



HEALTH SYSTEMS REVIEW: The Post COVID-19 Situation in Morocco

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ABOUT THE PROJECT

Why a “Post-COVID” review?

While the COVID-19 global pandemic burdened healthcare systems worldwide, it also helped to shed light on their deficiencies and weaknesses and, in some cases, it may have even accelerated a number of reform processes – not only in terms of pandemic preparedness but also with regard to the strength of the healthcare system as a whole.

This paper is part of comparative evaluation of the ramifications of the COVID-19 pandemic on the healthcare systems and the changes brought by it in three North African countries (Egypt, Tunisia and Morocco). The evaluation aims to provide an overview of the key changes and effects of the pandemic on the functioning of healthcare systems in each of these countries.

The ultimate objective of this evaluation is to help unmask interventions needed to improve the working conditions of healthcare workers, increase their retention and, naturally, build healthcare systems that are capable of addressing different health crises (pandemics included). The evaluations and interventions that will stem from it are also attuned to the short, medium and long-term objectives of closing the gap on the Sustainable Development Goal of securing Universal Healthcare Coverage to all. This should also provide decision-makers and civil society

actors with the knowledge needed moving forward in health systems reform efforts.

The COVID pandemic shed light on a number of deficiencies and vulnerabilities in the global and national healthcare systems alike. On the other hand, attention to those vulnerabilities was accompanied by a sense of urgency to act quickly, with new challenges of social justice and equity surfacing particularly when it comes to access to vaccines. A quick reaction is still needed to handle the distribution of healthcare services and resources that may have been unjust in many cases. Conducting a post-pandemic assessment of the healthcare sector will provide our societies with a possible roadmap moving forward. Not only in terms of pandemic preparedness, but also the strength, effectiveness and state of governance of the healthcare system as a whole.

The assessment will take stock of effective measures and interventions that were rolled out and given the green light in the context of the pandemic, but that can also give us a multitude of lessons learnt. The aim is to make this pool of experiences, successes, and failures available to be shared on a regional level and then across the continent for mutual learning and collaboration.

To summarise, the objective of this series of papers is to understand the changes and effects of the pandemic on the healthcare systems and highlight needed interventions to strengthen them. The research partners of this project will use these insights in identifying specific policy recommendations in each of the papers and advocate for them.

Sources and Methods

In light of the general limitations in accessing reliable, up-to-date data about healthcare systems performances in the region, the research team opted for a research methodology that relies on two main sources of data:

1. Literature and official sources released by government data made public and data from international development agencies (namely the World Health Organization (WHO) and the World Bank).
2. Experts' and stakeholders' consultations, providing their reviews, observations, and analysis of this data in light of practical experiences, implemented policies and observed realities on the local grounds.

Study Tool

To carry out this exercise, a study tool was created detailing the different review questions to examine during the experts' consultations. This study tool is based on the framework of the Health Systems Building Blocks created by the WHO and its indicators and measurements for the monitoring of those building blocks¹. It also includes components

that are based on the Epidemic Preparedness Index published in 2019 in the BMJ Global Health journal². Both of these frameworks have been used as a guide for the researchers who added details about each indicator and measure, its recommended sources and a brief explanation of their key characteristics. All these served as the basis for the expert review upon which the paper's conclusions are drawn.

A summarized version of this study tool is available **on this link** providing a succinct reference for readers interested in the methodology underpinning our investigation.



Limitations

The study methodology was specifically designed to address the inherent difficulty of acquiring reliable data for forming objective opinions. The reviews and analysis provided strive to be based on nationally approved data whenever available. However, reaching a consensual conclusion for some of the review components was impossible. This was clearly highlighted in the studies with the underlying reasons.

All efforts were exerted to provide a systematic review that reflects objective opinions about the healthcare systems.

¹ World Health Organization, Monitoring the Building Blocks of Health Systems, A handbook of indicators and their measurement strategies, 2010
<https://apps.who.int/iris/bitstream/handle/10665/258734/9789241564052-eng.pdf>

² Oppenheim B, Gallivan M, Madhav NK, et al. Assessing global preparedness for the next pandemic: development and application of an Epidemic Preparedness Index. BMJ Glob Health 2019;4:e001157.doi:10.1136/bmjgh-2018-001157
<https://gh.bmj.com/content/bmjgh/4/1/e001157.full.pdf>



Yet, this paper presents the potentially subjective opinions, reviews and recommendations of its authors and consulted experts within the context of short consultations. Consultations that in turn were part of a series of overview papers that provide a bird's eye view of healthcare systems without digging into the details of each component.

In Morocco, while the study methodology was carefully designed to address the challenge of obtaining reliable data and aimed to base opinions on nationally approved data whenever available, additional limitations are acknowledged. Notably, the online survey format poses inherent limitations, potentially excluding individuals without reliable internet access or those less comfortable with online platforms. This may impact the inclusivity of our sample and introduce bias in responses.

Furthermore, despite efforts to involve key stakeholders, we recognize the absence of participation from organizations such as the WHO and CNDH. Their non-participation limits the comprehensiveness of our study, and the findings should be interpreted within this context.

It's important to emphasize that, like the study mentioned, our efforts were directed towards providing a systematic review that reflects objective opinions about healthcare systems. However, this paper presents potentially subjective opinions, reviews and recommendations of its authors and consulted experts. The limitations mentioned here should be considered when interpreting the results, as our study, like any research, has constraints that may impact the depth and breadth of its insights.

About the Peoples Vaccine Alliance Africa

PVA Africa is a regional movement of organisations and networks supported by Nobel Laureates, Heads of State, health experts, economists, world leaders, faith leaders and activists working together to ensure Africans everywhere have equitable access to vaccines. Housed in the African Alliance, PVA Africa, under the guidance of the Steering Committee, comprises leaders of five regional networks and never loses sight of our collective desire for the decolonisation of public health and rights-based access to products and science that saves lives, keeps us healthy and accelerates our right to dignity as Africans. PVA Africa's role is to ensure that the voices, priorities and work of African activists and communities, in all our diversity, are meaningfully reflected in the global work of PVA. PVA Africa also works to ensure that interventions, strategies and approaches to addressing the lack of access to COVID-19 vaccines, tests and treatments, as well as gender and economic inequalities in relation to vaccine equity and access, are addressed in our (African) terms.



THE MOROCCAN HEALTHCARE SYSTEM REVIEW



ABSTRACT

In the wake of the global COVID-19 pandemic, the Moroccan healthcare system has encountered unprecedented challenges that require a thorough examination and analysis. The outbreak not only tested the resilience of healthcare infrastructure worldwide but also brought to light the specific vulnerabilities within national systems, including Morocco. This study embarks on a comprehensive exploration of the post-COVID situation in Morocco, aiming to identify and address the specific issues that arose during the pandemic and understand how they have shaped the country's healthcare landscape.

Morocco's healthcare system, with its distinct socio-economic and geopolitical factors, has been subject to significant stress during the pandemic. The study sheds light on systemic vulnerabilities and shortcomings that emerged under the strain of COVID-19. Additionally, it analyzes the effectiveness of measures and interventions to ensure the resilience of the healthcare system during the pandemic and beyond, providing a comprehensive overview of what worked and what needs improvement.

Key questions guiding the study in Morocco include an examination of the evolution of accessibility of healthcare services and treatment, especially in remote or underserved areas. It investigates the impact of the crisis on healthcare workers, exploring issues such as working conditions, retention, and the resilience of the workforce in the face of unprecedented challenges. Furthermore, the study explores how Morocco addressed issues of social justice and equity in the distribution of healthcare resources, personnel, medicines and vaccines.

The results of the study show a number of noticeable improvements that were built on a well-defined strategy, good governance structures and effective communication. Challenges related to validation and usage of new technologies were highlighted. The nation-wide roll-out of Universal Healthcare Coverage is an essential development that requires substantial focus particularly regarding financing, efficient usage of resources, accountability and pooling of resources to counteract impoverishment of public healthcare infrastructure. Finally, a number of recommendations have been provided particularly regarding pandemic preparedness and the state assuming its role as a regulator and strategic “designer” of the healthcare sector. These recommendations are provided to empower decision-makers and civil society actors in Morocco with the knowledge necessary to bolster the country's healthcare system, ensuring its resilience and efficacy.

MOROCCO'S EXPERTS' AND STAKEHOLDERS' CONSULTATIONS

Utilizing an online survey format, we conducted an Experts' E-Consultation to tap into the insights of a diverse group of seven local healthcare systems experts and stakeholders in Morocco. The list included government officials, service providers, policymakers, civil society members, academics, and private healthcare providers.

These experts were invited to provide their expert's opinions about the situation of each of the components of the health systems pillars in the Moroccan national context, answering a standard question for each of the health systems components: "Comparing the situation now with that of 2019 (before COVID-19), did this component improve, regress or stay the same?"

Instead of an in-person workshop, the virtual survey gathered expert opinions on the status of different healthcare system components. This online approach facilitated efficient data collection, overcoming geographical barriers and providing a targeted understanding of the pandemic's impact on Morocco's healthcare system.

Facilitators would then ask the participants to start with an initial vote to detect if there is a consensual answer followed by a discussion to provide justification for each expert's opinion. The outcome of these discussions were then documented and used a short rationale provided in this paper for the collective answer on each question.

The pool of experts, selected for a wider diversity of opinion and expertise, consisted of the following backgrounds:

1. Coordinator, PHEOC-MSPS (Public Health Emergency Operations Center - Ministry of Health, Morocco)
2. UNAIDS Executive Director, Morocco Office,
3. Pharmaceutical Market Analyst
4. National Coordinator, Moroccan Family Planning Association (AMPF)
5. President of the Moroccan Human Rights Association (AMDH)
6. Director of Programs, MENA Community Network for People Living with HIV (PLWHIV)
7. International Action Coordinator, Association for the Fight Against AIDS" (ALCS)

The carried out consultations were carried out following the study tool described earlier. This tool is based on the framework of the Health Systems Building Blocks created by the WHO and the Epidemic Preparedness Index published in 2019 in the BMJ Global Health journal.

RESULTS

A. Health service delivery

The total number of basic healthcare establishments (ESSB) across Morocco in 2021 was 2,985, compared to 2,947 in 2020. The number of hospital establishments in 2021 was 165 (compared to 162 in 2020). The theoretical bed capacity in 2021 was 26,711, down from 26,926 in 2020.

In order to strengthen the country's healthcare system, Morocco plans to “build eight new regional teaching hospitals, 29 urgent-care hospitals, and four university hospitals over the next decade. Within the Al Hoceima, Rabat and Agadir regions the government plans to add 3,354 hospital beds with a total spend of \$1.1 billion. In addition, the government plans to rehabilitate and remodel 21 regional (CHR) and provincial (CHP) hospital centers to add a further 3,254 beds with a total budget of \$440 million”¹.

The Moroccan medical device market is estimated at \$236 million, with \$191 million in imports in 2021. China, Germany, and the United States supply the majority of the equipment, with increasing competition from Italy, Turkey, and South Korea. The Moroccan government has put a plan in place for the development of emergency and mobile hospital units, for which the Ministry of Health will issue multiple tenders over the next five years. Notably, “the government has prohibited the import or sale of second-hand or refurbished medical devices and equipment per a February 2017 law, to improve equipment quality”².

The analysis of the health map shows a concentration of doctors in the Rabat-Sale-Kenitra and Grand Casablanca-Settat regions (where more than half of them practice).

In 2021, the medical coverage rate stands at 70% of the population. In 2021, 11.6 million people benefited from mandatory health insurance. When combined with the beneficiaries of the obligatory medical insurance plan (RAMED), a total of 22 million people have fundamental health insurance.³

The overall cost of universal social protection amounts to approximately 51 billion DH annually, with 14 billion allocated to the universalization of mandatory health insurance.⁴

¹ Country Commercial Guide, US International Trade Administration, 01.01.2024, <https://www.trade.gov/country-commercial-guides/morocco-healthcare>

² Ibid.

³ This concerns mandatory health insurance, taking into account non-salaried workers.

⁴ Covering medical care, medications, hospitalization, and outpatient care. (SDGs Report-2021) <https://unstats.un.org/sdgs/report/2021/goal-03/>

1. Comprehensiveness

“A comprehensive range of health services is provided, appropriate to the needs of the target population, including preventative, curative, palliative and rehabilitative services and health promotion activities.”



Expert's Consensus



Worse than 2019

Morocco faces challenges in maintaining the comprehensiveness of healthcare services. Issues such as discontinuity in essential services, inadequate coordination among healthcare stakeholders, and economic pressures have contributed to a decline in service quality. Notably, family planning, antenatal and postnatal care, pediatric care, HIV/AIDS services, chronic disease management, surgeries and mental health services have experienced setbacks if compared to 2019.

The government's response to the pandemic has shown gaps, and private initiatives to fill these gaps remain largely unexplored.

2. Accessibility

“Services are directly and permanently accessible with no undue barriers of cost, language, culture, or geography. Health services are close to people, with a routine point of entry to the service network at primary care level (not at the specialist or hospital level). Services may be provided at homes, the community, the workplace, or health facilities as appropriate.”



Expert's Consensus



Same as in 2019

Challenges in healthcare accessibility persist in Morocco, primarily due to a reliance on out-of-pocket and private healthcare services. Economic challenges and inflation have further strained accessibility for certain communities. While commendable efforts have been made in response to COVID-19, sustained improvement in healthcare accessibility post-pandemic remains elusive.

3. Coverage

“Service delivery is designed so that all people in a defined target population are covered, i.e. the sick and the healthy, all income groups and all social groups.”



Expert's Consensus



No Consensus

The government reports indicate a potential improvement in healthcare coverage, attributed to the rollout of the social health insurance scheme and the inclusion of new demographic groups. However, the expert's express skepticism due to the lack of reliable data reflecting the actual coverage of the population.

Comprehensive data, including rates of mandatory vaccination coverage and utilization of maternal care, is missing, making it challenging to assess the true extent of coverage.

4. Continuity of Care

“Service delivery is organized to provide an individual with continuity of care across the network of services, health conditions, levels of care, and over the life-cycle.”



In the post-COVID-19 period, attention has been directed towards addressing gaps in healthcare service provision in Morocco. Several initiatives and programs have been introduced, often spearheaded by governmental efforts, to enhance the continuity of care. While some of these initiatives have been lauded for their efforts to provide a certain level of continuity in healthcare services, nuances and critiques surrounding their implementation exist.

Kingdom initiatives and vertical programs have been pivotal in addressing specific healthcare challenges. Despite varying opinions, it is widely acknowledged that certain programs were designed with the aim of ensuring a continuous delivery of care, at least throughout their intended durations. The effectiveness of these programs has been a subject of debate, but there is an emerging consensus that some have contributed to bridging gaps in continuity of care for their target population.

One noteworthy success story is the implementation of Universal Health Coverage (UHC) in Morocco, reflecting a commitment to ensuring healthcare accessibility for all citizens. The UHC program, commencing with an overarching objective of providing comprehensive health coverage across the country, has shown success in offering a wide array of services. These encompass not only mass screenings for specific health issues but also encompass diagnostic services, treatment provisions, and follow-up care. The achievements of the UHC program underscore the potential for establishing a seamless continuum of care when appropriately designed and executed.

However, experts have pinpointed areas for improvement, particularly in programs such as Hepatitis B Virus (HBV) programs. These initiatives encounter difficulties in achieving sustained continuity of care, often owing to insufficient integration with primary healthcare units and a failure to fully address the ongoing healthcare needs of patients within the UHC framework.

To ensure a lasting impact and sustained continuity of care, it is imperative for these programs to be fully integrated into the regular, day-to-day operations of the Ministry of Health under the umbrella of the broader UHC strategy. The responsibility for the objectives of these programs squarely rests with the established structures, departments, and divisions of the Ministry of Health, aligning with the overarching goal of achieving universal health coverage. Addressing these integration issues will be pivotal in advancing the overall effectiveness and impact of UHC initiatives in Morocco.

5. Quality

“Health services being of high quality means they are effective, safe, centered on the patient’s needs and given in a timely fashion.”



Expert’s Consensus



Better than 2019

The evaluation of the quality of healthcare services in Morocco, from 2019 to the present, is grounded in fundamental principles such as effectiveness, safety, patient-centeredness, and timeliness. High-quality healthcare services entail that interventions and treatments are effective, leading to positive health outcomes. Safety measures are implemented to prevent harm to patients, ensuring that healthcare practices adhere to established standards. Patient-centered care is prioritized, emphasizing the individual needs, preferences, and values of patients to enhance their overall experience. Additionally, timely delivery of healthcare services is crucial, ensuring that patients receive appropriate care without unnecessary delays.

It is noteworthy that experts believe that there has been an observed improvement in various aspects of healthcare service quality in Morocco since 2019.

This progress reflects the ongoing efforts made to strengthen standards in healthcare delivery, contributing to an overall enhancement of the quality of healthcare services in the country.

6. Person-centeredness

“Services are organized around the person, not the disease or the financing. Users perceive health services to be responsive and acceptable to them. There is participation from the target population in service delivery design and assessment. People are partners in their own healthcare.”



Expert’s Consensus



No Consensus

No sufficient data to reach a consensus about this aspect.

7. Coordination

“Local area health service networks are actively coordinated, across types of provider, types of care, levels of service delivery, and for both routine and emergency preparedness. The patient’s primary care provider facilitates the route through the needed services, and works in collaboration with other levels and types of provider. Coordination also takes place with other sectors (e.g. social services) and partners (e.g. community organizations).”



Expert’s Consensus



Better than 2019

Coordination efforts between the Ministry of Health and other government entities in Morocco have shown significant improvement during the response to COVID-19. Collaborative initiatives, such as integrated referral pathways and joint projects, have made positive strides. However, it is noteworthy that coordination with the private and social sectors lags behind, primarily due to technical and logistical barriers.

Throughout the COVID-19 crisis in Morocco, coordination among various stakeholders in the healthcare system, including civil society, has reached a significant level of improvement. This coordination has been crucial in ensuring an effective response to the pandemic. Mechanisms such as integrated referral pathways have facilitated collaboration among different entities, enabling rapid and efficient sharing of information and resources.

However, despite these advancements, challenges persist. Coordination with the private and social sectors remains an area for improvement. Technical and logistical obstacles have hindered the implementation of effective coordination mechanisms. Overcoming these barriers is crucial to ensure a holistic response to the population's needs, drawing lessons from the current crisis.

The crisis continues to pose a challenge to society as a whole, but it also presented an opportunity for learning. Continuous evaluation and review of implemented health interventions are essential. This approach will assess the effectiveness of the actions taken, as well as their coherence, consistency, and alignment with the International Health Regulations of 2005 and established guidelines.⁵

From this perspective, coordination among various actors in the healthcare system is a central element of the evaluation. The establishment of more robust coordination mechanisms, especially with the private and social sectors, will contribute to strengthening the resilience of the healthcare system and better responding to future crises. Emphasizing ongoing coordination remains a guiding principle to ensure an effective and consistent response to health challenges in Morocco.

With few exceptions, the same structures responsible for coordinating the response against the influenza A (H1N1) 2009 pandemic were reactivated to lead the response operations against COVID-19. A national plan for monitoring and responding to infection was officially launched on January 27, 2020. A high-level commission chaired by the head of government was set up to take political, diplomatic, regulatory, cooperation, and response orientation decisions. The Ministry of Health set up a steering committee for the health component of the response. The tasks of epidemiological monitoring and coordination were entrusted to the National Public Health Emergency Operations Center as part of the operationalization of the actions included in the National Health Security Plan 2018-2022.

⁵ WHO, International Health Regulations, 2005, <https://www.who.int/publications/i/item/9789241580496>

8. Accountability and efficiency

“Health services are well managed so as to achieve the core elements described above with a minimum wastage of resources. Managers are allocated the necessary authority to achieve planned objectives and held accountable for overall performance and results. Assessment includes appropriate mechanisms for the participation of the target population and civil society.”



Expert's Consensus



Same as in 2019

Accountability and efficiency in the healthcare system in Morocco face substantial challenges, as evidenced by the insufficient implementation of performance-based incentives.

The absence of effective mechanisms for rewards and punishment, coupled with subjective evaluation methods, reveals deficiencies in regular monitoring and accountability structures. Corruption remains a persistent concern, and there is a need for improved documentation of available resources to enhance efficiency and transparency. The Court of Accounts, in its role of overseeing management, conducted examinations related to the health sector for the years 2019, 2020 and 2021⁶. The focus encompassed the healthcare system and service delivery within the public sector. The examination delved into the governance of the healthcare system, the strategy employed by the Ministry of Health, the information system, public hospital constructions and equipment, the emergency medical network managed by the ministry, and the national blood transfusion system.

These audits brought to light structural deficiencies negatively impacting various services and establishments within the health department. Shortcomings include challenges in governance, monitoring, and leadership, as well as a shortage of necessary financial and human resources (medical, paramedical, administrative, and technical). The inadequacy of infrastructure and equipment for patient reception, care provision, and the delivery of quality healthcare; organizational and managerial difficulties in healthcare establishments, and shortcomings in information systems were identified as key areas of concern. These systemic failures complicate the management, monitoring, and control of healthcare activities.

The findings from the Court of Accounts' report underscore the need for a comprehensive approach to address the challenges in accountability and efficiency within the healthcare system. There is a crucial requirement for strategic interventions to enhance governance, allocate adequate resources, address infrastructural deficiencies, and improve information systems. By addressing these issues, Morocco can foster a more accountable and efficient healthcare system, thereby ensuring better service delivery and utilization of available resources.

⁶ Covering medical care, medications, hospitalization, and outpatient care. (SDGs Report-2021) <https://unstats.un.org/sdgs/report/2021/goal-03/>

B. Health workforce

According to the annual report for the year 2021 by the Court of Accounts and insights gathered from interviews with healthcare experts, significant challenges persist within the health workforce sector in Morocco. As an independent financial authority, the Court of Accounts has put forth recommendations, placing a particular emphasis on territorial disparities regarding human resources in the Ministry of Health.

Over the past decade, healthcare workforce dynamics in both the public and private sectors in Morocco have seen modest improvement.

The number of healthcare professionals increased from 51.1 to 64.1 per 1,000 inhabitants between 2011 and 2020, primarily driven by an expansion in the private sector. However, the density of healthcare professionals, especially doctors, in the public sector has experienced a decline during this period.

Territorial Disparities: The 2021 annual report from the Court of Accounts has underscored that this improvement has not been evenly distributed across all regions of the country. The Court has specifically pointed out the absence of precise criteria for determining the compatibility between available medical staff and the healthcare needs of the population and health facilities. This situation raises concerns about the distribution and development of healthcare professionals in Morocco, as highlighted both by the Court of Accounts and experts interviewed.

Furthermore, the Court has drawn attention to "the dominance of non-priority specializations, the decrease in the share of priority specializations, and the reinforcement of healthcare offerings that do not contribute to supporting primary care."

Both the institution and healthcare experts consulted have said that in their estimation that "the shortage of doctors, nurses, and nurse technicians is expected to increase in the coming years," and that achieving "adequate coverage of the population (45.4 healthcare professionals per 1,000 inhabitants, according to the World Health Organization's definition) remains challenging."

Addressing the challenges identified in the health workforce sector is crucial for Morocco to ensure equitable distribution of healthcare professionals, prioritize essential specializations, and work towards achieving optimal coverage for its population in the years ahead, as highlighted by both the official report and the perspectives of experts in the field.

1. Strategic Planning and Medical Human Resources Management system

“The way the health authority manages and develops plans regarding human resources in health systems. Recruitment and deployment systems including incentive schemes to ensure that health-care facilities meet their nationally recommended staffing norms”



Expert's Consensus



Worse than 2019

The Court of Accounts' comprehensive report for the years 2019-2020 and also 2021 report offers a detailed examination of the healthcare landscape in Morocco, a perspective further emphasized by insights from our expert consultations. The report sheds light on multifaceted challenges that the sector grapples with, signaling a need for nuanced solutions.

The identified deficit in both human and financial resources within the healthcare sector is a significant concern. The report highlights that this shortage hinders the sector's capacity to carry out its assigned tasks effectively. The scarcity of medical, paramedical, administrative, and technical staff, coupled with inadequate infrastructure and equipment, poses substantial obstacles to delivering quality healthcare services. This shortage, as noted by both the official report and expert perspectives, significantly affects the functionality of health centers, impacting their productivity and their ability to meet the diverse needs of the population.

Furthermore, the report underscores a notable imbalance in the information system, complicating the management, monitoring, and control of healthcare activities. This systemic issue, when coupled with the absence of a health map as mandated by law, raises questions about the sector's ability to plan and organize healthcare services strategically. The health map, viewed as a fundamental framework for resource distribution and investment regulation in health facilities, is deemed essential for effective healthcare delivery.

The observations from our expert consultations align with the identified challenges in the report, emphasizing the urgent need for strategic planning and an efficient medical human resources management system. The complex interplay of these issues necessitates a comprehensive and nuanced approach to address the intricacies of resource shortages, organizational inefficiencies, and information system imbalances. The findings collectively underscore the imperative for transformative initiatives to fortify the foundations of Morocco's healthcare sector.

2. Size

“The size of the national health workforce, include recruitment and training”



Expert's Consensus



Worse than 2019

There is no sufficient data available to be able to make an objective assessment of the healthcare workers' size. However, the consensual opinion of the experts is that it has significantly decreased due to increasing brain drain.

The Minister of Health, Khalid Ait Taleb, estimated the current need for human resources necessary for the optimal functioning of the health system to be no less than 97,000 medical and paramedical professionals. He further specified that Morocco needs at least 25 years to catch up with this backlog.

3. Capacity

“The capacity of health professions' educational institutions, including the quantity and quality of instructors and auxiliary staff”



Expert's Consensus



Same as in 2019

Regarding capacity, there hasn't been a significant change in health professions educational institutions, encompassing both the quantity and quality of instructors and auxiliary staff, despite the establishment of "cités des métiers" (professional training centers). The expected enhancement in capacity, both in terms of the number of educators and the quality of instructional staff, has not been as pronounced as anticipated. The introduction of "cités des métiers" has not resulted in a transformative shift in the capacity of health education institutions, raising questions about the effectiveness of this initiative in addressing the broader educational needs of health professions.

4. Private Sector

“Interaction with or regulation of the private sector requiring accurate knowledge of the numbers, types and qualifications of private sector providers”



Expert's Consensus



No Consensus

Private entities play a major role in health globally. However, their contribution has not been fully optimized to strengthen delivery of public health services. The COVID-19 pandemic has overwhelmed health systems and precipitated coalitions between public and private sectors to address critical gaps in the response.

The Moroccan government established partnerships with the private sector to manufacture COVID-19 rapid diagnostic tests. The private sector also contributed to treatment and management of COVID-19 cases. In addition, private entities provided personal protective equipment, conducted risk communication to promote adherence to safety procedures and health promotion for health service continuity. However, there were concerns related to reporting, quality and cost of services, calling for quality and price regulation in the provision of said services. There is a need to develop regulatory frameworks for sustainable public-private engagements including regulation of pricing, quality assurance and alignment with national plans and priorities during response to epidemics.

5. Management of health workforce migration

“Managing health workforce market among countries that witness large numbers of health workers migration, efforts may be undertaken to manage the pressures of the international health workforce market on migration”



Expert's Consensus



Worse than 2019

In delving into the complex issue of health workforce migration in Morocco, our survey has elicited valuable insights from healthcare experts. The urgent demand for 47,000 physicians and 65,000 nurses and health technicians is underscored by a noticeable decline in the current workforce. According to data from 2022, provided by the Ministry of Health, there are only 28,892 physicians in the country, spread across both public and private sectors. This downward trajectory, persisting over several years, is attributed to a significant number of practitioners opting to migrate, seeking enhanced professional opportunities abroad.

The phenomenon of healthcare professionals leaving the country poses a substantial threat to Morocco's healthcare system, as highlighted by experts participating in our survey. The motivations behind this migration are varied, with some practitioners choosing to pursue specialization abroad, while others are enticed by recruiters seeking their specialized skills.

The survey findings align with the realization that the migration of medical expertise is impeding the reform of Morocco's healthcare system and hindering the realization of universal mandatory health insurance. The departure of skilled professionals, as diagnosed by our expert contributors, is identified as a significant obstacle, undermining the country's ability to build a robust and sustainable healthcare infrastructure.

Our survey has also shed light on the active efforts of the Moroccan government to address this challenge. Experts acknowledge ongoing initiatives to retain and control migration flows, facilitate mobility, and transform the migration of Moroccan medical professionals abroad into an opportunity. The goal is not only to retain talent but also to leverage the experiences and expertise of those who have migrated, fostering knowledge-sharing and transmission of social norms.

However, experts participating in our survey emphasize that the deficiencies within the healthcare system are significant and present a considerable hurdle in retaining talented individuals who aspire to a promising future. This collective diagnosis from our survey participants underscores the urgent need for a comprehensive approach to address both the migration of healthcare professionals and the systemic dysfunctions within Morocco's healthcare system.

The survey illuminates a path forward, where the migration of medical professionals can be transformed into an opportunity for growth and collaboration, ultimately strengthening the healthcare landscape in Morocco.

6. Management of inefficiencies

“Inefficiencies may include identifying and reducing worker absenteeism that is known to be a significant problem in the public health system in many contexts”



Expert's Consensus



No Consensus

No consensus could be reached about progress regarding management of inefficiencies.

7. Motivation and staff performance

“Health worker motivation and productivity, which may include strengthening of supervision. Potentially one of the most effective instruments to improve the competence of individual workers and effective management of performance of health workers.”



Expert's Consensus



Same as in 2019

No noticeable developments were observed by the consulted experts on that front.

C. Health information systems

Data generation, existence of birth and death registration, regular census exercises and availability of censuses, as well as health system resource tracking have improved since 2019.

However, there's no consensus on data analysis and validation, indicating that while data is available, standardized strategies for analysis and implementation initiatives are lacking.

The audit conducted over the period 2010–2020 by the Court of Accounts focused on the coverage level of activities by (digital) information applications, the operation and utilization of key applications, the management of major structural IT projects, as well as the major constraints preventing the establishment of an efficient application portfolio.⁷

The Ministry's activities are organized into 15 business processes. However, it was observed that these processes are either partially covered or entirely uncovered. It is worth noting that no process is covered end-to-end.

Furthermore, the Ministry of Health's application portfolio consists of 62 applications deployed across various entities and healthcare facilities, of which 42 are operational. The examination of the main operational applications revealed that these applications are heterogeneous, not interoperable with each other, and generally underutilized. Consequently, users often resort to non-digital parallel procedures for data collection, processing, and utilization. Therefore, in its current state, the application portfolio cannot serve as a foundation for the development of an efficient, comprehensive, and integrated information system⁸.

Note: Other aspects of Health Information Systems were not covered due to the limited information provided.

1. Data generation

“Data generation capacity using core sources and methods (health surveys, civil registration, census, facility reporting, health system resource tracking). These reflect the country’s capacity to collect relevant data at appropriate intervals and to use the most appropriate data sources. Benchmarks include periodicity, timeliness, content of data collection tools and availability of data on key indicators.”



Expert's Consensus



Better than 2019

⁷ Covering medical care, medications, hospitalization, and outpatient care. (SDGs Report-2021) <https://unstats.un.org/sdgs/report/2021/goal-03/>

⁸ Rapport annuel de la Cour des comptes au titre des années 2019 et 2020 <https://unstats.un.org/sdgs/report/2021/goal-03/>

General data and Health-related data are generally centralized at a governmental level. However, it is not always clear when this data (birth and death, censuses) is collected and at what frequency is it shared. Although the experts noted a general improvement in data generation, specific data such as reports of health facilities and health system resources are becoming less available upon request. There isn't a clear culture of health data generation and databases yet, despite efforts and technical support from the World Health Organization.

2. Data analysis and validation

“Country capacities for synthesis, analysis and validation of data. These measure key dimensions of the institutional frameworks needed to ensure data quality, including independence, transparency and access. Benchmarks include the availability of independent coordination mechanisms and the availability of microdata and metadata”



Expert's Consensus



No Consensus

Since data is not always available and accessible, it is only analyzed for specific ad-hoc and internal purposes. There is no standardized strategy to use and implement initiatives using this data.

3. Existence of Health surveys

“Country has a 10-year costed survey plan that covers all priority health topics and takes into account other relevant data sources.”



Expert's Consensus



Better than 2019

Experts who participated in our survey highlighted a notable improvement in the conduct of health surveys in the country. Health surveys are acknowledged as a vital component of the Moroccan health strategy, playing a crucial role in collecting accurate and up-to-date health information.

Key areas of impact include data collection and analysis covering various health indicators, strategic planning for resource allocation and targeted interventions, continuous monitoring and evaluation of program effectiveness, identification of health disparities, disease surveillance, contribution to public health research, community engagement, and global reporting.

The experts emphasized that involving communities in health surveys (especially in the COVID-19 context) fosters engagement and awareness, allowing them to voice health concerns and actively participate in shaping health policies. The improvement in health survey practices aligns with the broader goal of enhancing healthcare planning, delivery, and overall health outcomes in Morocco.

4. Existence of birth and death registration

“The target goals are: Birth registration of at least 90% of all births, death registration of at least 90% of all deaths, ICD-10 used in district hospitals and causes of death reported to national level.”



Expert's Consensus



Same as in 2019

Insights from all the experts who actively participated in our survey reveal that the pandemic had virtually no impact on birth and death registration practices in Morocco.

The survey findings reveal that, overall, there has been minimal disruption to the standard procedures for registering births and deaths in the country. Experts noted a continuity in routine processes despite the challenges posed by COVID-19.

However, a significant observation emerged concerning death registrations. Experts identified a notable shift in the registration pattern, introducing a new indicator specifically tailored to capture death cases associated with COVID-19. This strategic addition aims to provide a more comprehensive understanding of the pandemic's impact on mortality rates.

In contrast, the registration of births maintained a stable and conventional approach, with procedures for recording newborns' arrivals remaining largely unchanged. The emphasis appears to be on adapting death registration practices to the unique challenges presented by the pandemic, while birth registrations continue along established lines.

5. Existence of censuses

“Census completed within the past 10 years with population projections for districts and smaller administrative areas available for the next 10 years, in print and electronically, and well documented.”



Expert's Consensus



Same as in 2019

No noticeable change regarding censuses has been observed.

6. Existence of Health facility reporting

“Special emphasis on systems for reporting of notifiable diseases and how much it makes use of modern communication technology, and reporting of statistics from district to national levels.”



Expert's Consensus



Same as in 2019

No noticeable change regarding health facility reporting has been observed.

7. Existence of health system resource tracking

“This includes at least one national health accounts exercise completed in the past five years, a national database with public and private sector health facilities and geocoding, available and updated within the past three years”



Expert's Consensus



Better than 2019

During the COVID-19 pandemic in Morocco, the government implemented health system resource tracking to efficiently manage and allocate healthcare resources in response to the dynamic challenges posed by the crisis. The objective of this initiative was to ensure the optimal distribution of medical equipment, personnel, and facilities to effectively handle the evolving demands of the pandemic.

In addition to resource tracking, the Moroccan Health Ministry developed the "Wiqaytna" mobile application. This app served as a crucial tool for tracking and managing COVID-19 positive cases. "Wiqaytna" plays a pivotal role in contact tracing, providing real-time information to users and health authorities, thus contributing to the overall strategy of mitigating the spread of the virus. The integration of technology, such as this mobile application, reflects the government's commitment to leveraging innovative solutions for effective pandemic management.⁹

D. Access to essential medicines

Access to essential medicines as a right faces challenges, with issues surrounding the lack of an official national list of essential medicines. While there is a national medicines policy, it is not published, indicating the need for increased transparency. There is no consensus on the practical availability of essential medicines, reflecting disruptions in the supply chain and management issues.

⁹ Rapport annuel de la Cour des comptes au titre des années 2019 et 2020 <https://unstats.un.org/sdgs/report/2021/goal-03/>

1. Access to essential medicines as a right

“Access to essential medicines/technologies as part of the fulfillment of the right to health, recognized in the constitution or national legislation as part of the progressive realization of the right to health and/or as a specific entitlement of all citizens.”



Expert's Consensus



Same as in 2019

Although it is not specifically recognized in the constitution, the right to health enshrined in the constitution is understood to enable access to essential medicines.

2. Published national medicines policy

“Existence and year of last update of a published national medicines policy (an official National Medicines Policy (NMP) and updated within the past five years)”



Expert's Consensus



Better than 2019

A national medicines policy exists, including the support for the development of generic medicines, however it is not published. This is mainly because it is still subject to debate and has not been validated at the highest decision-making level yet.

3. Published national list of essential medicines

“Existence and year of last update of a published national list of essential medicines that is updated within the past five years.”



Expert's Consensus



No Consensus

The publication of the national list of essential medicines in Morocco happens at regular intervals and it provides a rather comprehensive stock which includes over 350 medicines. Remarkably, this list demonstrates a substantial alignment with the WHO Model List, with more than 78% similarity in terms of the number of medicines. This high degree of concordance reflects a systematic and consistent approach to updating and disseminating essential medicines information.

Despite the notable regularity in the publication of the list, it's worth noting that there does not seem to be a unanimous consensus among all experts involved in our survey on the evaluation of the

medicines included in the list. However, the robustness and extensive nature of the published list, coupled with its significant alignment with international standards, underscore a conscientious and systematic effort by Moroccan authorities in ensuring the accessibility and availability of essential medicines in the country.

4. Practical availability of essential medicines

“In practice, are essential medicines available and accessible at all levels of care?”



It was difficult to reach a consensus without reliable data to assess the practical availability of essential medicines. Noted challenges in practical availability, such as stockage or distribution inefficiencies, may have affected access, impacting overall healthcare system effectiveness.

The consulted experts emphasized the importance of examining the practical availability of essential medicines in Morocco. This assessment would provide valuable insights into the accessibility of crucial medications for the population and would pave the way for the much needed collaboration between health authorities, suppliers, and providers, involving supply chain monitoring, optimized procurement, and affordability measures.

E. Health systems financing

The budget of the Ministry of Health and Social Protection has improved by 50%, 19.77 billion DH in 2021, compared to 13.1 billion DH in 2015. Despite this improvement, households still bear the largest share of expenses. The Ministry of Health and Social Protection finances more than half (59.7%) of the total health expenditure.¹⁰

1. Government expenditure on health

“General government health expenditure as a proportion of general government expenditure”



¹⁰ Rapport annuel de la Cour des comptes au titre des années 2019 et 2020 <https://unstats.un.org/sdgs/report/2021/goal-03/>

According to Said Addi, head of the Social Sectors Division at the Budget Directorate of the Ministry Delegate in charge of the Budget, the budget of the Ministry of Health increased from 10.46 billion DH in 2010 to 28.12 billion DH in 2023, representing an increase of 17.66 billion DH, of which 8 billion were allocated to upgrading healthcare infrastructure and strengthening equipment. Concurrently, during the period 2014-2022, the state mobilized more than 13.6 billion dirhams from the resources of the Social Protection and Social Cohesion Support Fund for the financing of Ramed, which has been transformed into "AMO-Tadamon" since December 1, 2022. 9.5 billion DH were allocated by the 2023 Finance Act to cover individuals currently subject to the "AMO-Tadamon" schemes and 8 billion DH for upgrading the national healthcare system.¹¹

Looking at wider sector spending, total current health expenditure was worth 6.5% of GDP in 2019; 6.2 % in 2020 and 6.7 in 2021. The overall budget allocated to the health and social protection sector will increase by 9.1% (+2.559 billion dirhams) for 2024 in comparison with 2023, to reach 30 billion, 689 million and 949 thousand dirhams as stated by the Minister of Health and Social Protection.¹²

2. Financial risk protection and coverage for vulnerable groups

"Population covered by health insurance. Mechanisms made available to ensure coverage of the most vulnerable populations"



Expert's Consensus



No Consensus

Although noticeable efforts were deployed to achieve Universal Healthcare Coverage in Morocco, the challenges faced reflect issues related to inequity in coverage and risk protection.

The root cause of remaining defects in UHC outcomes in Morocco is attributed not to financing but to the mismatch between healthcare supply and evolving needs.

As a consequence of consistently inadequate healthcare coverage, the following gaps persist:

- Access Limitations: Inequities in regional access and patients' financial means restrict healthcare service accessibility.
- Impoverishment of Public Hospitals: Public hospitals suffer financial constraints, while private healthcare providers flourish, relatively speaking.
- Unsatisfied UHC Beneficiaries: Beneficiaries of UHC programs like AMO and RAMED express dissatisfaction with the provided healthcare services, adopting unpredictable healthcare-seeking behaviors.

¹¹ Financement de la santé au Maroc : réduire les dépenses directes des ménages est le défi n°1, Le Matin.ma, Juin 2023, <https://lematin.ma/express/2023/financement-sante-reduire-depenses-directes-defi-n1/390907.html>

¹² Rapport annuel de la Cour des comptes au titre des années 2019, 2020 et 2021, <https://unstats.un.org/sdgs/report/2021/goal-03/>

- Inconsistent, unpredictable and deregulated healthcare: The healthcare system operates at varying speeds, lacking coherent care pathways and regulatory oversight.

3. Financial transparency

“Financial transparency at operational and managerial levels”



Expert's Consensus



Same as in 2019

Based on the information provided, it appears that there have been concerns about financial transparency in the management of COVID-19 in Morocco. The irregularities and issues outlined in the report, such as non-compliance with laws, collusive contracts, acquisition of supplies without proper registration, and overcharging for certain medical tests, suggest a lack of financial transparency in the handling of funds allocated for the pandemic response.

In its leading report on Financial transparency in the management and control of the COVID-19 Pandemic in Morocco¹³, Transparency Maroc¹⁴ raises an important point:

With the government's announcement of the decree on March 16, 2020, establishing exceptional waivers in the field of public procurement to address situations of health emergencies and their extension to areas beyond health, Transparency Morocco brought to the attention of the public authorities that 'the almost total absence of regulation of exceptions clearly poses a significant risk of abuse and lack of ethics, which could worsen the already endemic corruption.'

This risk has proven to be very real. Indeed, numerous blatant irregularities in transparency deficits and lack of equal opportunities were identified in the parliamentary committee's report on the management of the 333 contracts in the budget of the public health sector, bolstered by the 3 billion DH allocated by the COVID Solidarity Fund. These noted irregularities are not exhaustive, as the documents provided to the committee by the ministries of health and finance are incomplete and submitted with a delay of more than 5 months. This raises the question of the application of the access to information law for citizens if even a constitutional institution encounters difficulties and obstacles.

For reference, here are some examples of irregularities reported in the report:

- Non-compliance with Law No. 84-12 of August 30, 2013, which stipulates the obligation for the Ministry of Public Health and companies in the health sector to register these companies and their products and goods in order to operate in the sector.

¹³ Gestion des marchés du secteur de la santé publique durant la pandémie du coronavirus : <https://transparencymaroc.ma/communiquede-transparency-maroc-gestion-des-marches-du-secteur-de-la-sante-publique-durant-la-pandemie-du-coronavirus/>

¹⁴ Transparency Maroc is a non-governmental organization based in Morocco that focuses on promoting transparency, integrity, and accountability in the country. Transparency Maroc is part of the global Transparency International network, which is a leading civil society organization working against corruption worldwide.

- Collusive contracts with companies not registered with the ministry and the acquisition of highly sensitive supplies not registered and/or registered under the names of other companies, marginalizing competitors whose files are ready but not processed despite their appeal to the Ministry of Health. This demonstrates favoritism, dual treatment of registration requests for companies and supplies, and a violation of the principles of fair competition and equal opportunities.
- Tolerance of the promotion of equipment whose effectiveness has not been proven by a technical committee and without prior control conditions that should be in place regardless of the circumstances, thus endangering the health of patients and healthcare personnel.
- A significant gap was observed in the import licenses for respiratory devices and high-flow oxygen devices, while more cost-effective alternative solutions exist.
- Inflation in the pricing of serological tests market amounting to 213,918,000 DH and other concerns over expiration dates. While this test is sold for nearly 40 DH per unit in France, the ministry allowed its purchase at 99 DH, resulting in an overcharge of 59 DH despite expiration dates not exceeding 3 months.

In addition to the loss of taxpayers' money, there is the exclusion of saliva tests that could contribute to pandemic screening, alleviate pressure on public hospitals, and ease the financial burden on citizens. This situation benefits PCR tests and reflects blatant corporatism.

4. Out-of-pocket payments

“The ratio of household out-of-pocket payments for health to total expenditure on health”



Expert's Consensus



Same as in 2019

Health financing in Morocco is characterized by a multiplicity of funding sources and actors. These include public sources through state tax revenues, health insurance contributions (including various forms of private insurance), and private sources through direct household payments. The ratio of direct household expenditure relative to the Total Health Expenditure (THE) indicates the level of financial protection a country provides to its people. One of the objectives of Universal Health Coverage (UHC) is to reduce this ratio to less than 25%. The goal is to ensure that collective health financing is based on national solidarity and ensure a maximal pooling of financial burden of disease.

In Morocco, Health financing still relies mainly on out-of-pocket payments. The World Health Organization (WHO) has shown that these payments can expose households to catastrophic health expenditure and impoverish them. Morocco Out-of-Pocket Health Expenditure as a percentage of Total Health Expenditure was reported at 42 % in 2023¹⁵ and is estimated at about 2.5 billion Dollars in the form of direct expenditure. When we add to the direct contribution of households to health insurance, which they make on an annual basis, this percentage rises to 49.7% of the Total Healthcare Expenditure.

¹⁵ Out-of-pocket expenditure (% of current health expenditure) – Morocco, World Health Organization Global Health Expenditure database (apps.who.int/nha/database). The data was retrieved on April 7, 2023

The following was noted regarding Healthcare Expenditures and out-of-pocket expenses incurred by individuals:

- Significant growth has been observed on Total Health Expenditures which have outpaced economic growth, reaching up to tenfold increases for certain healthcare services.
- High patient cost-sharing: despite higher costs in the private sector, patient out-of-pocket expenses remain substantial across both public and private sectors.
- Wide disparities in health service costs: cost differentials between public and private health services vary dramatically, with some expenses exhibiting a 15-fold difference.
- Financial imbalance in health insurance: beneficiaries of the "compulsory health insurance (AMO) fonctionnaires" spend more than those covered by "AMO privé," indicating a potential future financial deficit as contributions lag behind expenditure growth.

The fundamental question arises: "finance first, then reform, or reform first, then finance?" This dilemma underscores the complex landscape of health systems in Morocco. United Nations assessments of health system performance reveal concerning rankings for Morocco in terms of population health (110th) and equity (111th). Additionally, research on health system performance¹⁶ positions Morocco at the 109th place globally, highlighting suboptimal financing and health indicators.

F. Leadership and governance

1. National health strategy

"How is it made? Is it publicly available? Is it regularly updated? is it binding?"



Expert's Consensus



Better than 2019

Since 2019, there have been improvements in Morocco's National Health Strategy. Improvements may include advancements in healthcare infrastructure, the implementation of new health programs such as UHC, enhanced disease prevention and control measures, and strengthened healthcare delivery systems.

The government has adopted a proactive policy for the digitalization of the health sector to improve healthcare and optimize the use of available means to guarantee the efficiency of interventions and the reduction of their costs. This still needs to be better adapted to communities.

¹⁶ Global, regional, and national incidence, prevalence, and years lived with disability for 310 diseases and injuries, 1990–2015: systematic analysis for the Global Burden of Disease (GBD 2015, Lancet 2016) : [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(16\)31678-6/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(16)31678-6/fulltext)

2. Representation

“Are all relevant stakeholders regularly represented in decision-making? How participatory is the decision-making process? on service provision level, district level and national level?”



Expert's Consensus

X

No Consensus

In the context of Morocco's National Health Strategy, a multitude of stakeholders converge to shape and influence the trajectory of the country's healthcare system. This takes place within the framework of regular, national dialogues named “Assises Nationales” which includes a broad spectrum of entities pivotal in the strategic planning and development of the national health agenda.

Among these stakeholders are the ministries, embodying the state's authority and responsibility in crafting comprehensive health policies, local Authorities contributing at the territorial level and aligning regional strategies with broader state objectives, healthcare institutions, the Health Insurance Organizations (which plays a significant role in designing coverage schemes to shield individuals and their families from financial uncertainties associated with healthcare during illness) training, educational and research institutions, international organizations, but also and most importantly representatives of consumers, encompassing patients and service beneficiaries, healthcare personnel and their representative entities, civil Society, comprising NGOs, foundations, and associations actively contributing through advocacy and community-based support, lastly, suppliers and subcontractors.

While consensus about the degree of representation of these stakeholders may not be universal among experts, this diverse assembly of stakeholders embodies a holistic and collaborative approach, reflecting the intricate tapestry that shapes Morocco's National Health Strategy. The engagement of these entities aims at ensuring that the strategy is nuanced, inclusive, and considers the multifaceted dimensions of the healthcare system, ultimately contributing to its effectiveness and success.

3. Transparency and 4. Accountability

“Is information made available in a transparent, precise and timely way? Is national health data accessible to all, on all levels?”

“Are there mechanisms for local and national accountability towards service providers and regulators?”



Expert's Consensus



Slightly worse than 2019

Consulted experts agreed that transparency and accountability within the healthcare sector has either stayed the same or slightly declined since before 2019.

5. Grievance redress mechanisms

“Are there complaints and grievance redress mechanisms in place? are they effective and timely in their results?”



Expert's Consensus



Same as in 2019

Regarding the healthcare system in Morocco, the handling of complaints may vary depending on the entity or organization involved. Here are some general mechanisms for processing complaints that may apply in the field of healthcare in Morocco:

Ministry of Health: Complaints related to healthcare services can be filed with the Ministry of Health in Morocco. The Ministry may have a specific department responsible for handling complaints and ensuring that they are appropriately reviewed. The Ministry has also put in place The electronic service for complaints (Chikayasanté) <http://www.chikayasante.ma> and a hotline known by (Chikayates) 08.01.00.53.53. These pertain solely to services provided in public healthcare institutions (hospitals, health centers, and hemodialysis centers).

Healthcare Institutions: Hospitals, clinics, and other healthcare institutions may have their own internal procedures for handling complaints. Typically, there are complaint management services within these institutions.

Order of Physicians: Complaints against healthcare professionals, such as doctors, can be filed with the Order of Physicians in Morocco which in turn carries out the needed investigations to ensure adherence to professional standards.

Judicial System: In cases of serious disputes or alleged medical negligence, it is possible to resort to the judicial system to resolve the matter.

National Commission for the Control of the Protection of Personal Data (CNDP): For issues related to the confidentiality of medical information, the CNDP may be involved.

To report an incident of corruption in Morocco, whether someone has been a victim or a witness, especially in the healthcare sector, a hotline has been established and can be reached toll-free at 080 100 76 76.

No significant changes have been noted on this front since before 2019.

G. Epidemic preparedness

1. Public Health Infrastructure



The consensus was that there is a general improvement in public health infrastructure.

2. Surveillance



The consensus was that there is a general improvement in surveillance.

3. Immunization



Improvement in access to vaccines and medications is attributed to the National Immunization Program:

- For Child Immunization: The proportion of children aged 12-23 months who are fully vaccinated is 94.5% in 2018 (compared to 90.9% in 2011).
- Against COVID-19: As of March 5, 2023, around 55.4 million doses of coronavirus (COVID-19) vaccines had been administered in Morocco. Morocco was one of the leading countries in the COVID-19 vaccination drive on the African continent.¹⁷

4. Hospital capacity , 5. Labs



¹⁷ Total number of coronavirus (COVID-19) vaccination doses administered in Morocco as of March 5, 2023, Statista, <https://www.statista.com/statistics/1219577/number-of-covid-19-vaccine-doses-administered-in-morocco/>

Table 1: Public healthcare establishments and hospitals - National

Indicators	2005	2010	2015	2019	2020	2021
Establishments of the SSB	2,545	2,689	2,792	2,888	2,947	2,985
Hospital establishments	128	141	155	159	162	165
Paramedical consultations (in thousands)	24,953	27,453	29,450
Medical consultations (in thousands)	14,111	18,730	22,782	19,956

Table 2: Activities of public hospitals - National

Indicators	2005	2010	2015	2019	2020	2021
Bed capacity (functional)	22,636	21,734	22,075	21,581	21,594	20,364
Bed capacity (theoretical)	26,256	27,326	...	25,385	26,926	26,711
Number of admissions (in thousands)	877	1,151	1,135	1,154	950	939
Number of hospital days (in thousands)	4,347	4,757	4,817	4,898	3,876	4,032
Average occupancy rate in %	55,1	61,6	63,8	68,0	58,9	59,7
Average length of stay in days	5	4	4	4,2	4,1	4,3
Turnover rate in person	39	53	51,4	53,5	44	46,1
Rotation interval in days	11	7	2.4	2	2.9	2.9

Source: Ministry of health and social protection¹⁸

6. Coordination



Expert's Consensus



Better than 2019

Actions were quickly taken to minimize the scope of the epidemic's contamination chain: 'Coronavirus command posts' were established at appropriate territorial levels to ensure monitoring and coordination with health services for the identification and localization of the epidemic.

The Ministry of Health implemented a series of measures to enhance its level of vigilance in real-time monitoring of the epidemiological situation. It adjusted its mode of operation by establishing a

¹⁸ Les Indicateurs sociaux du Maroc, Edition 2023 : https://www.hcp.ma/Les-Indicateurs-sociaux-du-Maroc-Edition-2023_a3729.html<https://transparencymaroc.ma/communiqu-e-de-transparency-maroc-gestion-des-marches-du-secteur-de-la-sante-publique-durant-la-pandemie-du-coronavirus/>

Technical and Scientific Advisory Committee, one of whose missions is to define a protocol for the management of Covid-19 patients.

To support the populations most affected by the crisis, Morocco established an Economic Monitoring Committee (CVE) to assess and anticipate the direct and indirect economic repercussions of Covid-19 on the population. The 'Special Fund for the Management of the Coronavirus Pandemic,' endowed with 3% of the GDP, was created. The Fund received contributions from various private and public entities totaling over 32 billion dirhams (approximately 3.2 billion USD) in donations. The Fund was used to finance medical infrastructure upgrades, support the national economy in coping with the shock, preserve jobs, and mitigate the social repercussions of the pandemic. An Inter-Ministerial Monitoring Committee oversaw the action plan in its economic and social aspects.

Furthermore, on April 7, 2020, Morocco mobilized a sum of 2.97 billion USD from the International Monetary Fund (IMF).

As another manifestation of coordination of efforts, the Parliament authorized the government to exceed the debt ceiling set in the 2020 budget law. The use of the Precautionary and Liquidity Line (amounting to 3 billion dollars repayable over a period of 5 years, with a grace period of 3 years) negotiated with the IMF in late 2018 helped mitigate the effects of the COVID19 crisis and preserve foreign exchange reserves, thereby strengthening the confidence of foreign investors and Morocco's bilateral and multilateral partners.

H. Public health communication

Public education and risk education have improved, especially during the COVID-19 pandemic. Communication with healthcare workers, however, lacks official platforms for effective information flow.

1. Public education and 2. Risk education



3. Communication with healthcare workers



Since the breakout of COVID-19 pandemic in Morocco, many ways have been proposed to improve the quality of communication between the medical staff, patients and their families.

Due to the lack of resources MOH created a communication center in different hospitals to keep the healthcare workers updated and also patients and their families. Other measures included:

- Establishment of a web portal: www.liqahcorona.ma
- Establishment of a telephone service for individuals to be vaccinated: Allo Liqah helpline 0800 000 147.
- Appointment scheduling via SMS 1717.
- Mobilization of journalists for specialized programs.
- Media appearances by members of the scientific committees.
- Implementation of the Yakadaliqah platform for reporting adverse effects.
- Broadcasting of audiovisual materials: SPOTS and capsules on SNRT, 2M, Medi1 TV/radio channels.
- Development of regularly updated FAQs.
- Production of press releases.

I. COVID specific measures

Since the first registered case in Morocco on 2 March 2020, and like many other countries, Morocco implemented various measures to address the COVID-19 pandemic. These measures have included:

- Lockdowns and Movement Restrictions: implementing lockdowns or movement restrictions to limit the spread of the virus.
- Travel Restrictions: imposing travel restrictions, including the suspension of international flights or quarantine measures for incoming travelers.
- Social Distancing Measures: encouraging or enforcing social distancing in public spaces, including the closure of non-essential businesses.
- Mask Mandates: requiring the use of face masks in public places to reduce the risk of transmission.
- Testing and Contact Tracing: increasing testing capacity and implementing contact tracing to identify and isolate individuals who may have been exposed to the virus.
- Vaccination Campaigns: launching vaccination campaigns to immunize the population.
- Public Awareness Campaigns: conducting public awareness campaigns to educate the population about COVID-19 prevention measures.
- Healthcare Infrastructure Enhancement: strengthening healthcare infrastructure to handle the surge in COVID-19 cases, including the expansion of hospital capacity.

1. COVID data available (incidence, mortality, morbidity)?



COVID data across the pandemic was generally available and accessible through the main communication channels and social media and also on the official web site of MOH.

2. COVID data credible? 3. COVID data regular and 4. COVID data accessible?



The data, though generally reliable, exhibited occasional delays and fragmentation attributed to regional and sectoral disparities in collection, particularly during the initial waves. A notable concern arises in the credibility of morbidity data due to the utilization of COVID-19 rapid tests, potentially resulting in an underestimation of cases. This discrepancy, particularly with rapid tests, raises questions about the accuracy of reported morbidity figures and the comprehensive representation of the virus's actual impact. It suggests a need for careful consideration when interpreting the data, emphasizing the importance of understanding the challenges associated with regional differences and the diagnostic methods employed.

5. Vaccine coverage ensured? 6. Vaccine equity realized? 7. Vaccine outreach to high risk population and target groups achieved?



The vaccine coverage was ensured across the country, after a period of settling and striving to acquire enough doses to cover the entire country. Morocco was the first African country to launch a vaccination campaign.¹⁹

Vaccinating the Moroccan population became a major public health priority, and remarkable efforts were undertaken by the government to achieve large-scale immunization. In fact, preparations were arranged before the arrival of the first batches of vaccine doses into the country. Moroccan citizens and residents were notified about the procedure of setting up a vaccination appointment.

¹⁹ Drissi Bourhanbour A, Ouchetto O. Morocco achieves the highest COVID-19 vaccine rates in Africa in the first phase: what are reasons for its success? *Journal of Travel Medicine*. 2021;28(4):1

The procedure simply entailed providing one's ID card number to register and subsequently receive a place and date for their appointment. Any citizen or resident was automatically referred to the nearest vaccination center using digitized identity card numbers. Concurrently, "Liqahona"—Arabic for "our protection"—the official portal of the COVID-19 vaccination campaign, was set up by the Moroccan MoH. This platform provides information about available vaccines, mechanisms of action, the vaccine development process and clinical trials, potential side effects, and enables individuals to verify their vaccination appointment.²⁰ Additionally:

- His Majesty King Mohammed VI announced the national vaccination campaign against the Covid-19 virus in November 2020 and officially launched it on Thursday, January 28, 2021.
- Mobilization of the Ministries of Health, Interior, Foreign Affairs, Finance to ensure the campaign was coherent.
- Mobilization of the military medical services as well as the private sector through Public-Private Partnerships (PPPs).
- Gradual vaccination rollout: prioritizing vulnerable populations, frontline workers, and a scheduled roll-out otherwise according to age groups.
- Implementation of a vaccination appointment system, vaccine stock management system, transport tracking, temperature monitoring, and adaptation for vaccines requiring ultra-cold storage.

In discussing vaccination, the socio-behavioral aspect must not be omitted. The COVID-19 pandemic and the accompanied misinformation campaign led to the emergence of vaccine hesitancy among many of the world's population. Vaccine hesitancy presented a worldwide challenge that threatened to reverse years of progress made in infectious disease prevention and control. An initial survey conducted by the HCP after the first case was reported in the country indicated that the acceptance rate was 68.6% among Moroccans. However, the same report noted that nearly one household in 10 (11%) would refuse to get vaccinated. More recent studies in Morocco reported low vaccine acceptance rates among health science students (26.9%) and non-health-sciences students (35.3%).²¹

The WHO office in Morocco said on 3 March 2021 that Morocco was among the first 10 countries that have completed the challenge of vaccination against the COVID19. It is the African country that has immunized the most people so far.

The vaccination campaign in Morocco, which has contracted the Chinese laboratory Sinopharm and the British laboratory AstraZeneca, has been progressing at a quick rate since its launch on January 28, 2021. As of December 31, 2022, it has achieved the following:

- 24,917,889: received 1st dose of vaccination
- 23,418,622: received 2nd dose of vaccination
- 6,867,866: received 3rd dose of vaccination

²⁰ Campagne de vaccination contre le coronavirus au Maroc [Internet]. [cited: 2022 Jun 9]. Available on: <https://liqahcorona.ma/fr>

²¹ Samouh Y, Sefrioui MR, Derfoufi S, Benmoussa A. Acceptance du vaccin anti-COVID-19 au Maroc: étude transversale auprès des étudiants. The Pan African Medical Journal.

- 58,089: received 4th dose of vaccination.²²

8. Boosters were available? 9. Boosters coverage achieved?



Expert's Consensus



In Agreement

Boosters were accessible, and individuals were encouraged to visit their nearest vaccination center once the recommended time frame after the initial dose had elapsed. Nevertheless, a certain hesitancy emerged regarding booster shots, particularly among individuals inoculated with vaccines associated with higher side effects and restricted in other countries.

Consequently, there was a reduction in the anticipated booster coverage, primarily observed during the administration of the second and third doses.

10. Access to testing guaranteed? 11. Affordability of testing ensured?



Expert's Consensus



In Agreement

Throughout the course of the pandemic, insights gathered from our panel of experts, engaged through our survey, reveal compelling statistics from the health sector. Over 15 million individuals in Morocco underwent testing, yielding more than 1 million confirmed cases by the close of January 2022, with a resulting positivity rate of nearly 10%. Notably, nearly one million individuals have successfully recovered, while sadly, 15 thousand deaths have been reported.²³ The impact of the virus has been felt across all regions of Morocco, particularly accentuated in densely populated cities, where the vulnerability to the risk remains most pronounced.

Our experts shed light on the dynamic evolution of testing implementation in Morocco during the COVID-19 crisis. Faced with the initial challenge of inadequate availability of essential equipment and qualified personnel for screening tests, the health department strategically delegated the responsibility for test execution to regional and provincial public laboratories. These laboratories, affiliated with public hospitals, military institutions, and university hospitals, as well as entities like the

²² Les Indicateurs sociaux du Maroc, Edition 2023 : https://www.hcp.ma/Les-Indicateurs-sociaux-du-Maroc-Edition-2023_a3729.html<https://transparencymaroc.ma/communique-de-transparence-maroc-gestion-des-marches-du-secteur-de-la-sante-publique-durant-la-pandemie-du-coronavirus/>

²³ Study concerning the analysis and monitoring of the evolution of the COVID-10 testing marked, Competition Council, 2022, <https://conseil-concurrence.ma/cc/wp-content/uploads/2022/05/Etude-Etat-de-la-concurrence-dans-le-marche-des-tests-PCR-au-Maroc-Fr.pdf>

National Institute of Hygiene (INH) and the Pasteur Institute (IP), were focal points for testing activities. The emphasis was placed on identified contagion hotspots (clusters), addressing both symptomatic cases and their corresponding contacts.

As the epidemic's severity increased, the health department, in alignment with expert recommendations, aimed to dramatically amplify screening efforts to detect asymptomatic infections among the Moroccan population. Consequently, there was a deliberate opening of the COVID-19 diagnostic test market to private entities, particularly private laboratories specializing in analysis and medical biology. Despite these efforts, our expert insights indicate that the trajectory of COVID-19 diagnostic tests in Morocco did not exhibit a notable upward trend compared to global counterparts. Experts suggest that this observation may be attributed to the prevalent high prices for these tests, potentially limiting accessibility, especially for households with constrained incomes.

During the first COVID-19 waves, access to testing was quite difficult as only few testing centers were allowed to perform the RT-PCR. This was followed by the permission to more private labs and clinics to organize testing, as well as the development and commercialization of rapid tests. However, the latter were not always trust-worthy, and RT-PCR is deemed very expensive in the private sector for the general population.

12. Access to treatment realized? 14. Affordability of treatment ensured?



Expert's Consensus



In Agreement

Morocco, like many countries, was actively working to ensure access to COVID-19 treatments and vaccines. Government and health authorities typically implement measures to make treatments available to the population, and international collaborations often play a crucial role in securing affordable access to medications and vaccines. Morocco was notably engaged in vaccine clinical research with the Sinopharm laboratory, a partnership that aimed to strengthen relations with this Chinese laboratory. This collaboration not only facilitated access to the vaccine but also contributed to fostering diplomatic ties. However, it's important to note that specific data regarding the pricing of the vaccines purchased by Morocco is not available, making it challenging to provide insights into the cost aspects of the vaccination campaign.

Treatment for COVID-19 patients varied from symptomatic (mild form) patients to advanced and oxygen-dependent form of COVID-19. Treatments of mild symptoms were generally available in private pharmacies, however not all of them were recommended nor affordable to the general public. On the other hand, patients who needed to be hospitalized had to wait at home or at the emergency room to find a bed at the medical ward or the intensive care unit. The July 2021 wave has been very critical with a congestion of hospitals and wards, and even a disruption of oxygen supply in some hospitals. This has obliged patients to be transferred to other hospitals and private clinics, which could only be done if it was practical and financially viable.



CONCLUSION AND RECOMMENDATIONS



CONCLUSION AND RECOMMENDATIONS

Despite facing challenges aggravated by the impact of the COVID-19 pandemic, the trajectory of the Moroccan healthcare system, until 2022, has shown mixed trends across various health system building blocks. Economic crises, budget shortages, and the effects of the pandemic have played significant roles in shaping these trends.

COVID-19 Response in Morocco: Key Success Factors

- **Strategic Framework:** a crucial aspect of Morocco's successful response to the COVID-19 pandemic lies in its strategic framing. The country adopted a well-defined Strategic National Vaccination Plan against SARS-CoV-2. This strategic approach provided a clear roadmap for the deployment of various interventions and resource allocation.
- **Governance Structures at the Pinnacle:** Morocco's governance structures played a pivotal role, with leadership commitment at the highest levels. Instances of governance, driven by influential figures, ensured a coordinated and effective response. This top-down commitment facilitated swift decision-making, resource mobilization, and the implementation of targeted interventions.
- **Guiding Principles:** the success of Morocco's COVID-19 response can be attributed to the adherence to key guiding principles. These include a commitment to equity, solidarity, voluntarism, and transparency. These principles formed the foundation for policies and actions, fostering an inclusive and collective approach to the health crisis.
- **Proximity Deployment with Mass and Gradual Vaccination:** Morocco's approach to vaccination was characterized by a dual focus on proximity and scalability. The deployment strategy prioritized accessibility, ensuring that vaccination centers were within reach for a large portion of the population. This approach allowed for both mass vaccination campaigns and a gradual rollout, accommodating the diverse needs of the populace.
- **Transparent and Scientifically Effective Communication:** effective communication has been a cornerstone of Morocco's success in managing the COVID-19 situation. Transparent and scientifically grounded communication strategies were employed to disseminate information, guidance, and updates to the public. This approach helped in building trust, dispelling misinformation, and encouraging widespread adherence to preventive measures.

- **Domestic Vaccine Production:** An additional key success factor in Morocco's COVID-19 response lies in the pursuit of local vaccine manufacturing. Recognizing the significance of vaccine sovereignty and health sovereignty in the wake of the pandemic, Morocco has drawn valuable lessons. The strategic move to sign an agreement with Sinopharm for the Fill and Finish (F and F) of the anti-COVID vaccine, coupled with technology transfer in July 2021, marked a pivotal step in enhancing the country's self-reliance in vaccine production.

Furthermore, the signing of a contract for the construction of a facility dedicated to the production of anti-COVID vaccines, as well as other vaccines and biotechnological medicines on January 27, 2022, underscores Morocco's commitment to bolstering its healthcare infrastructure. This forward-looking initiative not only strengthens the nation's capacity to address immediate health challenges but also positions it strategically for future health crises. The emphasis on local vaccine production contributes significantly to achieving both vaccine sovereignty and health security.

COVID-19 Response in Morocco: Challenges

Challenges of New Technologies (mRNA Vaccines), Time Required for Process Validation, and Investment Costs: the adoption of innovative technologies, particularly mRNA vaccines, presents notable challenges in terms of both validation processes and investment costs.

The intricacies associated with these cutting-edge technologies necessitate thorough validation processes to ensure safety, efficacy, and regulatory compliance. However, this pursuit of validation requires a substantial amount of time, posing a challenge in the swift deployment of new vaccines.

Additionally, the investment costs associated with implementing and scaling up these advanced technologies are a significant hurdle. The need for state-of-the-art facilities, specialized equipment, and skilled personnel contributes to the overall expenses. Balancing the imperative for technological advancement with the pragmatic considerations of time and investment is a complex challenge that healthcare systems globally, including Morocco, grapple with. As these technologies represent the forefront of medical innovation, careful navigation of these challenges is essential to harness their potential benefits while addressing the associated complexities.

COVID-19 Response in Morocco: Key Conclusions

- **Challenges in Healthcare Coverage:** the rollout of social health insurance schemes and targeted programs have shown potential for improving healthcare coverage. However, skepticism remains due to the lack of reliable data reflecting the actual coverage of the population.
- **Accountability and Efficiency:** accountability faces challenges, with issues in the effective implementation of performance-based incentives and persistent corruption. Transparency in documenting available resources needs improvement for increased efficiency.

- **Strategic Planning and Workforce Management:** initiatives in strategic planning for healthcare human resources are underway, emphasizing the need for coordination between the Ministry of Health and the Ministry of Higher Education.
- **Data and Information Systems:** progress has been made in data generation, birth and death registration, and health system resource tracking. However, there's a lack of consensus on data analysis and validation, suggesting the need for standardized strategies.
- **Access to Essential Medicines:** challenges persist especially in the absence of an official national list of essential medicines, reflecting persistent problems with ensuring access to essential medicines as a right.
- **Health Systems Financing:** economic challenges, exacerbated by the COVID-19 response, have led to a decline in government expenditure on health, impacting financial risk protection and coverage for vulnerable groups.
- **Leadership and Governance:** positive steps have been taken with the development of a national health strategy. However, concerns about the strategy's implementation pillars and inclusivity in the health societal dialogue persist.

COVID-19 Response in Morocco: Recommendations for the Future

1. **Optimal Resource Utilization:** there is a need to ensure optimal utilization of resources introduced during the pandemic, such as digital platforms for vaccination. Efforts should focus on sustaining and expanding such successful initiatives.
2. **Maintaining Hygiene Measures:** in the aftermath of the major peaks of COVID-19, sustaining discipline towards hygiene and epidemic preparedness measures among healthcare professionals and citizens is crucial to prevent future health crises.
3. **Building on Successes:** emphasize building on successes from COVID-19 actions, particularly in digitalizing health platforms, emergency preparedness, and the operationalization of the national health strategy.
4. **Sustainable Health Systems:** beyond external funding, the focus should shift towards centralizing health system operations into more independent and sustainable solutions. These solutions should thrive independently once external funding diminishes.
5. **Enhancing Data Quality:** consistent efforts are required to improve health information and data quality. Lessons learned from COVID-19 reporting should guide strategies for evidence-based decision-making.

6. Strategic Policy Development: health officials should prioritize building strategies and policies based on comprehensive surveys and health information. These should be closely monitored, with reduced bureaucracy barriers, as observed in the national health strategy; healthcare professionals' recruitment strategy; and the national policy for essential medicines.

Regarding UHC

The nation-wide roll-out of Universal Health Coverage (UHC) is an essential and reasonable public policy that has served a significant portion of the vulnerable population. However, its implementation has yielded unexpected effects:

- A substantial portion of the underprivileged has not experienced complete access to healthcare services, but rather partial access.
- State healthcare facilities have undergone impoverishment, contributing to the growth of private healthcare structures.
- Addressing these issues requires political courage for this new "Morocco-centric" endeavor and acknowledging certain shortcomings in public health policies. The overhaul of the healthcare system in all its dimensions is a prerequisite for the effectiveness of UHC.
- The concept of "institutional complementarity" and financing is crucial to ensure patients' rights to access quality care and health equity in its various dimensions.
- The state must assume its role as a regulator and designer, clearly defining the role of local communities (regions) in healthcare.
- Innovative financing, where the state becomes the majority shareholder in healthcare funding, is one proposal that should be considered.
- Most importantly, recognizing the need for change. There is a call for a paradigm shift that could serve as the cornerstone of a new path for Moroccan UHC and the efficiency of our healthcare system.

REFERENCES

1. World Health Organization, Monitoring the Building Blocks of Health Systems, A handbook of indicators and their measurement strategies, 2010, <https://apps.who.int/iris/bitstream/handle/10665/258734/9789241564052-eng.pdf>
2. Oppenheim B, Gallivan M, Madhav NK, et al. Assessing global preparedness for the next pandemic: development and application of an Epidemic Preparedness Index. BMJ Glob Health 2019;4:e001157.doi:10.1136/bmjgh-2018-001157, <https://gh.bmj.com/content/bmjgh/4/1/e001157.full.pdf>
3. Covering medical care, medications, hospitalization, and outpatient care. (SDGs Report-2021) <https://unstats.un.org/sdgs/report/2021/goal-03/>
4. Rapport annuel de la Cour des comptes au titre des années 2019 et 2020 <https://unstats.un.org/sdgs/report/2021/goal-03/>
5. The Lancet, Global Burden of Disease 2015, <https://www.thelancet.com/gbd>
6. Gestion des marchés du secteur de la santé publique durant la pandémie du coronavirus : <https://transparencymaroc.ma/communique-de-transparency-maroc-gestion-des-marches-du-secteur-de-la-sante-publique-durant-la-pandemie-du-coronavirus/>
7. Out-of-pocket expenditure (% of current health expenditure) – Morocco, World Health Organization Global Health Expenditure database (apps.who.int/nha/database). The data was retrieved on April 7, 2023.
8. Les Indicateurs sociaux du Maroc, Edition 2023 : https://www.hcp.ma/Les-Indicateurs-sociaux-du-Maroc-Edition-2023_a3729.html , <https://transparencymaroc.ma/communique-de-transparency-maroc-gestion-des-marches-du-secteur-de-la-sante-publique-durant-la-pandemie-du-coronavirus/>
9. Drissi Bourhanbour A, Ouchetto O. Morocco achieves the highest COVID-19 vaccine rates in Africa in the first phase: what are the reasons for its success? Journal of Travel Medicine. 2021;28(4):1
10. Campagne de vaccination contre le coronavirus au Maroc [Internet]. [cited: 2022 Jun 9]. Available from: <https://liqahcorona.ma/fr>
11. Samouh Y, Sefrioui MR, Derfoufi S, Benmoussa A. Acceptance du vaccin anti-COVID-19 au Maroc: étude transversale auprès des étudiants. The Pan African Medical Journal.

12. Study concerning the analysis and monitoring of the evolution of the COVID-10 testing market, Competition Council, 2022, <https://conseil-concurrence.ma/cc/wp-content/uploads/2022/05/Etude-Etat-de-la-concurrence-dans-le-marche-des-tests-PCR-au-Maroc-Fr.pdf>
13. Morocco – COVID19 Vaccine Tracker [Internet]. [cited: 2022 June 9]. Available from: <https://covid19.trackvaccines.org/country/morocco/>
14. WHO, International Health Regulations, 2005, <https://www.who.int/publications/i/item/9789241580496>
15. Total number of coronavirus (COVID-19) vaccination doses administered in Morocco as of March 5, 2023, Statista, <https://www.statista.com/statistics/1219577/number-of-covid-19-vaccine-doses-administered-in-morocco/>
16. Financement de la santé au Maroc : réduire les dépenses directes des ménages est le défi n°1, Le Matin.ma, Juin 2023, <https://lematin.ma/express/2023/financement-sante-reduire-depenses-directes-defi-n1/390907.html>
17. Country Commercial Guide, US International Trade Administration, 01.01.2024, <https://www.trade.gov/country-commercial-guides/morocco-healthcare>



The Egyptian Initiative for Personal Rights has been working since 2002 to strengthen and protect basic rights and freedoms in Egypt, through research, advocacy and supporting litigation in the fields of civil liberties, economic and social rights, and criminal justice.



Founded in 2012, the Alliance seeks to strengthen and amplify civil society voices working on solutions to the current and future pandemics as well as those working in the health sector addressing access and quality of services, impacting inadequately served populations in one of the most unequal regions on earth.

To achieve this, the Alliance focuses on developing and implementing public education and engagement strategies, advocacy, policy reform and research translation to ensure that all people across the continent are informed about their rights and have the skills and access to platforms to hold others to account for violations.



The International Treatment Preparedness Coalition (ITPC-MENA) represents an alliance of people living with HIV and their advocates.

This non-governmental organization operates in the Middle East and North Africa region, focusing its efforts on promoting access to essential medicines, health technologies and health policies. Its action focuses on promoting equitable health policies and defending access to necessary treatments.

