jordan has made progress in this area, with the neonatal mortality rate at **9** deaths per **1,000** live births, which is lower than the target, and the under-**5** mortality rate at **15** per **1,000** live births, which shows notable progress.
4. **Age-Standardized Mortality Rate:** The report indicates a decline in the ability to address age-standardized mortality due to cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases in adults aged **30-70** years.
5. **Life Expectancy:** The report also highlights significant challenges related to life expectancy, which has decreased. According to World Bank data, the average life expectancy in **2022** was **74** years, down from **76** years in **2019**. This decline reflects the quality and efficiency of healthcare services. This decline is an indication and reflection of the quality and efficiency of healthcare services provided. The higher the life expectancy in a given country, the more it signifies the good or high level of healthcare services offered and the efforts exerted by the state in the health sector. These efforts may include the quality of services, the availability of the latest medical equipment, keeping up with the newest treatment methods and techniques, the efficiency of human resources, and more.
6. **Universal Health Coverage Indicator:** The report shows that Jordan continues to face significant challenges in universal health coverage, reaching only **65**٪ in **2021**. This represents a decline from **72**٪ in **2010** and is now at a level similar to **2000**.

These six indicators highlight challenges facing the Jordanian healthcare sector over the past two years, requiring clear plans to address these challenges.

In addition to the ongoing refugee challenge, Jordan is one of the leading countries hosting refugee communities. With one refugee for every **15** citizens, Jordan is the second-highest country in the world regarding the refugee-to-population ratio. This reality places immense pressure on resources and infrastructure, particularly the healthcare system, which plays a vital role in meeting the needs of both citizens and refugees

Furthermore, the distribution of the population's age in Jordan, as reported by the World Health Organization, is critical in shaping efforts to improve healthcare services and direct their objectives. The WHO report for **2023** indicated the population distribution, which impacts the quality of healthcare services provided.

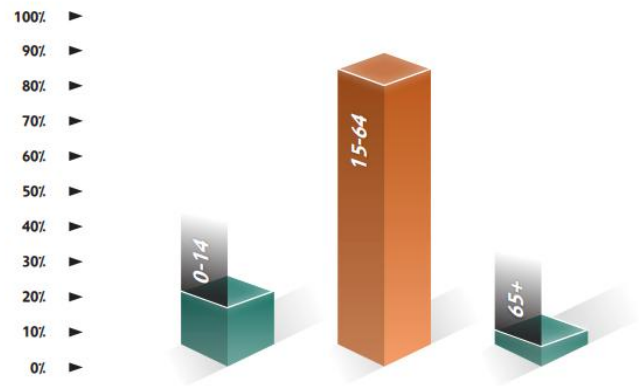

Figure 1: Population Distribution by Age Groups – Source: (World Health Organization Report, 2023)

It is also observed from the demographic distribution that the Jordanian society is youthful, with nearly **80**٪ of the population falling within the age group of **15-65** years.

Regarding healthcare professions and their availability in comparison to global standards (see attached table), as mentioned in the Ministry of Health's annual statistical report, these ratios are considered good in terms of the number of doctors. Jordan exceeds developing countries and is approaching the rates of developed nations in this regard. However, despite the progress in the number of doctors, the number of nurses in Jordan is relatively low, and efforts should be made to increase and improve this number. The number of dentists in Jordan is relatively high compared to the number of general practitioners and the population, and this ratio continues to rise steadily for pharmacists. Nevertheless, according to local reports (**2022** report by the Amman Group for Future Dialogues), there is a shortage of doctors in some specialized fields, along with poor distribution across sectors and geographical locations. The shortage also extends to nursing specialties (such as intensive care and geriatric nursing).

Profession	Number	Average per 10,000*	
		Jordan	Europe*
Number of Doctors	36,437	31.6	37
Number of Dentists	9,722	8.4	6.7
Number of Pharmacists	22,995	20	6.9
Number of Nurses:	44,224	38.4	80
Registered	32,984		
Associate	5,140		
Assistant	1,116		
Licensed Midwives	4,984		

Table (1): Specialized Medical Personnel in Jordan Compared to Global Averages

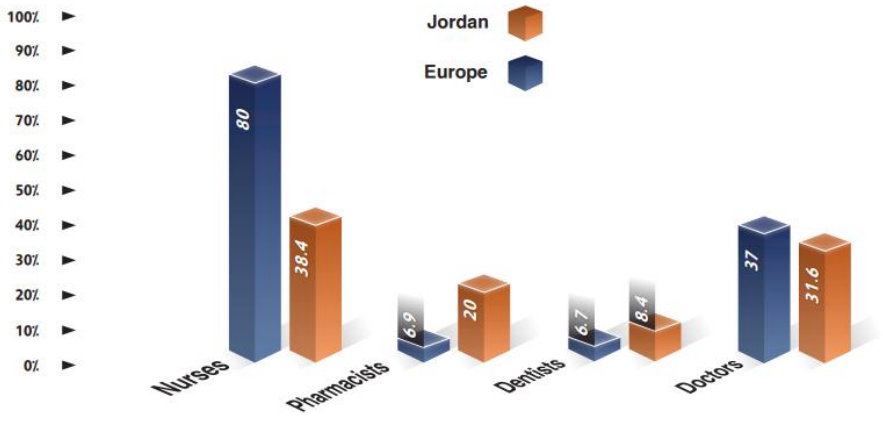

Figure (2): Rate of Medical Personnel per **10,000** Population

Institutional Performance Report and the Ministry of Health's Statistical Report for 2023

The Institutional Performance Report and the annual statistical reports are the primary sources of information about the Ministry of Health's status and its growth in terms of size and performance. There is no doubt that considerable effort has been made by the Ministry of Health in these reports, reflecting a clear will to evaluate and correct transparently and objectively. The Institutional Performance Report evaluates the implementation of the strategic plans for **2023/2024** and **2018-2022**, which rely on eight main areas, each containing significant sub-objectives. Meanwhile, the annual statistical report presents accurate data on human resources, infrastructure, and achievements in the most recent year, comparing them with previous years. It also contains important detailed information.

Before analyzing the Ministry of Health's performance, which is largely based on these two reports, we must note some observations:

1. There is no comparison of the achieved goals across similar or overlapping plans in the previous strategic reports.
2. The performance indicators remain superficial and general (e.g., satisfaction) with no data on their follow-up or corrective actions taken.
3. There is a lack of essential information required for policy formation, such as the number of specialist doctors in each specialty in each hospital and region, and the number of specialized nurses to assess needs.
4. There is no indication of compliance rates with the policies adopted across all sectors of the Ministry of Health and geographical areas.

Evaluation Areas for the Healthcare Services Provided by the Ministry of Health:

1. Governance.
2. Healthcare infrastructure and medical staff.
3. Quality control.
4. Financial policies.
5. Digital transformation.
6. Universal health coverage.

Analysis

First: Governance

Governance refers to the set of legislations, organizational structures, and controls that influence and shape how the institution is guided and managed to achieve its goals with integrity and transparency, ensuring follow-up, evaluation, and accountability.

In this context, Jordan has issued several quality regulations and policies that govern the work of healthcare staff in the recent past, such as the Health Professionals License Renewal System No. (46) of 2018, and the Executive Government Plan for Health Sector Reform for 2018-2022. Based on this, Regulation No. 1 of 2021, "Continuous Professional Development Instructions for the Renewal of Health Professionals' Licenses," was issued. Other regulations, such as the Medical and Health Liability Law No. 25 of 2018, and the Flexible Work System (Regulation No. 22 of 2022), were also introduced to regulate and protect healthcare staff and citizens.

The Ministry of Health's most recent institutional report and evaluation of its strategy highlighted governance as a key area. The report stated that the achievement rate for governance-related goals in 2023 was 66٪. Notably, the report pointed to a weakness in the achievement of strengthening the ministry's leadership, organizational, and pioneering role, which is striking because this strategic goal is one of the core pillars for improving institutional performance.

From our review of external reports and data regarding the Ministry's performance in the governance area during the past period, the need for improvement in some areas within this field is evident:

1. Work on improving the ability to implement instructions and regulations accurately, with follow-up from health leadership and corrective action plans for issues related to their implementation.
2. Develop the mechanism for selecting and appointing health leadership by strengthening integrity systems and criteria in this area.
3. Enhance the role of health governance in establishing, reviewing, and guiding quality reports and performance metrics.
4. Improve the ability of health leadership to evaluate staff performance using modern, globally recognized methods based on achievement, discipline, and precise objective standards.
5. Activate the institutional evaluation system in both top-down and bottom-up directions, using globally recognized methods that ensure transparency and protection, aimed at positively enhancing institutional development.
6. Modify the Ministry's organizational structure, which appears overcrowded and overlapping. Many departments and sections could be merged to reduce bureaucracy and streamline workflow.
7. Strengthen the role of top-level governance in planning and bringing productive projects to the Ministry, such as increasing the Ministry's involvement in medical tourism and establishing distinctive centers.

Second: Human Resources and Healthcare Infrastructure

The Ministry of Health's annual statistical report is comprehensive, offering detailed data about human resources and infrastructure, including numbers and ratios generally, and more specifically for specialties, regions, and distribution, with statistical comparisons to previous years.

To highlight this area with numbers, we extracted key data from the report and presented it in the following table:

	Ministry of Health	Jordan (Total)	Percentage of Ministry of Health to Total in Jordan
Number of hospitals	31	119	26٪
Number of health centers (comprehensive, primary, branch)	671	.....	.....
Number of beds Bed occupancy rate	6,029 61٪	16,182	37٪
Number of doctors	6,737	36,437	18.5٪
Number of dentist	947	9,722	9.7٪
Number of pharmacists	1,223	22,995	5.3٪
Number of nurses (Registered, associate, assistant, midwife)	12,790	32,984	38.7٪
Radiology technicians	184	.....	.....
Laboratory technicians	534	.....	.....

Table (2): Number of Facilities, Equipment, and Medical Personnel in the Ministry of Health and Jordan in General

Directorate	Population	Number of Centers ,Comprehensive) (Primary, Secondary	Number of Health Centers per 100,000 People	Specialist Doctor	General Doctor	Dentist	Pharmacist	Radiology Technician	Registered Nurse
Amman	4,834,500	114	2.36	139	170	69	47	22	147
Madaba	228,200	28	12.3	12	56	24	18	11	39
Zarqa	1,646,600	42	2.55	20	77	38	16	16	73
Balqa	593,200	70	11.8	28	70	60	25	23	88
Irbid	2,135,400	122	5.71	60	164	120	43	27	186
Ajloun	212,500	31	14.6	4	42	28	7	10	36
Jerash	286,000	27	9.44	4	40	19	20	3	61
Mafraq	636,400	88	13.83	15	127	51	34	14	156
Karak	381,900	63	16.49	18	103	42	60	18	117
Tafila	116,200	22	18.95	3	42	16	31	14	71
Ma'an	191,100	40	20.92	5	68	23	18	12	42
Aqaba	227,000	24	10.57	5	47	18	17	3	52

Table (3): Human Resources in Health Centers by Health Districts for the Year 2023

Location	Specialists	Resident Doctors	General Practitioners	Dentists & Specialists	Veterinary Doctors
Al-Bashir	328	691	41	48	0
National Center for Mental Health	39	54	0	0	0
Zarqa	98	234	23	0	0
Prince Hamzah	101	197	9	3	0
Al-Hussein / Salt	94	183	33	28	0
Princess Basma	99	300	42	35	1
Karak	77	189	25	3	1
Prince Faisal bin Al Hussein	41	58	25	10	0
Dr. Jamil Al-Totanji	51	113	25	11	0
Princess Rahma	24	43	0	5	0
Ma'an	24	48	26	2	0
Nadim	29	58	20	3	0
Jerash	27	58	18	11	0
Maternity & Children / Mafraq	10	33	7	0	0
Ramtha	21	33	14	3	0
Ghor Al-Safi	7	38	17	0	0
Tafileh	33	47	20	5	0
Princess Raya	19	29	13	1	0
Northern Badia	16	33	11	5	0
Al-Eman / Ajloun	28	60	16	7	0
Queen Rania Al-Abdullah	12	38	21	2	0
Princess Badea`a	21	38	1	0	0
Muath bin Jabal	16	24	8	2	0
Mafraq	14	32	17	8	0
Yarmouk	21	24	13	7	0
Southern Shouneh	17	22	13	0	0
Prince Hussein bin Abdullah II	21	21	21	4	0
Abi Ubaidah	13	23	13	0	0
Princess Iman / Ma`addi	12	27	9	0	0
Princess Salma	19	26	15	0	0
Ruweished	5	21	14	3	0
Field Hospitals	3	4	17	0	0

Table (4): Number of human resources in Ministry of Health hospitals - **2023**

Hospital Name	Internal Medicine	ICU	Pediatric ICU	Burns & Plastic Surgery	Emergency & ER	Nuclear Medicine	Pulmonary Diseases
Al-Bashir	105	75	0	14	40	32	52
National Center for Mental Health	0	0	0	0	0	0	0
Zarqa	173	18	0	0	0	0	0
Prince Hamzah	104	33	4	0	0	0	0
Al-Hussein / Salt	73	16	10	0	0	0	0
Princess Basma	101	0	0	0	0	0	0
Karak	32	9	0	0	0	0	0
Prince Faisal bin Al Hussein	34	4	0	0	0	0	0
Dr. Jamil Al-Totanji	19	12	0	0	0	0	0
Princess Rahma	0	0	8	0	0	0	22
Ma'an	24	7	0	0	0	0	0
Nadim	18	9	0	0	0	0	0
Jerash	22	10	0	0	0	0	0
Maternity & Children / Mafraq	0	9	0	0	0	0	0
Ramtha	32	6	0	0	0	0	0
Ghor Al-Safi	17	7	0	0	0	0	0
Tafileh	32	9	0	0	0	0	0
Princess Raya	23	8	0	0	0	0	0
Northern Badia	21	6	0	0	0	0	0
Al-Eman / Ajloun	52	12	0	0	0	0	0
Queen Rania Al-Abdullah	22	3	0	0	0	0	0
Princess Badea`a	0	0	0	0	0	0	0
Muath bin Jabal	10	7	0	0	0	0	0
Mafraq	22	10	0	0	0	0	0
Yarmouk	12	5	0	0	0	0	0
Southern Shouneh	8	4	0	0	0	0	0
Prince Hussein bin Abdullah II	24	6	0	0	0	0	0
Abi Ubaidah	7	6	0	0	0	0	0
Princess Iman / Ma`addi	8	3	0	0	0	0	0
Princess Salma	8	2	0	0	0	0	0
Ruweished	4	4	0	0	0	0	0

Table (5): Number of beds in Ministry of Health hospitals, distributed by hospitals and departments for the year 2023.

According to the latest data released in the Ministry of Health's **2023** statistical report (Tables **3**,**4**,**5**), it is noted that the achievement percentage for human resources in **2023** was **63**٪, while for infrastructure it was **69**٪. It is worth mentioning that the sub-goal related to improving the optimal and effective use of human resources based on actual needs did not reach even half of the achievement target. Furthermore, the goals related to inventory management and infrastructure development did not exceed achievement percentages of **37**٪ and **45**٪, respectively.

Key Observations Based on the Previous Tables:

1. There is a significant variation in the number of health centers per **100**,**000** populations across regions (ranging from **2**.**36** to **20**.**93**).
2. There is an imbalance in the distribution of health specialties relative to the population across regions, with some districts lacking radiology technicians and facing severe shortages of pharmacists, such as in the Northern and Southern Ghor regions.
3. There is variation in the number of doctors and the distribution of their specialties (resident and specialist) across geographic areas and population sizes.
4. The number of intensive care unit beds, both general and specialized, is insufficient compared to the population receiving healthcare services.

Third: Quality Control

Quality control in health is one of the most important foundations upon which the health system is based. It is a process aimed at improving the efficiency of service delivery and enhancing the quality of health according to specific standards. This is done by establishing a set of procedures and metrics to be followed and adhered to during the provision of healthcare, ensuring compliance with health standards based on the latest medical and scientific evidence, and improving patient safety. This includes monitoring and evaluating performance indicators, conducting internal and external audits, monitoring and removing the causes of errors, as well as analyzing them.

It is worth noting that, despite the existence of the Department of Institutional Performance and Quality Control within the Ministry's organizational structure, which is responsible for this matter, there is no mention of any information about quality management or control in the strategic plan or reports on what has been achieved regarding quality control activities.

However, to improve the quality of healthcare services, the ministry has implemented specialized programs to develop quality and enhance overall performance. **18** government hospitals within the Ministry of Health, **100** health centers, and **18** Mammography units have received general accreditation from the Health Care Accreditation Council. This is a small percentage of the total number of hospitals and centers under its supervision. It is expected that three additional hospitals will receive local accreditation in **2024**, along with several other centers. Jordan aims to have **100** hospitals internationally accredited by **2030**. However, no hospital within the Ministry of Health has international accreditation and no plans have been found that indicate efforts to obtain international accreditation.

From what has been mentioned, it is clear that the quality management system in the public health sector needs a comprehensive review. The Ministry of Health has achieved about **72**٪ of its strategy for the years **2023-2025**. The Ministry is facing difficulties in trying to match the public sector with the private sector in terms of developing the quality of healthcare services it provides.

The following points can be considered the most important observations regarding the quality management system within the Ministry of Health according to the study data:

1. The strategic plan does not indicate objectives related to developing and improving the quality management system (such as updating policies and following them within a comprehensive quality plan).
2. The statistical report lacks any data on quality control and management or institutional accreditation processes, either locally or internationally.
3. There is a shortage of qualified personnel in quality control and management.
4. The impact of obtaining local accreditation is not reflected in the actual service provided within the sector, leading recipients of services to believe that these certifications are purely formal.
5. There is a clear connection between the level of actual quality application and financial waste in the Ministry of Health.

Fourth: Financial Policies

Looking at the annual statistical report related to financial resources, there has been an increase in the Ministry of Health's budget from the general budget, reaching its highest value in 2023. However, the percentage of the health budget from the total general budget has decreased from 7٪ in 2019 to 6.2٪ in 2023. It was also observed that there has been stability in the revenues of the Health Insurance Fund over the past five years, with a significant decline in the forecasted revenues in 2023.

The report includes data related to healthcare spending in Jordan, with public healthcare spending reaching 34٪ of the total government spending from 2016 to 2019. No updated data was available for the past four years. Regarding healthcare spending, it is worth noting the waste in the public health sector, as no recent sources indicate this, except for a report by the Amman Dialogue Group in 2022, which addressed the Ministry of Health:

A. Waste in funding and health insurance: The health insurance system in Jordan faces significant challenges due to the diversity and fragmentation of insurance programs, which weakens the efficiency of resource utilization. The insurance coverage is divided between several programs, with 38٪ of Jordanians covered by the Royal Medical Services insurance, 34.4٪ by the Civil Health Insurance Program under the Ministry of Health, 12.1٪ by private sector insurance, and 6.9٪ receiving free healthcare services in Ministry of Health facilities. As a result, about 41.3٪ of the insured population benefits from the government's civil health insurance program. Additionally, an estimated 8٪ of Jordanians are covered by more than one insurance program, leading to waste due to the use of multiple insurance cards. Furthermore, those not insured receive subsidized healthcare services at a rate of 20٪ of the cost in Ministry of Health facilities, which further complicates resource management.
As the insured move to the public sector after age 60 or when they require expensive treatments such as cancer or dialysis, there is additional financial pressure on the public sector. The costs of advanced treatments, such as gene therapies for cancer, have skyrocketed to $500,000 per dose, which adds further strain on the health insurance system, leaving the government unable to cover these high costs. The Jordanian health system also depends on a "fee-for-service" model, which encourages unnecessary services, leading to inflated costs and resource waste.

B. Waste in medicines and medical supplies: Jordan suffers from significant waste in medicines and medical supplies, which indicates a lack of adequate attention to this issue. Despite Jordan being a relatively poor country that requires careful management of public resources, the waste of medicines and supplies is substantial. Waste in this context refers to incomplete or inefficient consumption of these materials, resulting in financial losses.

The waste is seen in two main areas:

1. **Waste within the Ministry of Health and government medical devices:** The total expenditure on medicines in all sectors is estimated at one billion dinars, with spending exceeding 34٪, compared to 14٪ in Germany. The waste in medicines in Jordan is estimated at around 20-25٪, amounting to

approximately **60** million dinars in the Ministry of Health. Medical supplies also experience similar levels of waste.

2. **Waste by citizens and patients:** Many Jordanians believe that obtaining medicines is a reward for visiting doctors, leading to stockpiling of medicines and waste. The share of wasted expired medicines is estimated at **12** million dinars from the Ministry of Health's annual pharmaceutical bill.

The causes of this waste include:

- Patients pressuring doctors for larger quantities of medicines.
- Doctors prescribing commercial drug names instead of generic names.
- Pharmacists dispensing medicines without consulting doctors.
- Citizens benefit from multiple insurance plans, making it easier for them to obtain medicines from various sources.
- Lack of a unified mechanism for tracking the medicines patients receive.

Key observations on the Ministry of Health's financial policies based on the study data are as follows:

1. The size of the budget allocated to the Ministry of Health aligns with global norms and similar countries.
2. There is an increase in spending on healthcare compared to global norms, which may be attributed to significant waste.
3. The strategic plan aims to reduce spending and optimize resources, with a focus on increasing partnerships with the private sector and purchasing services. However, more detailed data and justifications are needed based on accurate information to control spending. For example, the costs of intensive care unit stay in private hospitals and the purchase of services in medical specialties are relatively expensive, and there is no data to justify the necessity of these partnerships.
4. There is no data available on debts and dues for private and university hospitals.
5. There are no policies or objectives in the plan related to increasing capital expenditures, which are modest compared to ongoing expenditures.

Fifth: Digital Transformation

Digital transformation in the health system is defined as utilizing digital technologies to enhance patient care. It is considered part of efforts to develop healthcare and transform the health system using digital technologies to improve hospital efficiency and service quality for patients. Digital transformation aims to leverage digital technologies and smart systems to achieve a range of benefits, including creating an integrated environment that connects patients, doctors, healthcare facilities, and medical information more effectively. It seeks to save time and effort, reduce costs, alleviate budget pressure, improve operational efficiency in the healthcare system, enhance diagnosis and treatment accuracy, and achieve sustainable competitive advantage in healthcare.

According to the 2023 Institutional Performance Report, in the sixth axis (Digital Transformation Management and Information Systems), the achievement percentage of the targeted goal for this axis was 65٪. It includes three sub-objectives:

- Expanding the automation of health services provided.
- Developing the infrastructure for electronic health systems.
- Improving electronic linkage between information systems and standardization.

The 2023 Institutional Performance Report mentioned that the project of applying for the issuance and renewal of health insurance cards "electronically" was delayed until substantive legislative amendments to the system were completed so that no additional financial costs would be incurred with each amendment. No data was found in the annual statistical report regarding indicators and developments in 2023 related to digital transformation programs.

To follow up and evaluate, the "Assessment of the Current State of Digital Transformation in Hospitals and Health Centers affiliated with the Ministry of Health in the Kingdom" project was launched. This project aims to develop a roadmap for future projects. It will include the study of processes and procedures, identifying gaps, and resulting in a strategy and executive plan aligned with the national digital transformation strategy in the Ministry of Health.

Important projects in digital transformation include creating hospitals that provide remote healthcare services and integrate advanced technologies with the health computing system. These hospitals will include multiple units to improve resource management and provide remote medical care. The announcement this year included the start of establishing Al Salt Government Hospital as a nucleus for the concept of virtual hospitals.

Key observations on the digital transformation axis in the Ministry of Health according to the available reports:

1. Despite the benefits of digital transformation, it faces many obstacles in the healthcare system in Jordan, including several challenges that hinder the transition towards comprehensive digitization in healthcare, including:

A. Human Resources: Proper implementation of digital transformation cannot be achieved without trained and qualified personnel capable of utilizing digital transformation technologies required for continuous development and change.
B. Lack of Funding: Digital transformation faces financial challenges, as adopting modern technologies requires significant investments in providing equipment and developing systems, which may be difficult within budget constraints.
C. Weak Technological Infrastructure: Some regions in Jordan suffer from weak digital infrastructure, such as high-speed internet, limiting access to digital health services for patients in rural areas. The digital gap remains a significant challenge, as not everyone has equal access to digital technologies, potentially widening disparities in healthcare delivery.
D. Lack of Legislation and Laws: Legal frameworks related to telemedicine practice are lacking in terms of requirements, responsibilities, and consequences of telemedicine and virtual medicine practices, which should precede the implementation of telemedicine.
E. Low Digital Awareness Among Patients: Especially among the elderly and those with no prior technological experience.
F. Security Challenges and Data Protection: Digital transformation raises issues related to the security of health information and patient privacy. Cybersecurity breaches can expose patient data to risks, requiring advanced security technologies and strict regulations for data protection.
G. Resistance to Change: Especially among individuals who prefer traditional methods in the healthcare system. However, digital transformation in healthcare requires significant participation from doctors, administrators, and patients to address concerns about adapting to modern digital systems.

2. The electronic health records system is not fully implemented in all service areas with the same quality and efficiency. There are gaps in standards and significance according to international standards for patient records and files in terms of content, quality, credibility, and confidentiality.

3. The integration of digital systems is still not fully effective, including the management of human resources, inventory management systems, quality monitoring systems, and hospital digital systems.

4. The policy on health data security is unclear. Health data should be protected, and hospitals must comply with data security standards and encryption policies.

5. The adoption of electronic documentation should be an effective tool to measure performance indicators and control financial waste, enhancing the role of oversight bodies in applying laws related to accounting.

6. There is a need for documented and objective evaluations regularly to implement the computing system in all service areas, documenting corrective plans and implementing them.

Sixth: Universal Health Coverage

Universal health coverage (according to the World Health Organization) means that all individuals have access to the full range of essential health services they need whenever and wherever they need them, without facing financial hardship. It includes a full range of essential health services, from health promotion to prevention, treatment, rehabilitation, and palliative care throughout life. According to the WHO, achieving universal health coverage is one of the goals countries set when they adopted the 2030 Sustainable Development Goals in 2015. Countries reaffirmed this at the high-level meeting of the UN General Assembly on Universal Health Coverage in 2019, stating that health is essential to achieving sustainable development in its social, economic, and environmental dimensions and is an outcome and indicator of such sustainable development. The WHO's 13th General Program of Work aims for one billion more people to benefit from universal health coverage by 2025, while also contributing to achieving the two targets of better health security for one billion more people and greater health and well-being for one billion more people.

The WHO recommends redirecting health systems to prioritize primary healthcare as the foundation for universal health coverage using a primary healthcare approach. Primary healthcare is the most comprehensive, fair, effective, cost-efficient, and efficient approach to promoting physical, mental, and social well-being. It enables comprehensive and integrated access to high-quality health services and products individuals need to enjoy health and well-being, improving coverage and financial protection. Primary healthcare can achieve large cost-effectiveness, with approximately 90٪ of essential interventions for universal health coverage being achievable through primary healthcare. Achieving nearly 75٪ of expected health gains from the Sustainable Development Goals can be realized through primary healthcare, saving more than 60 million lives and increasing life expectancy globally by an average of 3.7 years by 2030.

In Jordan, there is a project to develop a roadmap to achieve universal health coverage by 2030. It includes eight main axes but has not yet been officially adopted by the government. The responsibility for preparing the plan to achieve universal health coverage lies with the Ministry of Health, supported by the High Health Council (which should be activated), and implemented through all health sectors, utilizing the comparative advantages of each sector to achieve the goals of the universal health coverage strategy.

Additionally, the healthcare system in Jordan faces inefficiencies linked to the concept of universal health coverage, which has led to increased healthcare expenditure, reaching over 8٪ of GDP.

According to the 2023 Institutional Performance Report, within the fifth axis, sub-goal three referred to the project of preparing a package of benefits for universal health coverage. This project aims to identify the list of health services to be provided when achieving universal health coverage and studying their costs in cooperation with the WHO office.

Key observations on universal health coverage include:

1. Incomplete legislation and approval of strategies.
2. Lack of clarity regarding the role of other health sectors in this strategy.
3. Lack of clarity regarding the roles of service recipients and providers, as well as defining the type of services required.
4. Lack of clarity on the concept of universal health coverage and comprehensive health insurance among service recipients.

Recommendations

Quality Control

1. Establish a comprehensive quality management system that ensures adherence to modern medical standards, including detailed policies for all administrative and technical procedures, and disseminate them across all technical and administrative departments of the ministry.
2. Develop qualified personnel to manage the quality portfolio matter in all facilities, particularly in health centers and remote governorates.

Healthcare Infrastructure and Medical Staff

1. Increase the number of nurses to align with global standards, as the ratio of nurses in Jordan is modest compared to developing and developed countries.
2. Improve the efficiency of utilizing medical equipment in hospitals and health centers affiliated with the Ministry of Health, ensuring fair distribution across governorates based on needs.
3. Expand the qualitative preparedness of peripheral hospitals in terms of qualified staff, specialized units, and intensive care beds.

Governance

1. Enforce legislation and enhance transparency to achieve effective management of the healthcare sector.
2. Combat waste and improve resource management by pursuing goals to reduce waste in government healthcare spending. Strengthen internal oversight of procurement, contracting, and service acquisition processes.

Financial Policies

1. Implement a comprehensive billing system in all hospitals and health centers to ensure expenditure rationalization.
2. Strengthen structured collaboration with other sectors to enhance financial efficiency and increase savings.

Digital Transformation

1. Implement training programs for medical and administrative staff in hospitals and health centers to prepare them for utilizing modern digital technologies.
2. Improve digital infrastructure and secure the necessary funding to facilitate access to services for all citizens.
3. Accelerate the adoption of necessary legislation to regulate digital and virtual healthcare applications, ensuring efficiency and the rights of all stakeholders.

Universal Health Coverage

1. Issue a comprehensive legal framework to regulate health insurance under a unified and inclusive legal provision, and establish a National Health Insurance Authority aligned with global standards.
2. Adopt strategies aimed at expanding health coverage to include all citizens, with a focus on the most vulnerable groups (such as the poor, the elderly, and persons with disabilities).

References

English references:

1. Astera. (n.d.). *Digital Transformation in Healthcare*. Retrieved from https://www.astera.com/ar/type/blog/digital-transformation-in-healthcare
2. Centers for Medicare & Medicaid Services. (n.d.). *Value of Health Insurance*. Retrieved from https://www.cms.gov/marketplace/outreach-and-education/value-of-health-insurance-arabic.pdf
3. Jordan Times. (2024). *Public hospitals complete digital transformation by end of 2024*. Retrieved from https://jordantimes.com/news/local/public-hospitals-complete-digital-transformation-end-2024
4. Malaysian Ministry of Health. (2023). *Health Facts 2023*. Retrieved from https://www.moh.gov.jo/EBV4.0/Root_Storage/AR/EB_HomePage/2023_تقرير_الأداء_السنوي_لعام.pdf
5. MEU Library. (n.d.). *Impact of Digital Transformation on the Performance of Jordanian Hospitals*. Retrieved from https://www.meu.edu.jo/libraryTheses
6. Northeastern University. (n.d.). *What is Digital Transformation in Healthcare?*. Retrieved from https://online.northeastern.edu/resources/what-is-digital-transformation-in-healthcare
7. NCD Alliance. (n.d.). *Jordan Puts NCDs at the Heart of UHC and Humanitarian Response*. Retrieved from https://ncdalliance.org/why-ncds/universal-health-coverage-uhc/jordan-puts-ncds-at-heart-of-uhc-and-humanitarian-response
8. UNOPS. (2024). *Strengthening the Capacity and Resilience of Tunisia's Healthcare System*. Retrieved from https://www.unops.org/news/strengthening-the-capacity-and-resilience-of-tunisias-healthcare-system
9. (2024). *Sustainable Development Report 2024*.
10. Jordan Population and Family Health Survey. (2023).

Arabic reference:

1. Amman Group for Future Dialogues. (2022). *Waste in the Public Health Sector in Jordan.*
2. Health Insurance. Publication date not available. *Tamini Advantages - Health Insurance Management*. Retrieved from https://hia.gov.jo/ebv4.0/root_storage/ar/eb_list_page/%D9%81%D9%88%D9%82_%D8%A7%D9%84%D8%B3%D8%AA%D9%8A%D9%86_%D8%B9%D8%A7%D9%85.pdf
3. Department of Statistics. (2023). *Population Estimates File for the End of 2023*. Retrieved from https://dosweb.dos.gov.jo/DataBank/Population/Population_Estimares/PopulationEstimatesbyLocality.pdf
4. Jordan Vision and Strategy 2025. Publication date not available.
5. Ministry of Digital Economy and Entrepreneurship in Jordan. Publication date not available. Retrieved from https://www.modee.gov.jo/Ar/NewsDetails
6. Jordanian Ministry of Health. (2023). *Annual Statistical Report of the Ministry of Health 2023.* Retrieved from https://moh.gov.jo/AR/List/%D8%A7%D9%84%D9%86%D8%B4%D8%B1%D8%A7%D8%AA_%D8%A7%D9%84%D8%AF%D9%88%D8%B1%D9%8A%D8%A9
7. Jordanian Ministry of Health. (2023). *Institutional Performance Annual Report 2023.* Retrieved from D8%A1_%D8%A7%D9%84%D8%B3%D9%86%D9%88%D9%8A_%D9%84%D8%B9%D8%A7%D9%85_2023.pdf
8. Jordan Strategy Forum. (2022). *Report on the Health Sector in Jordan.*