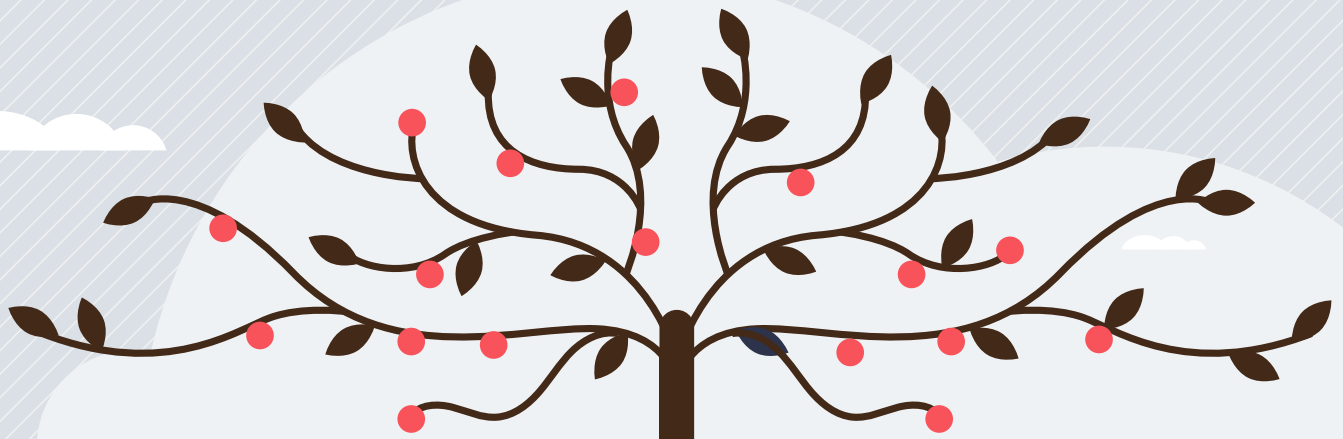


Laying the foundations for a fairer, healthier future

# Health Equity & Inclusion in Action





# Laying the foundations

for a fairer, healthier future



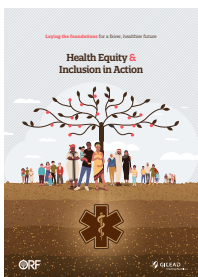
# Contents

Foreword	4
Preface	6
Expert Group	7
Acronyms	7
Executive Summary	8
Report Objectives and Approach	11
<b>Section 1: Health Equity and Inclusion in Action</b>	<b>13</b>
1a. Achieving Health Equity and Inclusion	15
1b. The Role of Technology	15
1c. Challenges to Achieving Health Equity and Inclusion	16
<b>Section 2: The Current Context: Health Vulnerability and Healthcare Delivery</b>	<b>17</b>
2a. Reversals Due to the COVID-19 Pandemic	18
2b. Limited Fiscal Space	18
2c. Issues with Workforce, Infrastructure, and Supply Chains in Health Transition Countries	19
2d. Societal Benefits of Delivering Universal Healthcare	20
<b>Section 3: Bright Spots: Leveraging Scarce Health System Resources</b>	<b>21</b>
3a. Task Shifting	22
3b. Improving the Quality of Medicines	24
3c. Innovative Healthcare Service Delivery Routes	25
<b>Section 4: Bright Spots: Improving Access, Increasing Affordability for All</b>	<b>27</b>
4a. Improving Access	28
4b. Improving Affordability	31
<b>Section 5: Bright Spots: Smart Use of Technology and Data to Leapfrog Constraints</b>	<b>33</b>
<b>Section 6: Call to Action</b>	<b>37</b>
Acknowledgements	40
<b>Section 7: Appendix</b>	<b>41</b>



# Foreword

As the world navigates the 21st century, we find ourselves at the intersection of remarkable healthcare advancements and persisting health disparities. In this backdrop, the **Health Equity and Inclusion in Action report** from the Observer Research Foundation, commissioned by the biopharmaceutical company Gilead Sciences, may offer a beacon of hope. This report illuminates efforts from around the world that are helping bridge the gaps in health equity, and provides insights towards a more inclusive future.



## Front cover

*The cover design signifies the impact of steady growth and solid foundations within the global health industry on bridging the gap between diverse communities and healthcare access.*

The narrative is underpinned by socio-economic determinants of health; from the impact of education on wellness, to the role of the environment in shaping health outcomes, it is evident that health equity is a multifaceted challenge. This report has been developed in the wake of three pivotal UN high-level global health meetings on universal health coverage (UHC), pandemic preparedness and response, and tuberculosis, and draws upon the UHC political declaration that aims to guide strategies of member states in UHC policy, programming, and legislation and steer efforts towards realising Sustainable Development Goal 3.<sup>1</sup>

Geographical disparities also result in inequities in access to essential healthcare services. While some regions benefit from state-of-the-art healthcare facilities, others grapple with difficulties in addressing even basic healthcare needs. The ripple effects of such disparities are evident in societal structures, economies, and individual lives. As adverse events mount and disasters, conflicts, and pandemics amplify day-to-day challenges, with detrimental and paralysing effects, the task of addressing these challenges becomes more urgent.

This report utilises relevant statistics and research findings to highlight the imperative of prioritising equity and inclusion in healthcare. Moreover, the case studies included in this report carry the unique voices and stories of the communities whose health journeys they narrate. While some stories speak of challenges, others underline the innovations and triumphs that have been achieved against the odds. This blend of narratives offers a panoramic view, highlighting the global nature of health equity challenges.

It is our hope that this report will prove to be indispensable for policymakers, healthcare planners, and advocates. It is a guide rich in best practices, innovative solutions, and transformative narratives – a call to action that urges the global community to stride together towards a world where health is a right, and not a privilege.

This report is more than an academic endeavour; it is a pulse check on where we stand in the pursuit of health equity and inclusion globally. It highlights the importance of collaboration, where healthcare professionals, policymakers, community leaders, the private sector, and individuals come together to develop holistic strategies to confront the multiple challenges we face. It also underlines the importance of government support for health inclusion across all socio-economic strata.

In a number of countries, a “squeezed middle”<sup>2</sup>—who balance precariously between the poor and relatively well-off populations—is unable to afford private health insurance but is ineligible for programmes targeted at very low incomes. There is evidence that this squeezed middle is at significant risk of catastrophic health expenditure; if they become seriously ill, they will be forced to fund treatment through out-of-pocket payments, which further exacerbates inequity.

In an increasingly interconnected world, the importance of ensuring health equity and inclusion cannot be overstated. Every story of a community that is denied basic healthcare rights or regions that are battling systemic healthcare challenges underscores the need for immediate, collective action. There is a



**It is a guide rich in best practices, innovative solutions, and transformative narratives—a call to action that urges the global community to stride together towards a world where health is a right, and not a privilege.**

Accessible and affordable primary healthcare at the patient's doorstep, India. Source: iKure Techsoft.

need to transition from mere discourse to actionable strategies, and this report offers some of the groundwork to achieve this.

This report explores how the transformative influence of technology can narrow healthcare disparities and build future systems that are inclusive and which can allow entire communities to benefit from shared data, newly developed skills, and economies of scale. Technology is reshaping every facet of our lives, and it has immense potential to democratise healthcare access. Whether it pertains to telemedicine solutions reaching remote areas or AI-driven diagnostics enhancing the cost-effectiveness, speed, and accuracy of diagnosis, the fusion of technology and healthcare holds promise.

Lastly, the report underscores the significance of community-led initiatives. Often, the most influential transformations originate at the grassroots, where communities, aware of their unique challenges and strengths, devise solutions that are both effective and sustainable. These locally-led, locally-grown solutions are a testament to human ingenuity and resilience.

It is our hope that this report provides insights and encourages action towards this global mission. In the collective pursuit of health equity and inclusion, every voice, effort, and initiative matters.

**Dr. Nilanjan Ghosh**

*Director, Centre for New Economic Diplomacy and ORF Kolkata*



# Preface

The journey of putting this report together has been enlightening, revealing the intricate tapestry of global health equity. Health Equity and Inclusion in Action encapsulates a vision, a commitment to ensuring that everyone, irrespective of their circumstances, can lead a healthy life.

This report has more than data; it has stories of resilience, innovation, and reflections on challenges faced and overcome. It aims to inspire a transformative approach to health equity and inclusion, emphasising the importance of looking beyond mere statistics. From the challenges of rural healthcare delivery, to the complexities of urban health, to the urgent requirements of addressing stigma associated with certain diseases, the report offers a holistic perspective.

Each case study and narrative underscores the pressing need for innovative action. It is a testament to the spirit of communities and individuals who, against all odds, are



An iKure Community Health Activist (iCHA) records a patient's vitals in iKure's wireless health incident monitoring system (WHIMS) application, India. Source: iKure Techsoft.

making progress towards the goal of health equity. As you read, we hope that you are inspired to join this global movement, contribute in your unique way, and help script a narrative of inclusivity and equity.

The process of curating this report was as enlightening as it was challenging. It took us to the heart of communities, revealing lived realities. Every narrative in the report underscores the interconnectedness of societal structures and health outcomes. While some stories prove human tenacity and innovation, others illuminate the deficiencies in healthcare systems and the struggles that people face to secure essential resources.

This report highlights that health equity is a collective goal that requires the involvement of educators, policymakers, the private sector, community leaders, and individuals.

As we navigate the complexities of the 21st century, reports like this one can serve as lighthouses, guiding our path and ensuring that we do not lose sight of our shared goal: health and well-being for all. We hope that the insights and recommendations presented here serve as catalysts for tangible, impactful change.

**Prof. Yongyuth Yuthavong**  
*Chair, Expert Group*



# Expert Group

The Observer Research Foundation and Gilead Sciences invited seven leaders in the domain of global health to form an Expert Group to bring their different perspectives and expertise to support the development of the **Health Equity and Inclusion in Action** report.

The Expert Group comprised the following members:



**Prof. Yongyuth Yuthavong (Thailand)**

Senior Advisor,  
National Science and  
Technology Development  
Agency (NSTDA)



**Michel Musilikare (Rwanda)**

Executive Director,  
Health Builders



**Dr. Rispah Walumbe (Kenya)**

Senior Health Policy Advisor,  
Amref Health Africa



**Anjali Gopalan (India)**

Founder,  
Naz Foundation India



**Levi Singh (South Africa)**

Regional Youth and  
Policy Officer, Sexual and  
Reproductive Health and  
Rights (SHRH) Africa Trust



**Dr. Katerina Leyritana (Philippines)**

Medical Director,  
Sustained Health Initiatives  
of the Philippines (SHIP)



**Dr. Bao Vu (Vietnam)**

Senior Technical Director,  
HIV/Tuberculosis (TB)/  
Hepatitis, PATH Vietnam

**Please note:** All expert group members reviewed an earlier version of the report and provided guidance and recommendations for the final manuscript.

## Acronyms

**AI** - Artificial intelligence

**ANM** - Auxiliary nurse midwife

**ASHA** - Accredited Social Health Activist

**CHS** - Commune health station

**CHW** - Community health worker

**CCMDD** - Central Chronic Medicines Dispensing and Distribution

**EMR** - Electronic medical record

**FHW** - Frontline health worker

**HIT** - Health information technology

**HTC** - Health transition country

**IT** - Information technology

**mHealth** - Mobile health

**NAAT** - Nucleic acid amplification tests

**NCD** - Non-communicable disease

**NGO** - Non-governmental organisation

**ODA** - Official development assistance

**PMP** - Patient medicine parcel

**PPE** - Personal protective equipment

**PPP** - Public-private partnership

**RDT** - Rapid diagnostic tests

**SDG3** - Sustainable Development Goal 3

**SDH** - Social determinants of health

**UHC** - Universal health coverage

**WBOTs** - Ward-based outreach teams



# Executive summary

In a rapidly changing world, the pursuit of health equity and inclusion remains at the forefront of countries' goals. While progress has been made globally in recognising health equity as a pivotal element for achieving better health outcomes, there is still little discourse around genuine inclusion, ensuring that every individual, regardless of their background or circumstances, has a voice and role in their healthcare decisions.

With non-communicable diseases like diabetes, cardiovascular disease, and cancer becoming increasingly prevalent, their implications extend beyond health and encompass economic consequences. Through insightful case studies, this report aims to illuminate feasible strategies that countries can adopt to ensure that healthcare is equitable and inclusive and that the influence of social determinants of health is minimised.

The analysis of health case studies reveals a concerted effort to extend healthcare services to underserved and rural areas, utilising digital technology and telemedicine. This approach has improved healthcare accessibility and reach, with collaborations between governments, global organisations, and insurers playing a vital role in expanding access. These partnerships are essential for overcoming geographic and economic barriers, facilitating wider healthcare coverage.

Initiatives offering specialised services such as HIV/AIDS care, mental health support, and dispensing medication for chronic illnesses exemplify the tailored nature of healthcare provision. The comprehensive scope of these services, which often includes primary care, pharmacy services, and telehealth, demonstrates a commitment to addressing

a broad spectrum of healthcare needs. Such comprehensive care is paramount for ensuring that various health challenges are met with appropriate and effective responses.

Innovation through digital technology, telemedicine, and mobile applications is a hallmark of these initiatives, driving the evolution of healthcare services. The prospective integration with AI and Big Data heralds an advanced future for healthcare solutions, suggesting a trajectory that could enhance predictive healthcare and personalised medicine.

Community empowerment is another critical element, with initiatives creating job opportunities, upskilling healthcare workers, and integrating informal practitioners into the formal healthcare sector. This not only strengthens the healthcare system but also nurtures community resilience. Entrepreneurial models like nurse-run clinics are testament to the potential of healthcare to contribute to community empowerment and economic development.

Scalability and adaptability are evident in the expansion of many case studies across regions and countries, demonstrating the potential for widespread impact. The ability to integrate healthcare systems across borders and diversify service portfolios underlines a dynamic approach to healthcare delivery that can respond to changing needs and contexts.







At the same time, sustainability and financial viability remain pressing concerns. Many initiatives struggle to maintain operations beyond the phase of initial funding, often relying on donor-driven models or external financial sources. The challenge of ensuring long-term sustainability is particularly acute for those dependent on digital technology and automated systems, which may require continuous investment. Limitations in scalability and the struggle to expand beyond pilot phases or specific regions highlight the challenges associated with broadening the impact of these initiatives. In areas with poor digital connectivity, the reach is inherently limited, and scaling to a broader audience becomes increasingly complex.

Maintaining quality of care and service consistency across diverse locations and healthcare settings is a challenging task. The variability in skills among community healthcare workers and providers can significantly impact service quality, necessitating robust training and support systems to ensure consistent care.

A nurse examines a child in an Unjani Clinic health pod, South Africa. Source: Unjani Clinic.



**Scalability and adaptability are evident in the expansion of many case studies across regions and countries, demonstrating the potential for widespread impact.**

Dependency on external factors, such as government support, public-private partnerships, or the technical proficiency of users, poses challenges to the long-term effectiveness of healthcare initiatives.

The reliance on external funding sources and consistent governmental backing is a delicate balancing act that requires strategic planning and engagement to secure the future of these initiatives.

In sum, while the strengths of these healthcare initiatives lay a robust foundation for improving access and integrating innovation, the challenges they

face underscore the need for sustainable financial models, quality assurance, and strategic scalability planning. These factors are crucial for the enduring success of these initiatives and the achievement of long-term health outcomes.

## **1 The Pressing Challenge: Dual Health Threats in Health Transition Countries (HTCs)**

› *HTCs grapple with a dual healthcare challenge: the sustained threat of infectious diseases and the escalating incidence of non-communicable diseases.*





- › The countries spotlighted in this report, such as South Africa and India, confront distinctive healthcare challenges. Marginalised communities within these nations suffer greater health disparities and limited access to essential services.

## 2 The Vision of Health Equity and Inclusion

- › The overarching vision is clear: a healthcare system that is universally accessible and holistically integrated, ensuring that every individual, irrespective of socioeconomic or cultural background, benefits as equally as possible from affordable access to quality healthcare.
- › This report delves deep into this vision, examining a plethora of health initiatives across health transition countries (HTCs) that are carving pathways towards a more equitable and inclusive healthcare framework.

## 3 Bright Spots: Proven Strategies in Resource-Limited Settings

- › Amid the challenges, innovative strategies are emerging as beacons of hope. Task shifting, ensuring the quality of health services and medications, and devising novel healthcare delivery models are proving their value in these demanding settings.
- › The pivotal role of community health workers and the transformational impact of quality generic medicines are particularly noteworthy. These strategies are not just improving healthcare accessibility but are also making healthcare more affordable.

## 4 Digital Leap: Technology's Potential as the Great Equaliser

- › Technology is offering solutions in healthcare that transcend traditional access barriers. It is emerging as a pivotal tool to democratise health access, although the fundamental challenges of the digital divide remain.
- › Initiatives harnessing mobile health applications, decentralised diagnostic technologies, digital health records, and a wider digital health ecosystem are spotlighted in this report. These initiatives have immense potential to elevate care quality, expand reach, and bridge the healthcare divide.

## 5 Recommendations for a Healthier Tomorrow

This report offers the following recommendations to generate progress:

### Leverage scarce health system resources.

- › **Use task shifting and innovative service delivery routes:** Implement task shifting and digitisation programmes to enhance health system efficiency. Prioritise clear delineation of roles and stringent quality control to ensure effective, context-specific healthcare delivery.
- › **Improvements to the quality of medicines:** Champion the adoption of effective pharmacovigilance programmes, and address the issue of low-quality or counterfeit medicines to prepare for a future where high-quality medication is the norm.

### Improve access and increase affordability for all.

- › **Increase funding for equity and inclusion programmes:** Amplify funding for initiatives that prioritise marginalised and underserved communities, fostering a more equitable and efficient health system.

### Ensure smart use of technology and data to leapfrog constraints.

- › **Promote uptake of tech and Big Data:** Enhance healthcare with contextually relevant tech, predictive artificial intelligence and Big Data, emphasising scalable solutions like mHealth to improve efficiency and decision-making. Ensure these technologies are accessible in both urban and rural areas, supporting comprehensive care delivery.

### Increase community leadership and inclusion.

- › **Put beneficiaries and communities at the front of healthcare decision-making:** Recognise that achieving health equity requires tailored approaches that are contingent upon generational and cultural contexts as well as country-specific situations. It is imperative to actively engage individuals and communities in healthcare decisions. To not only give communities a seat at the table but invite them to sit at the head of the table.
- › **Implement culturally relevant healthcare services:** Ensure that adequate training and programmes are in place to accommodate cultural and linguistic diversity in healthcare settings, preventing misunderstandings and misdiagnoses.

Let us join forces in action to pave the way for a future where health equity and inclusion are not mere aspirations but tangible realities.



# Report Objectives & Approach

**Laying the foundations** for a fairer, healthier future



# Report Objectives & Approach



These countries are very different: Rwanda is one of the lower-income countries in Africa, but has had remarkable success in ensuring access to primary care for a very high percentage of the population. Meanwhile, Vietnam is rapidly developing and is projected to soon become an upper-middle-income economy. Yet, it continues to face a problem endemic in many Asian countries: large hospitals in the cities are overwhelmed with patients flooding in from rural areas.

All six countries share a commitment to improving access to health for their citizens, most of them through a combination of public and private services. Otherwise, they are an intentionally heterogeneous group chosen to showcase the diverse approaches that can be adopted to achieve equitable and inclusive access to healthcare.

Local analysts identified a long list of case studies within their country. After further investigation, the long list was narrowed down to the 12 case studies that are presented in this report.

**Note: Gilead had no direct or indirect involvement in these case studies.**

This report aims to explore how various initiatives based in health transition countries (HTCs<sup>3</sup>) are working to bridge equity and inclusion gaps in access to health.

Through an examination of these initiatives, the report aims to disseminate lessons that could help inform global and national decision-making and support the development of universal health coverage (UHC) systems by incorporating technology advances that improve outcomes for all health service users.

To achieve these goals, the report will explore practices and characteristics of diverse health systems in a heterogeneous group of UHC, with the aim of facilitating cross-border and cross-sectoral collaborations between them. Based on this assessment, the report highlights innovative and effective approaches as well as the positive health outcomes that they produce.

At the heart of this exercise was identifying case studies of health initiatives that are making a demonstrable impact in their countries and, in some cases, regionally.

We sought case studies that are innovative, whether by incorporating the smart use of technology, or proving to be financially sustainable and scalable. Ideally, these programmes are already demonstrating notable health impacts.

The report contains case studies from six countries: Bangladesh, India, Morocco, Rwanda, South Africa, and Vietnam.





**SECTION 01**

**Health Equity  
& Inclusion  
in Action**

**Laying the foundations** for a fairer, healthier future

01

## Section 01:

# Health Equity & Inclusion in Action

Health equity refers to the absence of systematic disparities in health outcomes among different groups. This means all individuals should have an equal opportunity to achieve good health, regardless of their background. In contrast, health inequalities are disparities in health outcomes that are avoidable, unnecessary, and often linked to socioeconomic or demographic factors.

Inclusion in healthcare means ensuring that all individuals, regardless of their background or socioeconomic status, are able to access quality healthcare services and are treated with respect and dignity. It encompasses recognising and valuing diversity, ensuring cultural competency in care delivery, providing everyone with the equal opportunity to achieve optimal health outcomes, and guaranteeing that every patient feels seen and heard. In the age of Big Data and artificial intelligence (AI), it is also essential to ensure that patient data is used responsibly, with appropriately anonymised records shared across the health system, leveraging these insights for the benefit of all.

To achieve a truly sustainable healthcare system, health equity and inclusivity must be intertwined, ensuring that services are not only equally accessible but also tailored to meet the diverse needs of different income brackets. Addressing disparities in health outcomes requires a two-fold approach: removing systemic barriers to healthcare access and ensuring that, once accessed, healthcare is delivered in a manner that recognises and respects the unique needs and circumstances of every individual, irrespective of their financial standing.

It is inevitable that, in a mixed system with private and public providers, there will be different settings in which treatment will be offered. However, effective healthcare systems should ensure equitable access for all, regardless of occupation or

Health equity and inclusion in healthcare, though interrelated, address distinct dimensions of health access, outcomes, and experiences. While both concepts are foundational to a just and effective healthcare system, they emphasise different facets of healthcare. Health equity is concerned with the end results, i.e., ensuring every individual can achieve the same level of health. Inclusion, on the other hand, focuses on the processes and environments in healthcare settings, i.e., making sure everyone feels valued, heard, and respected.

socioeconomic status. Such systems should include seamless data systems, protocols, and referral services that are universally accessible.

While individual healthcare plans might differ—for instance, one might have private insurance coverage, whereas another might rely on public-sector programmes—the underlying principle should be that all receive appropriate care. This approach not only addresses inequities in healthcare but also upholds the dignity and worth of every individual in the system.

The government's primary responsibility is to ensure quality and affordable healthcare across all social strata, particularly for disadvantaged groups. This includes rigorous data collection and outcome tracking to identify and address any service inadequacies, thereby maintaining standards for all.

Improving health equity needs a comprehensive approach that addresses not only healthcare but also social determinants of health, such as education, poverty, and environmental factors. A number of global reports have explored the theme of equity, highlighting it as a critical component of achieving global health goals by 2035.<sup>4</sup>

The subject of inclusion, meanwhile, has received less attention. 'Inclusion' refers

to the power of linking health systems which serve different socioeconomic strata and different geographical areas. The dated idea that everyone can use the same facilities and gain access to these facilities through the same route, is often not feasible in the climate of the 2020s. However, as shown by some of the case studies in this report, it is possible to share learnings across society, use resources rationally, and build political will.

Health equity and inclusion are essential components of a well-functioning healthcare system. In an ever-changing world, it is important to ensure that healthcare is accessible to all, regardless of socioeconomic status, race, gender, and other factors that can create disparities in healthcare delivery.

Apart from the high risk of many infectious diseases, non-communicable diseases (NCDs) such as diabetes, cardiovascular disease, and cancer are a growing health challenge in health transition countries (HTCs), with a significant impact on working-age populations. These diseases can lead to premature death, disability, and reduced workforce participation. They have a clear economic impact through loss of productivity, cost of careers, and loss of income.



A non-clinician hands over a parcel branded Dablap to a patient at pick-up point (PUP). The branding is the same to promote confidentiality, South Africa. Source: CCMD/Dablapmeds.

## 1a Achieving Health Equity & Inclusion

In order to achieve health equity and inclusion, it is crucial to focus on more than just medical care. Addressing the broader factors that influence health—known as ‘social determinants’ of health—is key. This includes elements like housing, education, and access to nutritious food. For instance, when policies ensure affordable housing or access to quality education, they indirectly but powerfully influence health. Similarly, by offering support to those in poverty, programmes can tackle the foundational issues that lead to unequal health outcomes.

Another need is to address systemic biases within the healthcare system.

This includes addressing issues related to implicit biases, awareness of cultural differences, and access to healthcare services. For example, healthcare providers should receive training in cultural awareness and intergenerational differences, which can help ensure that they are able to provide more personalised, respectful, and effective care to patients from various ethnic, religious, and social backgrounds.

All individuals need access to quality healthcare services. These include preventive services, such as lifestyle advice, immunisations, and cancer screenings, as well as access to treatment for acute and chronic conditions. To achieve this, it is important to address barriers to healthcare access, such as

lack of healthcare infrastructure, lack of transportation, language barriers, inadequate health literacy, and lack of health insurance. True health equity and inclusion necessitate confronting and eliminating stigma and discrimination, while ensuring that the most vulnerable populations such as refugees, migrants, and stateless and internally displaced persons have unhindered access to quality healthcare, thus affirming their rights and dignity in every interaction.

## 1b The Role of Technology

In the fast-changing world of healthcare, cost-effective technology can play a critical role in achieving health equity and inclusion. For example, while



a unified strategy that brings together healthcare, environmental, and policy experts to devise solutions that are both comprehensive and sustainable.

Cultural and linguistic barriers are another constraint to achieving health equity and inclusion. Healthcare providers may not have the necessary cultural competency or language skills to provide appropriate and sensitive healthcare services to diverse populations. This can lead to misunderstandings, misdiagnoses, and inadequate treatment, ultimately affecting health outcomes.

Another significant challenge in achieving health equity and inclusion is the high cost of medical equipment and technology. Advanced medical technologies are often prohibitively expensive, limiting their availability to only well-funded healthcare facilities. This disparity creates a divide in healthcare quality between affluent and under-resourced areas. Affordable and innovative solutions are required to bridge this gap and ensure that cutting-edge medical technologies are accessible to all healthcare providers, regardless of their location or the economic status of the populations they serve. This democratisation of medical technology is essential for true health equity.

Health equity and inclusion are essential components of a healthy society and ensure that everyone has equal access to healthcare and the opportunity for improved health outcomes. However, achieving this aim will depend on overcoming multifaceted challenges and addressing the social determinants of health, systemic biases, and cultural and linguistic barriers. Achieving health equity and inclusion also requires the collective effort of policymakers, healthcare providers, and communities to address the root causes and promote social justice in healthcare.

telemedicine can provide access to healthcare services to individuals who live in remote or underserved areas, this requires mobile data services, which are often unavailable.

Digital health tools, such as mobile health (mHealth) applications, can help promote health equity and inclusion. These tools can provide individuals with access to health information and resources and facilitate communication between patients and healthcare providers. Often, the integration of novel diagnostics leveraging the latest technologies facilitates rapid and precise detection of health conditions, further bridging the gap between advanced healthcare and traditionally underserved populations.

Moreover, the incorporation of health technology solutions like rapid diagnostic tests (RDT), technology-mediated self-care practices, self-testing, and point-of-care nucleic acid amplification (NAAT) testing represents a breakthrough in improving health equity. These technologies enable quicker, more accessible diagnoses and treatment, particularly for marginalised communities, thereby enhancing the effectiveness and reach of healthcare interventions.

## 1c Challenges to Achieving Health Equity & Inclusion

Despite the potential benefits of technology and policy solutions, there are several challenges to achieving health equity and inclusion. One of the notable challenges is the lack of political will to address the root causes of health disparities. These include issues related to poverty, discrimination, and systemic biases within the healthcare system. Strengthening political will involves not only recognising the importance of these health disparities but also committing to long-term funding and support for interventions, particularly focusing on the most vulnerable communities to ensure sustainable and effective healthcare solutions.

While many policymakers recognise the importance of addressing social determinants of health (SDH), there is often limited funding available to support these initiatives. This can lead to vulnerable populations being inadequately supported and excluded, thus exacerbating existing health disparities. The challenge with SDH extends beyond funding constraints; it also lies in the design of current healthcare systems, which often lack integrated, multisectoral approaches that are necessary for tackling these inequities effectively.

Moreover, the impact of climate change as a crucial social determinant underscores the need for collaborative efforts across various sectors. Addressing the health effects of environmental changes requires





**SECTION 02**

**The Current  
Context: Health  
Vulnerability &  
Healthcare Delivery**

**Laying the foundations** for a fairer, healthier future

02

# The Current Context: Health Vulnerability and Healthcare Delivery

Strengthening primary healthcare systems and implementing targeted interventions for marginalised communities can help address health vulnerabilities and improve health outcomes in these regions. The case studies highlighted in this report provide some pointers about the interventions that could be considered through highlighting their role in the push towards universal health coverage (UHC).

This chapter sets the stage by exploring the overarching challenges in health vulnerability and healthcare delivery. It underscores the importance of interventions that are crucial for achieving universal health coverage (UHC) and addressing the multifaceted issues raised by the COVID-19 pandemic and other systemic barriers.

## 2a Reversals Due to the COVID-19 Pandemic

The COVID-19 pandemic has had a profound impact on healthcare delivery systems in many countries, particularly in Africa and South and Southeast Asia. The economic distress caused by the pandemic reduced available funding for healthcare systems and exacerbated pre-existing challenges. People postponed or dispensed with healthcare altogether due to fear of contracting the virus, which has resulted in such individuals presenting with more advanced diseases, thus adding further strain to already overburdened healthcare systems. The redeployment of primary care workers to COVID-19 immunisation efforts further stretched the capacity of these systems, leading to workforce stress and reduced productivity. Given these factors,

the likelihood of many countries achieving Sustainable Development Goal 3 (SDG3) on UHC by 2030 seems remote.

One of the crucial challenges resulting from the pandemic has been the continued backlog in access to care. Many regions, for example, saw a decline in paediatric immunisation rates, which could potentially lead to increased incidence of preventable diseases in children. While the pandemic underscored the importance of preparedness and response to infectious diseases, leading to widespread acceptance of vaccination and the embrace of self-testing tools like rapid antigen tests, it also highlighted missed opportunities in global health strategy. Despite countries investing in advanced polymerase chain reaction (PCR) technology for COVID-19, which has the potential for being repurposed for the diagnosis of other diseases, there was a palpable lag in leveraging its momentum for broader infectious disease management. This oversight underscores the need for a holistic approach towards translating lessons from one health crisis to fortify responses to other persistent threats.

The pandemic also highlighted weaknesses in supply chains, particularly in relation to the availability of vaccines, personal protective equipment (PPE), and other essential medical supplies. Many countries struggled to secure sufficient quantities of PPE, leading to shortages and compromised safety for healthcare workers. Addressing these supply-chain weaknesses will be critical for ensuring that healthcare systems can effectively respond to future health crises.

## 2b Limited Fiscal Space

Health transition countries (HTCs), particularly those in sub-Saharan Africa and South Asia, have limited fiscal space



for public sector investment in health. The COVID-19 pandemic exacerbated this challenge, with increased government spending on health being accompanied by rising costs in other sectors. Despite the urgent need for investment in health systems, the share of health spending as a percentage of total general government expenditure dropped in 2020, according to estimates.<sup>5</sup>

Many health transition countries (HTCs) are forecast to experience low economic growth in the immediate future, according



A nurse poses in front of her Unjani Clinic health pod, South Africa. Source: Unjani Clinic.

## The economic distress caused by the pandemic reduced available funding for healthcare systems and exacerbated pre-existing challenges.

to the World Bank.<sup>6</sup> This will further limit the ability of their governments to invest in health. The increased cost of sovereign debt has also been a significant challenge for many HTCs in Africa. Historically, increased debt obligations have led to reduced investment in social sectors, such as health and education, exemplified by structural adjustment programmes, thereby exacerbating health disparities due to a fragmented approach to social determinants of health. Twenty-two African countries are already in debt distress or at risk of one, leading to debt-restructuring efforts that can further reduce the availability of resources for health investments.<sup>7</sup>

Collapsing budgets for official development assistance (ODA) for health is also a massive challenge for HTCs as many lower-income countries depend heavily on ODA to support their health systems. This is particularly true for funding

essential medicines, strengthening health systems, and addressing priority health challenges. The pandemic has further strained these budgets, as donor countries focus their resources on their own domestic response efforts.

Addressing these challenges will require innovative financing mechanisms and sustained investment in health systems, particularly in the areas of health workforce development, health infrastructure, and essential medicines and vaccines. This will be critical for improving health outcomes and building resilience in the face of future health crises.

### 2c Issues with Workforce, Infrastructure, and Supply Chains in HTCs

Workforce, infrastructure, and supply chain issues continue to pose challenges for healthcare delivery in HTCs. Learning

from the pandemic, many countries are undertaking initiatives to bolster health sovereignty through investing in the local manufacturing of medical products such as drugs, vaccines, and medical devices, recognising its potential to address workforce, infrastructure, and supply chain challenges in healthcare delivery. However, the feasibility and sustainability of local manufacturing depends on a number of factors, including regulatory frameworks, rules on intellectual property rights, and access to finance and technology.

Another challenge facing HTCs is the continued loss of healthcare workers to high-income countries (HICs).<sup>8</sup> The 'brain drain' of health professionals is an enduring issue that undermines the capacity of health systems to deliver quality care, especially in resource-limited settings. Policies to incentivise health professionals to stay in their home countries, such as financial and career-development opportunities, may effectively reduce the migration of health professionals to richer countries.

Finally, substandard and counterfeit medicines remain a significant challenge in HTCs, compromising patient safety and treatment efficacy. The pandemic exacerbated this issue through the

proliferation of fake COVID-19 treatments and vaccines in some countries. Addressing this challenge requires a multi-pronged approach, including strengthening regulatory systems, increasing public awareness, and leveraging technology for product tracking and tracing. International cooperation and partnerships can support countries in addressing this challenge by sharing best practices, providing technical assistance, and enhancing collaboration among stakeholders.

## 2d Societal Benefits of Delivering Universal Healthcare

As far back as the mid-20th century, Richard Titmuss, an influential British social policy scholar, argued<sup>9</sup> that healthcare is not just a technical or medical issue, but rather a social and political one that is closely tied to broader social and economic well-being. Titmuss's argument was that the discriminatory nature of services has led to the provision of poor-quality services for the poor. A two-tiered system of healthcare—where poor people receive care of low quality compared to that for the middle class—only exacerbates healthcare disparities. Instead, he argued, healthcare should be provided based on need and that everyone should have access to high-quality healthcare services, regardless of their income or social status.

This argument is relevant to the current debate around providing health coverage to the middle class and the squeezed middle. If those whose income is too high to access programmes for the poor but too low to afford personal health insurance are excluded from healthcare coverage, they may receive a lower quality of care, if at all, and be at high risk of catastrophic healthcare expenditures.

But who are the 'middle class'? The current definition has evolved from its mid-20th

century roots, especially with the rise of the freelance and self-employed sectors. This new dynamic has expanded traditional employment boundaries, creating a more diverse middle class with varying healthcare needs. Additionally, while the concept of the middle class was previously predominantly associated with developed countries, emerging economies are now also witnessing growth in their middle-class populations.

This global expansion has introduced new challenges and opportunities for healthcare systems in developing countries, where the stratification of society now includes a significant middle-class demographic. These shifts necessitate a more inclusive and adaptable approach to healthcare, ensuring that systems are responsive to changing economic and social landscapes.

The inclusion of the middle class in itself can potentially improve the quality of public healthcare services in multiple ways. First, this can help create a broader political constituency that supports universal healthcare. Consequently, this can strengthen the political will to invest in and improve public healthcare services, which can benefit all individuals who rely on these services, regardless of their socioeconomic status. Second, this can help reduce the stigma and negative perceptions associated with receiving government-funded healthcare. This can help build trust and support for public healthcare services, which can improve the quality of care and access to services for all individuals, including those who are currently excluded from healthcare coverage.

Third, the inclusion of the middle class can help create a more diverse patient population, which in turn can improve the quality of care provided by healthcare professionals. This can help ensure that healthcare professionals gain experience and knowledge of a wider range of health

conditions and social experiences, which can improve the quality of care for all individuals. Focusing on the inclusion of the middle class can also support greater political advocacy for healthcare, commanding adequate resources which would, in turn, also benefit lower-income groups—provided that resources, data, and expertise are utilised to the benefit of all.

Universal health coverage (UHC) is an essential component of a fair and just society. Providing healthcare to everyone, regardless of their socioeconomic status, not only promotes health equity but also has broader benefits for society. There are multiple pathways by which countries can meet this aspiration.

Were Titmuss writing today, he might have emphasised the importance of social entrepreneurship. Innovative and traditional private or voluntary sector providers now play a critical role in the provision of healthcare across HTCs. Many are focused on lower-income clients, albeit not always those at the base of the pyramid.

If we are to stay true to the vision of inclusion, these providers must be included in information technology (IT), data sharing, and data collection programmes that serve the whole nation. Government regulation and oversight are necessary to ensure that private-sector participation does not come at the expense of equitable and inclusive access to healthcare and private-sector accountability.

Another important aspect of UHC is ensuring that all parts of the health system, whether public or private, focus on prevention and health promotion, alongside treatment. Investing in preventive measures, such as vaccination programmes, health education, and public health campaigns, can result in significant cost savings in the long run by reducing the burden of preventable diseases.



**SECTION 03**

# **Bright Spots: Leveraging Scarce Health System Resources**

**Laying the foundations** for a fairer, healthier future

03

## Bright Spots: Leveraging Scarce Health System Resources

The health systems of many health transition countries (HTCs) face common challenges, including scarce resources, inadequate workforce, and deficient access to essential medicines. Novel strategies to address such issues can potentially be learned from and utilised in other settings in order to make better use of available resources.

Many of these challenges were exacerbated by the COVID-19 pandemic. In response, countries implemented a range of strategies to leverage scarce health system resources and improve outcomes. This section examines three such strategies: task shifting, improving the quality of medicines, and innovative healthcare service delivery routes.

### 3a Task Shifting

Over the past two decades, task shifting has been widely endorsed as a promising approach to address the shortage of healthcare professionals and increase access to essential health services in HTCs. The strategy involves delegating tasks from higher-level healthcare workers to their lower-level peers, or else to providers without healthcare qualifications who have been trained to perform these tasks. This approach has been particularly useful in rural areas where there is a shortage of doctors and other healthcare professionals. By shifting tasks to lower-level healthcare workers, HTCs can maximise their scarce health system resources to increase access to healthcare services for their populations. The integration of technology promises to

An iKure Community Health Activist (iCHA) enters a patient's vitals in iKure's wireless health incident monitoring system (WHIMS) application, India. Source: iKure Techsoft.



make this approach more feasible while maintaining quality of care.

Task shifting has been successfully implemented in several health transition countries. In Bangladesh, for instance, the government has implemented a task-shifting strategy for maternal and child health services. The programme involves training community health workers, known as Shasthya Kormis, to provide basic health services, including antenatal care, postnatal care, and family planning services. The Shasthya Kormis are selected from within the local community and trained to provide essential health services and receive regular refresher trainings to update their knowledge and skills. The programme has been able to reach remote and underserved areas, resulting in improved maternal and child health outcomes.

In India, meanwhile, the government has implemented a task-shifting strategy for tuberculosis (TB) treatment, which involves training community health workers, known as Accredited Social Health Activists (ASHAs), to identify and treat patients with TB. The ASHAs identify TB symptoms, collect sputum samples, and refer patients for treatment. The programme has been successful in improving the detection and treatment of TB in the country.<sup>10</sup>

In Morocco, the government has implemented a task-shifting strategy for the provision of mental healthcare that involves training primary healthcare workers to provide relevant services, including screening, assessment, and treatment. The primary healthcare workers receive training on the management of common mental disorders such as depression and anxiety and have helped improve access to diagnosis and treatment.

For its part, the Rwandan government has implemented a task-shifting strategy for HIV/AIDS. The programme involves

training nurses to perform tasks previously reserved for doctors, such as initiating and managing antiretroviral therapy for HIV-positive patients and managing side effects, thus helping widen access to HIV/AIDS care. Recent task-shifting strategies, such as utilising the services of community health workers (CHWs) in administering contraceptives, have expanded the reach of modern contraceptive methods and improved healthcare coverage.

Similarly, the integration of CHWs in managing malaria through community case management in the country has shown remarkable results; in 2022, the World Health Organization (WHO) reported that CHWs managed over 55 percent of malaria cases—a substantial increase from 15 percent in 2016—leading to more timely interventions and a notable reduction in disease mortality.

In South Africa, too, the government has implemented a task-shifting strategy for HIV/AIDS care. Like in Rwanda, nurses provide HIV/AIDS care, including initiating and managing antiretroviral therapy. The nurses are also trained to provide pre- and post-test counselling, perform HIV testing, and manage opportunistic infections. In parallel, there have been successful private-sector-led innovations based on task-shifting.

One of the detailed case studies covered in this report, Unjani Clinics, operates more than 100 nurse-run primary-care clinics across South Africa. It has leveraged scarce resources by implementing a task-shifting model that empowers nurse entrepreneurs to run their own clinics in underserved areas. To achieve this, the non-profit Unjani Clinics established a commercial subsidiary to enable the receipt of enterprise and supplier development loans and provide working capital assistance and operational donations for the first 24 months of clinic operation.

The investment covers training, support, administration, mentoring, management, and evaluation of the clinic's sustainability over five years. The Unjani Clinics model has been successful in expanding access to primary healthcare services in peri-urban and semi-rural areas, with 19 new clinics implemented under the blended funding model. To further scale the initiative, Unjani is seeking impact investment or impact-first partners to fund the model. The new funding model involves a 60 percent interest-free loan, repayable over five years, with a flat network fee linked to patient targets. By implementing this model, Unjani aims to create a sustainable and self-sufficient system of primary healthcare delivery in underserved areas while also providing an opportunity for professional nurses to run their own clinics and become entrepreneurs in their communities.

In Vietnam, the government has implemented a task-shifting strategy for non-communicable disease (NCD) care. The programme involves training nurses to provide NCD care, including screening, assessment, and treatment. The nurses are trained to manage common NCDs, such as diabetes and hypertension. The programme has helped improve access to diagnosis and treatment, particularly in rural areas where patients have previously often travelled to major hospitals in cities seeking care.

In the realm of HIV, initiatives like Thailand's Service Workers in Group (SWING) and South Africa's Sex Worker Education and Advocacy Taskforce (SWEAT) employ peers from key populations, such as sex workers, to provide HIV testing, prevention resources, and support—roles that are typically reserved for more formally trained healthcare staff. This ensures that services are culturally sensitive and stigma-reduced. Through these task-shifting strategies, healthcare becomes more localised, accessible, and tailored to community needs.

Since 2015, Vietnam's implementation of the lay-provider HIV-testing approach, engaging and training lay providers from key population-led community-based organisations, has become crucial for achieving the country's 95-95-95 HIV goals. Initially piloted between 2015 and 2017, this approach was scaled up nationwide from 2018, demonstrating its effectiveness in reaching undiagnosed key populations.

The importance of task shifting as a strategy to free up resources in constrained health systems was demonstrated in the pandemic. Another case study, Babyl Health Rwanda, was a digital health service provider that has successfully leveraged scarce resources through task shifting. The 2016 initiative focused on providing accessible and affordable healthcare services in Rwanda and recently redoubled efforts to reach people living in remote areas. Babyl worked alongside all the leading health institutions in Rwanda and in 2020 entered a ten-year partnership with the Government of Rwanda to build Africa's first universal primary care service using a digital-first approach. However, it ceased operations in the second half of 2023 owing to financial pressures on its parent company.

The closure of Babyl Rwanda, a key player in Rwanda's digital health services, marks a significant shift in the digital health landscape. This event, following financial difficulties faced by its parent company, Babylon Health, highlights the complexities of sustaining digital health innovations. Despite its success in providing accessible and affordable healthcare through teleconsultations and other services, Babyl Rwanda's shutdown underscores the challenges of financial sustainability in digital health ventures, particularly in emerging markets.

Including during the pandemic, Babyl transferred many functions that were previously performed by doctors to nurses, thereby reducing the burden on

doctors and leveraging scarce resources. Patients could book appointments by dialling \*811# from their smartphones, and after completing their consultation, they would receive an SMS with a unique Babyl prescription code. Clinicians can issue referral codes that patients can receive via SMS and redeem at partner health facilities. Babyl signed an agreement with the Rwanda Social Security Board (RSSB), the largest national insurance company in Rwanda, in March 2020, enabling patients to access their prescriptions and lab tests using their

**Many countries lack the resources and expertise to regulate local production effectively and scrutinise imported medicines to ensure that only high-quality medicines are available.**

insurance cards. By using technology to provide digital healthcare services, Babyl had contributed to the change in how healthcare is delivered in Rwanda, reducing the burden of overcrowding at health centres and opening up spaces for medical professionals to spend more time and resources on serious medical cases.

### **3b** Improving the Quality of Medicines

Substandard and counterfeit medicines are a persisting challenge in health transition countries (HTCs), with WHO stating that an estimated one in every ten medical products in HTCs are of poor quality, contaminated, or even toxic.<sup>11</sup> These medicines can have serious health consequences, including treatment failure and adverse reactions, and may contribute to the development of drug-resistant strains of infectious diseases such as

malaria and TB. While many HTCs have implemented strategies to improve the quality of medicines, they have met with varying degrees of success.

One country that has addressed the issue of poor-quality medicines is Morocco. In 2003, the Moroccan government established a national quality control laboratory for medicines, which is responsible for testing all imported and locally produced medicines to ensure that they meet the required quality standards. The laboratory uses a variety of testing methods, including high-performance liquid chromatography, gas chromatography, and spectrophotometry, to ensure the accuracy and reliability of its results. Since the establishment of the laboratory, there has been a significant improvement in the quality of medicines. A 2016 study found that the prevalence of substandard and counterfeit medicines in





Morocco had decreased from 33 percent in 2008 to 2.5 percent in 2015. Similar initiatives to improve testing facilities and medicine traceability are being pursued in several other African countries. Jeeon Foundation, a social business based in Bangladesh, has been instrumental in reducing the use of substandard and counterfeit medicines in the country.

Launched in 2015, it digitised and upgraded informal health providers, which serve as the primary healthcare destination for low-income populations in many emerging economies. It aims to improve the quality of healthcare by connecting informal health practitioners and drug shops to provide quality training, health information, authentic medicines, and referral networks to build their capacity while integrating them with the formal health sector.

As a result, Jeeon Foundation has created the largest digital network, comprising more than 35,000 pharmacies and drug shops in Bangladesh, and following the experience from the pandemic, is now seeking to integrate the facilities more broadly with the formal healthcare sector, faith-based organisations, civil society, and the police

to ensure a more coherent response to disease outbreaks. It also aims to increase the informal sector's advocacy capacity by creating an umbrella group which will aim to persuade the government to incentivise accreditation across the sector in Bangladesh.

A crucial challenge in improving the quality of medicines in health transition countries (HTCs) is the lack of regulatory capacity and infrastructure. Many countries lack the resources and expertise to regulate local production effectively and scrutinise imported medicines to ensure that only high-quality medicines are available. To address this challenge, some countries have partnered with international organisations and donor agencies to build regulatory capacity and improve infrastructure. For example, Rwanda has partnered with the World Health Organisation (WHO) to establish a national regulatory authority for medicines and medical devices, which has led to significant improvements in the quality and safety of medicines in the country.

Improving the quality of medicines is a critical component of healthcare delivery in HTCs. While challenges remain, countries

such as Morocco, Bangladesh, and Rwanda have demonstrated that it is possible to address the issue of poor-quality medicines through the implementation of targeted strategies across the private and public sectors, along with the development of regulatory capacity and infrastructure.

### 3c Innovative Healthcare Service Delivery Routes

New and effective ways of improving access to healthcare services will be critical to countries in achieving UHC. Many are utilising modern technology and community-based health workers to deliver services in remote and underserved areas. In Bangladesh, the government has implemented an mHealth programme which provides healthcare workers with smartphones and tablets to access information and communicate with patients. mHealth programmes have been shown to improve healthcare delivery and increase patient satisfaction, notably among rural populations who have limited access to healthcare.<sup>12</sup>

In India, the use of telemedicine has improved access to healthcare services in



Unmanned smart lockers that are accessible at any time by patients. On a scheduled date, patients receive a one-time pin (OTP) that enables them to open the locker and retrieve their parcel, South Africa. Source: CCMDD/Dablapmeds.

rural areas. In the state of Rajasthan, the government has established telemedicine centres that provide consultation and diagnostic services to patients in remote regions.

In Morocco, community-based health workers have been trained to provide basic healthcare services in remote and underserved areas. These workers, known as Techniciens de Santé, provide a range of services, including vaccinations, family planning services, and treatment for common illnesses. The programme has reduced the burden on people seeking healthcare in these areas, who often had to travel many hours or even days to reach a clinic or hospital.

South Africa has also implemented an innovative healthcare delivery model called the Ward-Based Outreach Teams (WBOTs) programme, where community health workers are trained to provide basic healthcare services. The WBOTs focus on preventive care, such as health education and screening for non-communicable diseases (NCDs). In South Africa, the Central Chronic Medicines Dispensing and Distribution (CCMDD) programme, also known as Dablapmeds programme, implemented by the government in 2014, has significantly improved access to chronic medication for stable patients. By collecting their medication from external contracted pick-up points or fast lanes at public facilities using an SMS code, patients can save time and transport costs. The CCMDD/Dablapmeds programme has improved treatment adherence, reduced stigma for people living with HIV or other chronic diseases, and improved the availability of reliable data to inform decision-making at facilities, service providers, and pick-up points.

One of the significant benefits of the CCMDD/Dablapmeds programme is that it reduces the demand on clinicians,

freeing up clinicians to treat to other ill patients. The programme has been successful because of strong political leadership, consistent monitoring, and the involvement of multiple stakeholders, including patients, contracted service providers, and other private sector actors. The uptake of the programme has led to its expansion, and it has become a flagship programme for the upcoming National Health Insurance initiative. The CCMDD/Dablapmeds programme is an example of a successful intervention that has improved quality of care and service delivery, providing valuable lessons for its continued implementation. It is now being piloted in several other southern African countries.

Vietnam has implemented a devolved healthcare delivery model known as the commune health station (CHS) model. Under this model, community-based health workers provide basic healthcare services in their local communities. The CHSs provide a range of services, including preventive care, treatment for common illnesses, and maternal and child health services.

Models of delivery of care have also emerged in areas that have received less scholarly attention, such as mental health. For example, Mizero Care, founded by Iréné Mizero in 2013, is a Rwandan NGO that provides mental health services to young people. Mental illness is highly stigmatised

in Rwanda, which makes it challenging for patients to seek a diagnosis for certain symptoms that may constitute a mental disorder. Mizero Care is innovative as it has integrated conventional physical psychotherapy at psychotherapy clinics with digital and online psychotherapy to address the issues of equity and inclusion. By integrating both clinic-based and digital psychotherapy, Mizero Care has made it easier for patients to access affordable mental health services.

Innovative healthcare service delivery routes have become essential for improving healthcare delivery in health transition countries (HTCs). These routes utilise modern technology and community-based health workers to provide healthcare services in remote and underserved areas. Countries in this report have implemented innovative healthcare delivery models that have been successful in improving access to healthcare services and reducing the burden on hospitals and clinics. However, there are still significant challenges to be addressed, including the shortage of healthcare workers and the need for sustained investment in healthcare infrastructure and systems. By implementing these innovative strategies and addressing the underlying challenges, HTCs can improve their health systems and achieve better health outcomes for their populations.

Digital health services provided by Babyl, Rwanda. Source: Babyl.





## SECTION 04

# Bright Spots: Improving Access, Increasing Affordability for All

**Laying the foundations** for a fairer, healthier future

04

## Bright Spots: Improving Access, Increasing Affordability for All

Healthcare delivery in health transition countries (HTCs) is often hampered by issues of accessibility and affordability. Limited resources, coupled with high disease burdens and inadequate healthcare infrastructure, pose significant challenges for healthcare delivery. In this context, improving access and affordability are critical components of any strategy aimed at strengthening health systems.

### 4a Improving Access

Improving access to primary healthcare services, regardless of a patient's geographical location, socioeconomic status, or other barriers, is a crucial step towards achieving universal health coverage (UHC). Private-sector engagement, including community clinics, is crucial for broadening access to primary healthcare and achieving UHC. These entities, such as key population-led clinics in Vietnam and Thailand, significantly improve health equity for marginalised populations. The private sector's diverse health services, effective in countries with strong regulatory frameworks, complement public healthcare, ensuring equitable access across different geographic and socioeconomic groups. This synergy between public and private sectors, including community and key population-led clinics, is vital for enhancing healthcare quality and accessibility.

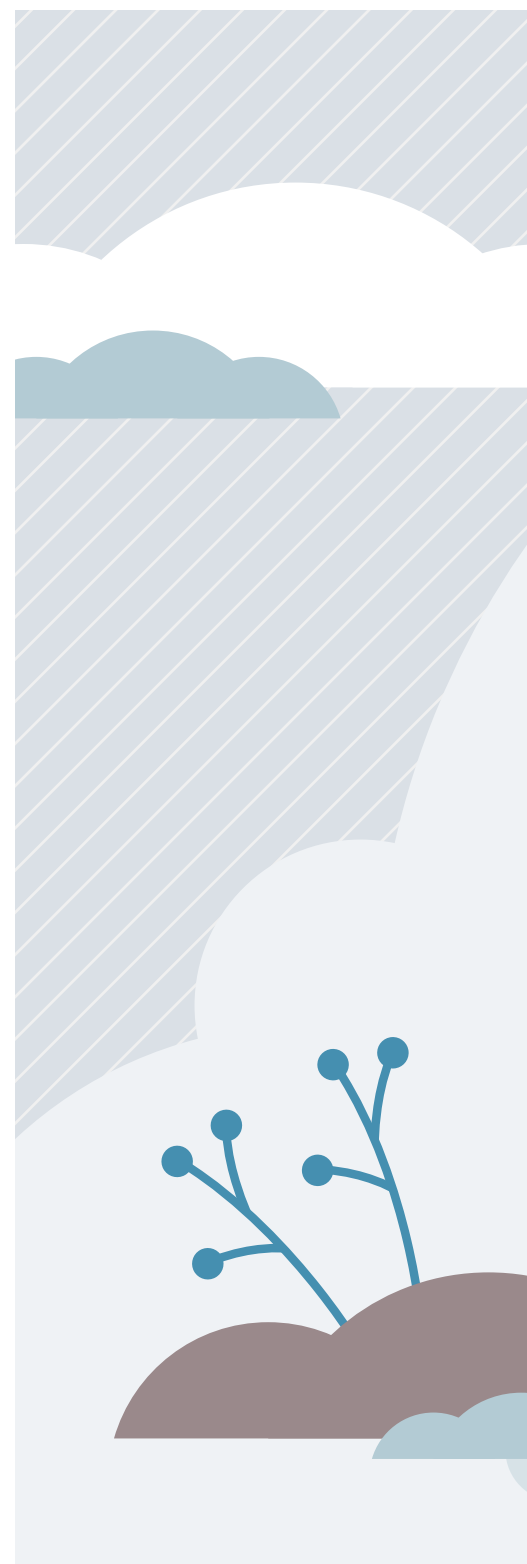
Expanding healthcare facilities and deploying healthcare workers in underserved areas is important. India's National Rural Health Mission is a prime example of this approach. The programme aims to improve access to healthcare services in rural areas by providing financial incentives to doctors and nurses who work in these areas.

Through this programme, the government has established rural health clinics, upgraded primary healthcare facilities,

and expanded healthcare infrastructure in remote areas. The programme has also provided training to healthcare workers in the provision of basic healthcare services, maternal and child health, and disease prevention and management. The success of the programme can be viewed within the context of increased availability of healthcare services in areas where the programme has been implemented.

Similarly, Bangladesh has launched a Community Clinic programme to improve access to healthcare services in underserved areas. The clinics are staffed by community health workers who are trained to provide basic healthcare services and refer patients to higher-level facilities when necessary. In 2018, the programme established over 13,000 community clinics, providing healthcare services to over 80 million people across the country.

Technologies such as telemedicine have already improved access to healthcare services. In Morocco, the government initiated a telemedicine programme that enables patients in remote and mountainous areas to consult with specialists located in urban areas. The pilot programme has been successful in improving access to specialty care, particularly for patients with chronic diseases such as diabetes and hypertension. The telemedicine programme has also reduced the need for patients to travel long distances to receive medical care, saving time and money and improving patient outcomes. However,





the funding for this initiative has been terminated, narrowing its initial scope and potentially jeopardising its future.

In Rwanda, Babyl Health had a promising start and created an impact on improving healthcare access, including providing up to 4,000 medical consultations daily. However, Babyl's parent company, Babylon Health in the UK, struggled to secure funding and has filed for bankruptcy. Babyl was unable to find a buyer and has now ceased operations. The closure reflects the challenges of maintaining such digital health services over the long term in resource-limited settings.

The CCMDD/Dablapmeds programme by the government of South Africa has been instrumental in improving access to healthcare in the country by initiating secure, community-based pickup points. The governance structure of CCMDD/Dablapmeds cuts across many programmes, including HIV/AIDS, care and support, TB, chronic disease, geriatrics, and affordable medicines. The idea is simple and has been implemented successfully, providing valuable lessons for other interventions.

In the context of the looming non-communicable disease (NCD) challenge faced by health transition countries



Rwanda's community health workers receive stipends for their roles in delivering health services at the grassroots. Source: Getty Images/William Campbell.

## In Rwanda, Babyl Health had a promising start and created an impact on improving healthcare access, including providing up to 4,000 medical consultations daily.

(HTCs), there is a profound opportunity to transpose insights from YRGCARE's decades-long experience with the HIV/AIDS community in India into the realm of NCDs. The organisation's success has been anchored in its comprehensive, multifaceted approach to addressing complex health challenges. Such a grassroots, community-centric model that prioritises underserved, marginalised communities is invaluable in grappling with the rising tide of NCDs.

YRGCARE's emphasis on community engagement offers a salient pathway for NCD interventions, ensuring that they are culturally sensitive and contextually relevant. Just as they did for HIV/AIDS, a ground-up approach involving communities in NCD prevention and management can lead to more effective outcomes. Their focus on counselling resonates deeply, especially considering

the pivotal role of lifestyle modifications in managing chronic diseases. Sustained guidance and support, akin to their model, can be indispensable for patients and families navigating the intricacies of NCDs. YRGCARE's nationwide footprint, built on collaborative networks with key supporters and stakeholders, showcases the power of collective action. This collaborative ethos can be harnessed for NCDs, pooling resources, expertise, and knowledge to amplify impact. Their modern electronic systems for data management and emphasis on implementation research provide a blueprint for tracking, analysing, and innovating NCD interventions.

Moreover, the organisation's capacity building, especially its work in enhancing the capabilities of civil society partners, could offer insights into creating a robust frontline for managing and preventing NCDs. In essence, the organisation's



journey offers a blueprint underscoring the potential of community-centric, collaborative, and data-driven approaches in reshaping the landscape of NCDs across HTCs.

In the global drive to extend healthcare to hard-to-reach populations, community health workers (CHWs) have emerged as a lynchpin, especially in resource-limited settings, and there is a mounting consensus on the imperative to professionalise and sustainably compensate CHWs. Ethiopia's Health Extension Programme is a notable example, having institutionalised its CHWs as salaried government employees, thus ensuring committed service delivery.

Similarly, Rwanda's community health worker programme has resulted in CHWs receiving stipends for their roles in delivering essential health services at the grassroots level, and similar programmes have been set up in South Africa. Organisations within the Community Health Impact Coalition, like Last Mile Health and Living Goods, further exemplify this trend, adopting models that offer regular stipends or performance-based incentives.

In Brazil, the Family Health Strategy has been pivotal in embedding CHWs into primary care teams, offering them formal employment and benefits. By

professionalising and providing sustainable compensation, these initiatives not only amplify the status and motivation of CHWs but also bolster the quality and consistency of the vital health services that they render.

## 4b Improving Affordability

Improving the efficiency of healthcare systems can help reduce the overall cost of healthcare services. Health information technology (HIT) can help streamline administrative processes, reduce medical errors, and improve coordination of care. In South Africa, for example, the government has implemented a national health information system that aims to improve the efficiency of healthcare services and reduce the overall cost of healthcare delivery.

The Community-Based Health Insurance (CBHI) scheme in Rwanda, known as Mutuelle de Santé, has significantly enhanced healthcare affordability for low-income individuals. This government-initiated solidarity-based insurance system allows families to collectively contribute towards medical care costs. The CBHI scheme has led to increased healthcare access, equitable service utilisation, and reduced out-of-pocket expenses, contributing to financial protection against health-related expenses. When challenges in premium affordability arose, they were subsidised for poorer populations. The CBHI's impact on improving healthcare access and financial protection for Rwandans remains a notable success.

While originator companies play a pivotal role in the initial development and introduction of new treatments, generic medicines offer a cost-effective alternative for medicines that are not covered by patents, making healthcare more affordable in many settings. In India, alongside recognising the contributions of original drug development, the government

promotes the use of generic medicines across both public and private healthcare facilities. This initiative has led to a noticeable reduction in the prices paid by patients. Similarly, in Bangladesh, the government has rolled out a programme supporting the production and distribution of generic medicines. However, it is worth noting that regulatory capacity can vary across countries, which might influence the quality assurance of generics. These efforts, combined with robust regulatory mechanisms, can ensure that essential medicines are both affordable and of high quality.

As discussed earlier, quality and accessibility of generic medicines are influenced by a complex interplay of factors, including regulatory environments, manufacturing practices, and market dynamics. In well-regulated markets, generics typically uphold high standards of quality. However, the system delivering these generics, which encompasses supply chains, distribution networks, and regulatory oversight, plays a pivotal role in determining their impact on patient health and affordability. While generics aim to offer the same therapeutic benefits as their branded counterparts at a fraction of the cost, the real-world relationship between generics, affordability, and access can be nuanced due to local health system dynamics and market behaviours.

Community-based healthcare models can also improve affordability. They involve the use of community health workers who are trained to provide basic healthcare services, including preventive care and treatment for common illnesses. In Rwanda, for example, the government has supported a programme that trains nurse entrepreneurs to provide basic healthcare services in remote and underserved areas.

An Indian case study, iKure Techsoft, has implemented the primary healthcare

delivery by the iKure Community Health Activist (iCHA) initiative to improve the accessibility, affordability, and quality of healthcare delivered by the organisation. India's public health infrastructure has critical gaps, such as the shortage of qualified medical staff and inadequate public health expenditure. iKure's primary healthcare model utilises scarce local resources to become a driver of change.

People living in the community are trained to become frontline health workers (FWWs), who are strategically deployed to serve communities that need them. iKure initially provides employees with a fixed salary that decreases incrementally over the first two years. After this period, the employees transition into a self-sustaining model by charging a nominal fee to the community for their services.

This social venture has provided sustainable and accessible care to nearly 21 million people in 6,400 villages across 12 states in India. iKure has empowered community health workers (CHWs) through more than 8,700 self-help groups and trained over 4,000 frontline health workers (FWWs), including the government's ASHA workers and auxiliary nurse and midwives (ANMs).

iKure is committed to enabling 200,000 FWWs to provide accessible and affordable primary care to achieve population-scale impact across India. iKure was able to address the challenge of inadequate and inaccessible primary healthcare using a population health management system and telemedicine. It has empowered women by providing the capacity and skills to earn their livelihood locally and contribute to developing grassroots healthcare services.

The Bangladeshi case study, Healthx Ventures Ltd., is a digital healthcare venture founded by Mustafa Mahbub Hasan with

the vision of providing accessible and affordable primary and essential healthcare services to Bangladesh's population of 170 million. The venture began in March 2021 and has been developing a digital health ecosystem connecting the four Ps—patient, physician, provider (i.e., pharmacies, hospitals, clinics, and labs), and payor (i.e., health insurer). Healthx has been successful in improving the affordability of healthcare in Bangladesh by offering one-stop primary and essential health services, affordable health plans for patients, and cloud-based solutions for physicians, clinics, and pharmacies.

Healthx's cloud-based My Health Portal offers the country's first one-stop healthcare interface where patients' personal information, health information, health records, medication records, and lab test records will be stored and securely accessible to providers. Their integrated business model, which provides all aspects of telehealth and home health through a single platform, along with technology solutions for physicians and pharmacies,

has already been successful in bridging the gap of access to quality primary healthcare in its short period of existence.

The Social Health Insurance (SHI) scheme, established in 1992, is now a major public financing method for healthcare in Vietnam. The government subsidises the SHI for vulnerable groups such as the poor, ethnic minorities, children under the age of six, and the elderly aged above 80. The latest data from 2023 indicates that, presently, over 92 percent of the Vietnamese population is covered by this insurance.<sup>13</sup> This scheme is essential to reducing the financial burden of healthcare on low-income families.

However, significant challenges remain to be addressed in improving affordability in health transition countries (HTCs). One of the main challenges is the limited budgets for developing healthcare infrastructure and IT systems. Many HTCs have limited resources for healthcare, which results in limited funds for sustained capital investment.



iKure has trained thousands of India's frontline health workers. Image is representational. Source: Getty Images/Noah Seelam.





**SECTION 05**

**Bright Spots:**  
Smart Use of Technology  
& Data to Leapfrog  
Constraints

**Laying the foundations** for a fairer, healthier future

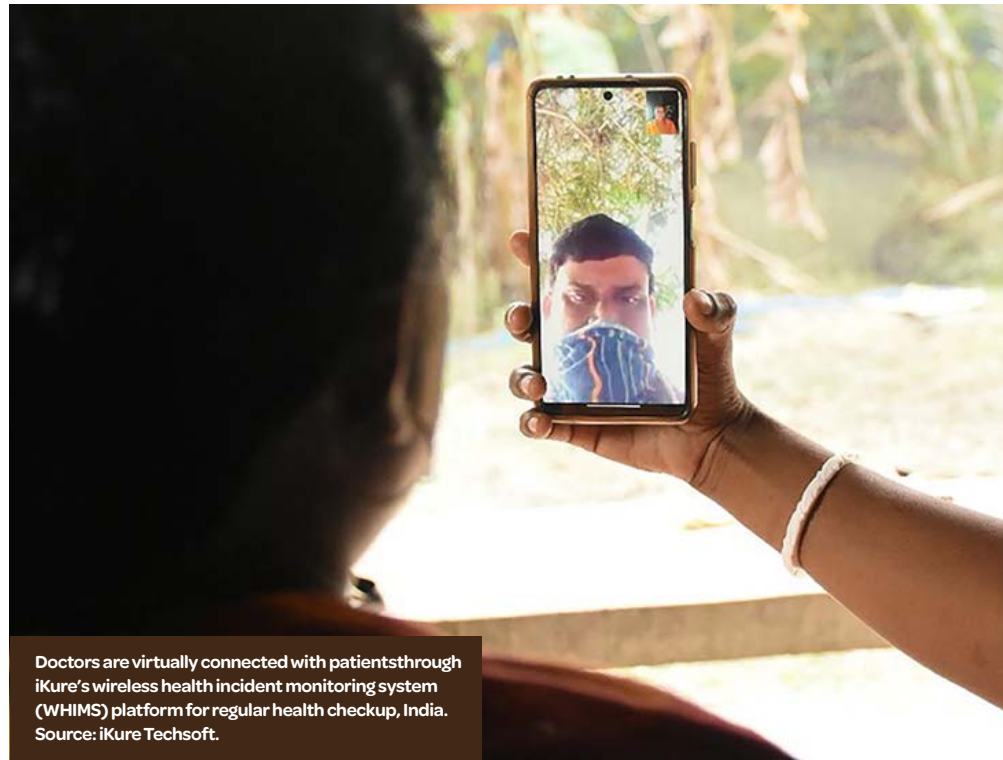
05

## Bright Spots: Smart Use of Technology & Data to Leapfrog Constraints

Technology and data can help address many of the constraints that impede the ability of healthcare systems to provide quality healthcare to their populations, such as inadequate infrastructure, insufficient financial resources, a shortage of skilled healthcare workers, and limited access to medical supplies and equipment.

A health system can ensure the integration of protocols, referrals, and collection of health data in order to build equitable and inclusive healthcare delivery systems. If healthcare providers follow standardised protocols for diagnosis, treatment, and follow-up care, it helps ensure that all patients receive high-quality care regardless of their location or socioeconomic status. Standardised protocols also facilitate communication between healthcare providers and ensure continuity of care as patients move between different healthcare settings.

Patients requiring specialised care or services can be referred to appropriate healthcare providers or facilities, often by leveraging technology in innovative ways. Referral systems help to ensure that patients receive the care they need in a timely and efficient manner. They can also help to reduce the burden on primary care and ensure that patients receive specialised care from providers with the appropriate skills and expertise. Accurate and comprehensive health data needs to be collected and analysed to guide healthcare policy and practice. Such data can help to identify health disparities, monitor disease outbreaks, and evaluate the effectiveness of healthcare



Doctors are virtually connected with patients through iKure's wireless health incident monitoring system (WHIMS) platform for regular health checkup, India. Source: iKure Techsoft.

interventions. In the context of building equitable and inclusive healthcare delivery systems, it can be used to identify areas of need and ensure that resources are allocated to address these needs.

One way in which technology is being used to leapfrog constraints in health transition countries (HTCs) health systems is through the use of mHealth applications. In countries such as Bangladesh and India, mHealth platforms are being used to improve maternal and child health outcomes by providing remote consultations, monitoring vital signs, and tracking medication adherence. These applications can be accessed via smartphones and other mobile devices, enabling patients in remote or underserved areas to receive high-quality care without having to travel long distances to a health facility.

The National Programme of Telemedicine case study initiated by the Moroccan

Society of Telemedicine (SMT) has successfully improved healthcare access in the country by leveraging technology and data. The SMT was established in 2018 with the mission of providing teleconsultations and promoting telemedicine activities. The programme was launched in October 2018 as a public-private partnership (PPP) with the goal of covering 80 percent of medical deserts in Morocco by 2025 by reaching 1.3 million inhabitants across 123 municipalities. The SMT started with a proof-of-concept phase in October 2018, with five sites deployed to test the concept of telemedicine in landlocked rural areas. By the end of 2022, 16 areas in Morocco were covered, with 35 pilot sites equipped and active. The second stage has not been implemented due to lack of funding. This stage planned to involve regional hospitals under the Ministry of Health by playing the role of regional telemedicine hubs and enabling people in remote areas to have local access to healthcare.

Another area where technology is being leveraged to improve healthcare in health transition countries (HTCs) is the development of digital health records. In countries like Rwanda and South Africa, electronic medical records (EMRs) are being used to improve the accuracy and completeness of patient records, reduce errors, and improve communication between healthcare providers. EMRs can also enable healthcare providers to track disease outbreaks better and monitor health trends in real time, which can be critical for effective disease control and prevention. The Electronic Health Book application, a case study launched by the Ministry of Health in Vietnam, aimed to improve access to healthcare in the country significantly by utilising technology and data. The patient-held mobile phone application helps individuals proactively monitor and prevent diseases as well as care for their health. It allows citizens to store all their health information in one place, and medical staff can more easily

access and diagnose patients' health situations. The application played a crucial role in the COVID-19 vaccination campaign.

Each vaccinated citizen received an electronic 'Certificate of Immunisation' in compliance with the Ministry of Health regulations. The application also helped medical staff collect information, reduce congestion at vaccination locations, and limit the possibility of infection. It helped individuals know and manage their health information, allowing them to be proactive in disease prevention and healthcare. With the application's introduction, the aspiration was that each citizen could manage their own health information and have quick, accurate, and complete health records. However, there were several technical, financial, and healthcare resource challenges associated with implementing this patient-held system, and the government has scaled back the programme to a more conventional electronic health record that is stored in clinics and hospitals.

In addition to mobile health (mHealth) and EMRs, other technologies are being deployed to improve health outcomes in HTCs. For example, medical drones are being used in Rwanda to deliver medical supplies and vaccines to remote areas.

IVIE, another case study from Vietnam, is a digital health ecosystem created by Ta Thi Van Anh that aims to make medical and health services more accessible to people. With IVIE, people can interact with doctors online any time they have a functioning data connection. The application connects health stakeholders such as patients, doctors, nurses, hospitals, and pharmacies, reducing pressure on hospitals and increasing convenience for people. The app uses modern technology and data systems to allow medical staff to save time in making diagnoses and treatments. IVIE has won many national awards and cooperates with over 50 medical facilities, testing centres, and 2,000 doctors across Vietnam. It has become a specialised e-commerce platform connecting patients with healthcare providers. The application is free to download on a mobile phone and has a simple, fast, user-friendly interface.

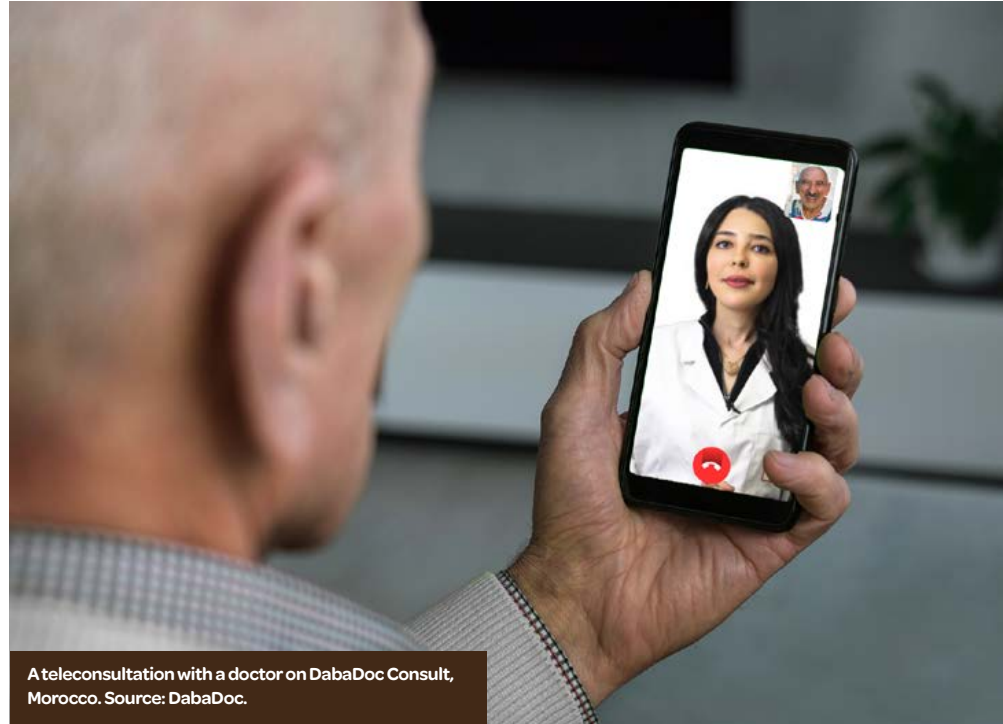


Patients can use the platform to book doctor appointments as well as buy medicines. The priority medical examination process ensures that patients do not have to wait in long queues to consult doctors at Vietnam's major urban hospitals. IVIE has achieved remarkable success and is recognised as an essential component in the national innovation ecosystem.

DabaDoc, a Moroccan case study, is a free-for-use platform that has revolutionised the patient-doctor relationship in Morocco, democratising access to healthcare by making doctors' appointments available online. Founded in 2014, the company developed a disruptive technology that allows patients to make instant doctors' appointments. Video medical consultations were launched in 2020 during the pandemic and were rapidly adopted by both patients and doctors to limit the spread of COVID-19.

In 2022, DabaDoc and Orange launched DabaDoc Consult in Morocco, which enabled the diaspora populations residing in Europe and North America to pay for their relatives and friends in Morocco to have video medical consultations with doctors based in Morocco by using an online payment service provided by Orange. DabaDoc has received funding from Axa Assurance Maroc and Orange Middle East and Africa to scale up its operations. The company's major goal of expanding access to healthcare services in Morocco has been largely achieved. At the end of 2022, the company launched services focusing on employees in large corporations as well as mental health. The main challenges to the programme include the regulation of telemedicine, as such consultations cannot yet be reimbursed through the compulsory health insurance system.

While the use of technology and data can be transformational in health transition countries (HTCs) health systems, there are



A teleconsultation with a doctor on DabaDoc Consult, Morocco. Source: DabaDoc.

also challenges that need to be addressed. One key challenge is ensuring that these technologies are accessible to all segments of the population, including those in remote or low-income areas. Another challenge is ensuring that healthcare providers are properly trained and equipped to use these technologies effectively. Finally, there are issues related to data privacy and security, which need to be addressed to ensure that patient data is protected and used in an ethical and responsible manner.

Despite these challenges, the smart use of technology and data is proving to be a powerful tool for leapfrogging constraints in HTC health systems. By harnessing the potential of these tools, countries can improve the quality and accessibility of healthcare services, reduce costs, and ultimately improve health outcomes for their populations. As such, investments in technology and data infrastructure should be a priority for governments and healthcare stakeholders in HTCs.

**One key challenge is ensuring that these technologies are accessible to all segments of the population, including those in remote or low-income areas.**



**SECTION 06**

# Call to Action

**Laying the foundations** for a fairer, healthier future

06

## Call to Action

Across the vast global landscape of healthcare, stark disparities persist, often undermining our collective goal of achieving universal health and well-being. These disparities, entrenched in socioeconomic divides, geographical constraints, and systemic biases, challenge our collective conscience.

The case studies and insights contained in this report are a call for action—to transcend traditional boundaries, innovate, collaborate, and, most importantly, champion the cause of health equity and inclusion with renewed vigour. As stakeholders in this global endeavour, the onus is upon us to create a future where there is equitable access to quality healthcare. The time to act is now.

In the wake of the pandemic, health experts harboured hopes that healthcare would be prioritised universally. This has been far from reality, however. Despite the ambitious goal set by Sustainable Development Goal 3 (SDG3) to achieve universal health coverage (UHC) by for 2030, current data points to challenging prospects, especially for health transition countries (HTCs), with limited fiscal space for health and modest economic projections. Two case studies in this report demonstrate how the lack of required resources in the health system often impacts scaling: The existing ecosystem

could not handle the information collected by the Electronic Health Book application in Vietnam, and funding constraints led Morocco's National Programme of Telemedicine to grind to a halt.

Mixed health systems, combining both public and private sectors, present both opportunities and challenges. While they harness diverse financing streams and potentially increase efficiency, they can inadvertently exacerbate inequities in access and quality. Key drivers of such disparities include varying financing mechanisms, geographical imbalances, and information asymmetry. Ensuring equitable care requires a harmonised approach: robust regulation, public-private partnerships, and innovative financing methods like subsidies or health insurance. Technological and policy innovations, such as integrated health information systems and standardised accreditation, can bridge the divide between public and private services, towards establishing a system where quality healthcare is universally accessible, irrespective of socioeconomic status.

However, even as massive challenges persist, hope can be gleaned in different parts of the world. This report sheds light on the kind of innovative initiatives which, if supported and scaled, can bring about significant changes. Yet, these pioneering efforts often confront roadblocks including financial sustainability.

These case studies lay plausible pathways for HTCs that do not depend solely on the resource-intensive secondary and tertiary care models but gravitate towards a cost-effective primary-care approach. This transition is bolstered by the judicious use of cutting-edge technology.



# Key areas of focus

To galvanise action and create meaningful change, we recommend the following key areas of focus:



YRGCARE's Project ACCELERATE brings HIV services to the most vulnerable populations, India. Source: YRGCARE.

## 01 Leveraging Scarce Health System Resources

**Use Task Shifting and Innovative Service Delivery Routes:** Implement more programmes that leverage strategies such as task shifting from doctor to nurses, or from nurses to community health workers (CHWs), and digitisation to improve the efficiency of health systems, as demonstrated by Unjani Clinics in South Africa and the telemedicine initiative in Morocco. Streamlining processes such as remote prescription pickups in community settings and shifting tasks for dispensing to a private service provider utilised in South Africa's Central Chronic Medicines Dispensing and Distribution (CCMDD/ Dablapmeds) can significantly optimise healthcare staff time.

**Improvements to the Quality of Medicines:** Champion the adoption of effective pharmacovigilance programmes, as exemplified by countries like Morocco, India, and Rwanda. Address the issue of low-quality or counterfeit medications that is pervasive across many health transition countries (HTCs) to pave the way for a future where high-quality medication is the norm. Training pharmacies and informal health practitioners involved in quality medicine purchase and prescribing practices, as done by Jeeon Foundation in Bangladesh, can help with this.

## 02 Improving Access, Increasing Affordability for All

**Increase Funding for Equity and Inclusion Programmes:** Increase and sustain funding for healthcare in marginalised and underserved communities, focusing on durable solutions to create an equitable and resilient health system. This strategy should ensure long-term stability and accessibility of healthcare services for underserved populations. Morocco's telemedicine initiative is a good example of equity being enhanced by facilitating access to difficult-to-reach communities; it also serves as a reminder of the need to support such efforts with sustainable financing.

## 03 Ensure Smart Use of Technology and Data to Leapfrog Constraints

**Promote Uptake of Tech and Big Data:** Encourage the adoption of digital technology, Big Data, and predictive AI, focusing on solutions that enhance efficiency, scale potential, and aid decision-making at the facility level. Innovative digital platforms like DabaDoc Consult in Morocco, IVIE Digital Health Ecosystem, and the Electronic Health Book in Vietnam have been pioneering solutions to bridge healthcare access gaps in often resource-limited settings, enabling efficient digital recordkeeping,

streamlined communication between patients and doctors, and comprehensive health assessments. Initiatives like CCMDD/ Dablapmeds use hand-held technologies to track the journey of the medicines in their system, leading to more efficient and effective prescribing. Ensure that these technologies are contextually relevant and accessible in both urban and rural settings, with an emphasis on mHealth applications to exemplify inclusivity. This may mean using more basic technologies such as SMS or voice, which in many rural areas are more widely available than mobile internet.

## 04 Increase Community Leadership and Inclusion

**Put Beneficiaries and Communities at the Front of Healthcare Decision-Making:** Recognise that achieving health equity requires approaches tailored to cultural contexts and country-specific situations. This includes empowering individuals and communities to actively participate in healthcare decisions, as Mizero Care has done in Rwanda, with a strong emphasis on self-care strategies. Encourage the integration of self-care education and practices into community health initiatives, ensuring that they are accessible, culturally appropriate, and supported by local health services.

**Implement Culturally Relevant Healthcare Services:** With the increasing cultural, geographic, and linguistic diversity in healthcare settings, there is a need to offer services that resonate with this diversity, such as in the case of iKure and YRGCARE in India in varied contexts. Ensure adequate trainings and programmes are in place to acknowledge and accommodate this diversity in order to prevent misunderstandings and misdiagnoses.

**The imperative is to unite in action and champion a future where health equity and inclusion are not mere aspirations but tangible realities.**



# Acknowledgements

This report was developed by the global think tank **Observer Research Foundation (ORF)** in collaboration with the biopharmaceutical company, **Gilead Sciences**, who commissioned this report.

The primary writer of the report is **Oommen C Kurian**, Senior Fellow and Head of Health Initiative, ORF, with additional contributions from **James Snodgrass**. The report was edited by **Vinia Mukherjee** and **Aswathy Gopinath**, ORF.

The following global health experts reviewed the report and provided valuable inputs to enhance it.

- > **Prof. Yongyuth Yuthavong (Thailand)**  
Senior Advisor, National Science and Technology Development Agency (NSTDA)
- > **Anjali Gopalan (India)**  
Founder, Naz Foundation India
- > **Dr. Katerina Leyritana (Philippines)**  
Medical Director, Sustained Health Initiatives of the Philippines (SHIP)
- > **Michel Musilikare (Rwanda)**  
Executive Director, Health Builders
- > **Levi Singh (South Africa)**  
Regional Youth and Policy Officer, Sexual and Reproductive Health and Rights (SHRH) Africa Trust
- > **Dr. Bao Vu (Vietnam)**  
Senior Technical Director, HIV/tuberculosis (TB)/Hepatitis, PATH Vietnam
- > **Dr. Rispah Walumbe (Kenya)**  
Senior Health Policy Advisory, Amref Health Africa

**ORF** and **Gilead** would also like to thank the following for their contribution to the development and review of this report:

**Dr Richard Alia, Mouna Belkhat, Mark Chataway, Diep Le Van, Dr Subhadra Menon, Nick Parry, Huynh Thi Kim Phuong, Melani Prinsloo, A.H.M. Shafiqul Alam Siddiqui, and Shamima Vawda.**





**SECTION 07**

# Appendix

**Laying the foundations** for a fairer, healthier future

07



# Laying the foundations

for a fairer, healthier future

# Appendix

<b>Case studies featured in the report</b>	<b>44</b>
<b>Case study summary</b>	
<b>Leveraging scarce health system resources</b>	
Bangladesh: <i>Jeeon Foundation</i>	45
Rwanda: <i>Babyl</i>	46
Rwanda: <i>Mizero Care</i>	46
South Africa: <i>Central Chronic Medication Dispensing and Distribution (CCMDD/Dablapmeds)</i>	47
South Africa: <i>Unjani Clinic</i>	48
<b>Improving access and increasing affordability for all</b>	
Bangladesh: <i>HEALTHx</i>	50
India: <i>iKure Techsoft</i>	51
India: <i>YRGCARE</i>	52
<b>Smart use of technology and data to leapfrog constraints</b>	
Morocco: <i>DabaDoc</i>	54
Morocco : <i>National Programme of Telemedicine</i>	55
Vietnam: <i>IVIE by ISOFH</i>	56
Vietnam: <i>The Electronic Health Book application</i>	57



This appendix includes a short summary of each of the twelve case studies included in the main Health Equity and Inclusion in Action report. These are located in six countries: Bangladesh, India, Morocco, Rwanda, South Africa, and Vietnam.

These countries were carefully chosen to include a variety of contexts that have a broad range of approaches to improving access to equitable and inclusive healthcare. The case studies demonstrate innovation, use of technology, financial sustainability, and scalability, and all aim to show health impact—though this is limited in many cases by absent or poor-quality health data.

The section below categorises the case studies by the main health system challenge they seek to address:

- **Leveraging scarce health system resources**
- **Improving access and increasing affordability for all**
- **Smart use of technology and data to leapfrog constraints**



## **Case studies** featured in the report

# Case study summary: Leveraging scarce health system resources

## Bangladesh: Jeeon Foundation

Largest digital network of more than 30,000 pharmacies in Bangladesh.

### What is the challenge?

In Bangladesh, retail pharmacies and informal drug shops act as the first point of care for most of the rural population and account for 65 percent of out-of-pocket health expenditures. However, many such facilities do not have qualified pharmacists or trained pharmacy workers, so the advice given and medications dispensed may be inappropriate and, in some cases, substandard or falsified.

### What is the case study?

Jeeon Foundation is a social impact business from Bangladesh focusing on digitising and upgrading informal health providers, which act as the primary healthcare destination for lower-income populations across most emerging economies.

Launched in 2015 by founder Rubayat Khan, Jeeon has created the largest digital network of more than 35,000 pharmacies and drug shops in Bangladesh. It is backed by investments from well-known impact investors and supported by leading development partners such as the United States Agency for International Development (USAID), UK Foreign Commonwealth and Development Office (FCDO), Unilever, Acumen, Aspen Network, Mulago Foundation, and others.

Jeeon aims to improve the quality of healthcare by connecting informal health practitioners and informal drug shops to quality training, health information, and authentic medicines, as well as referral



In Bangladesh, retail pharmacies and informal drug shops are the first point of care for most of the rural population. Source: Getty Images/NurPhoto.

networks to build their capacity while integrating them with the formal health sector. The foundation is also targeting rural primary healthcare providers with educational initiatives on topics such as dengue and children's health while supporting this group in developing an advocacy capacity to increase their voice in national health policy.

Their revenue model is currently donor-driven, although they expect to run programmes in the future that generate revenue.

### What is the impact?

During the COVID-19 pandemic, Jeeon Foundation served as the secretariat under the Government of Bangladesh's Risk Communication and Community Engagement (RCCE) pillar for the dissemination of authentic COVID-19-related information through pharmacies to their communities.

Jeeon Foundation also trained and certified over 25,000 pharmacies in community-based COVID-19 responses and ran large-scale interventions to encourage healthy behaviours in partnership with the Bangladesh-based non-governmental development organisation BRAC, which is the largest in the world by number of employees.

Successful models developed during the pandemic have subsequently been documented by Jeeon and partners in a national action toolkit on community engagement endorsed by the Ministry of Health and Family Welfare and published under a USAID-funded project.

Jeeon also built the largest ever national online network of **35,000 pharmacies and public health pharmacies (PHPs)**, called Jeeon Community, as a closed group on Facebook.

Following the experience of the pandemic, Jeeon is now seeking to integrate informal

health practitioners and informal drug shops more broadly with the formal healthcare sector, faith-based organisations, civil society, and the police to ensure a more coherent response to disease outbreaks. It also aims to increase the informal sector's advocacy capacity by creating an umbrella group which will aim to persuade the government to incentivise accreditation across the sector in Bangladesh.

### Why is it featured in the report?

Jeeon has been instrumental in reducing the use of substandard and falsified medicines in the country. It has also helped improve the quality of services for informal health entrepreneurs who operate under the radar without government recognition. These informal health entrepreneurs, primarily drug shops, comprise two-thirds of Bangladesh's healthcare provision and expenditure. Improving access to training and high-quality medicines for these drug shops ameliorates the quality of care for people with lower incomes.

## Rwanda: Babyl

### Largest digital health service provider in Rwanda.

### What is the challenge?

In Rwanda, around 80 percent of the population live in rural areas, where access to primary healthcare is often limited. Many people in these regions lack access to reliable transportation and often cannot afford to pay to access regional healthcare centres.

### What is the case study?

Until recently, Babyl was the largest digital health service provider in Rwanda, providing accessible and affordable healthcare services. The programme was launched in

2016 using software developed by Babylon Health UK. Since then, Babyl Rwanda has developed a new healthcare delivery model called "Digital-First Integrated Care" for convenient access to qualified doctors and nurses, reaching people living in remote areas of the country. In 2020, Babyl entered a ten-year partnership with the Government of Rwanda to build Africa's first universal primary care service using a digital-first approach.

However, Babyl Rwanda ceased operations in 2023, following financial challenges faced by its parent company, Babylon Health, UK. The closure of Babyl Rwanda came after the shutdown of Babylon Health's US operations in August 2023. The decision to cease operations was influenced by a failed rescue merger planned by Babylon Health, which intended to transition into a private entity through a partnership with Swiss digital therapeutics firm MindMaze and Babylon creditor AlbaCore Capital.

Babyl worked alongside all health institutions in Rwanda as well as the Rwanda Social Security Board (RSSB). Babyl signed an agreement with RSSB, the largest national insurance company in Rwanda, in March 2020, allowing Babyl's patients to access their prescriptions and lab tests using their insurance cards.

Appointments were accessed via mobile phone. After a consultation, an SMS was generated with a unique Babyl prescription code, which could be used at the Babyl partner pharmacy that works with insurers. Clinicians could also refer patients when the need arose by issuing a referral code, which was received via SMS and could be redeemed at a partner health facility.

The founders used knowledge gained from digitised healthcare systems within industrialised nations and extended this expertise in the development of the health system within Rwanda. Partnerships with



A patient collects a Dablap medicine parcel from a smart locker, South Africa.  
Source: CCMDD/Dablapmeds.

the government and local pharmacies allowed for the rapid expansion of access to healthcare services.

### What is the impact?

Babyl had considerably extended its base in Rwanda before the shutdown. As of July 2023, the number of registered users reached 2.5 million—over a third of Rwanda's adult population—with about 3.5 million consultations performed. The service provided around 4,000 consultations daily, and coverage was offered nationwide.

### Why is it featured in the report?

Babyl successfully integrated itself within the existing healthcare capacity by extending lessons learned from digitised health systems in other countries while

also covering one of the major needs of the Rwandan health system: rural access.

The system demonstrated that scaling up such a programme can be successful and has given people enhanced access to the expertise of urban health centres. Integration of lab tests and prescriptions into the system can allow for equitable healthcare access even in areas that are serviced only by local pharmacies and health centres—a common situation in the developing world. The case study is representative of many initiatives in low-income contexts which, despite helping health systems leapfrog constraints, are unable to secure long-term funding.

## **Rwanda: Mizero Care** Digital health initiative reaching out to marginalised and stigmatised communities in Rwanda.

### **What is the challenge?**

As in several countries worldwide, mental health is a taboo topic in Rwanda. This has left many individuals with feelings of isolation, with no community support. This has been exacerbated by the Rwandan genocide, with many suffering from post-traumatic stress disorder (PTSD) and having to hide their mental health issues due to the associated stigma. Both physical and financial access to mental health services were challenges in the country context, exacerbated by shortages of professionals, particularly for marginalised groups.

### **What is the case study?**

Mizero Care is a non-governmental organisation (NGO) established to assist with treating people with mental illness in Rwanda. Mizero Care was created in 2013 by founder Iréné Mizero. Following

the Rwandan genocide, he suffered from mental health challenges, which he was able to overcome with the help of counselling from friends and peers. Iréné thought about other young people who could be suffering quietly from their own mental health challenges and decided to form Mizero Care to care for them.

Mizero Care integrated the conventional way of treating patients with mental illness (in-person sessions at psychotherapy clinics) with digital or online psychotherapy to address the issues of equity and inclusion. They currently operate in seven of the 30 districts in the country.

The NGO is recognised by the government and has been fully licensed. It has financial support from the Ministry of National Unity and Civic Engagement for social healing projects. However, in its initial phases, the project was entirely funded out of pocket by the nine co-founders.

### **What is the impact?**

Although they are operating in only seven out of 30 districts in Rwanda, they have rapidly increased their community reach within 2022-23. By June 2022, Mizero Care had successfully treated 500 clients (from the time the institution was created in 2013). Between July 2022 and July 2023, 1,200 new clients were successfully treated and supported with reintegration into their communities. The progress made in the last year can be attributed to the digital innovation introduced in 2021, which helped the NGO expand its services. It created outreach and online psychotherapy services and was able to reach more clients through mobile applications. The progress is also because the target population was expanded: instead of focusing on PTSD patients only, Mizero Care started targeting youth who suffered from drug abuse issues, mental illnesses, transgenerational trauma, and so on.

Some of those who have been treated have gone on to become counsellors themselves, using their own testimonies to help other patients with mental illnesses. These success stories, including testimonies from the patients themselves and their relatives, resulted in the NGO attracting more clients. However, some patients relapsed when integrated back into society, due to issues such as poverty and familial problems.

### **Why is it featured in the report?**

Mizero Care is a key example of how digital health initiatives can help reach out to those in marginalised communities. Mental health is often overlooked and underfunded in settings in which healthcare resources are limited. By providing a digital platform that can be accessed remotely, the NGO helps offer services to a group of people who are often stigmatised and ostracised from their communities as a result of mental health problems. Such a service could be replicated in other similar settings.

## **South Africa: Central Chronic Medication Dispensing and Distribution (CCMDD/Dablapmeds)**

Alternative access to chronic medication, reducing clinicians workload, and focusing on treatment adherence of patients in South Africa.

### **What is the challenge?**

South Africa has experienced an unprecedented growth in patients requiring access to long-term therapies, driven in part by universal access to antiretroviral therapy (ART) for patients with HIV/AIDS

and steady increases in diagnoses of non-communicable diseases (NCDs). This has led to the overextension of public health care facilities, creating a strain on available resources, contributing towards medicine shortages, long waiting times, and challenges in the quality of care provided.

### What is the case study?

Central Chronic Medication Dispensing and Distribution (CCMDD), also known as Dablapmeds, is a Ministry of Health initiative aimed at creating alternative access routes for patients to get their chronic medication. Established in 2014, the CCMDD/Dablapmeds is a flagship programme for the South African national health insurance programme.

The CCMDD/Dablapmeds consists of two parts. The first is the manual or electronic collection of prescription scripts from a facility. The second aspect handles the distribution of dispensed medicines parcels to patients, either to external contracted pick-up points (PUPs) or fast lanes at public facilities. Patients can choose from the 3,000 contracted external PUPs or from over 3,500 public facilities. PUPs include smart lockers, corporate pharmacies, doctors' clinics, purpose-built

containers, and non-profit organisations such as Unjani Clinic Network. Patients are able to collect their prescriptions securely and confidentially using a one-time code sent via SMS.

### What is the impact?

In 2011, South Africa's government launched a plan to cover all citizens under a single-payer national health insurance (NHI) system by 2025. The CCMDD/Dablapmeds programme was implemented in 2014 in eleven pilot districts as an NHI initiative. Due to the positive uptake of the programme, it quickly expanded to eight provinces and all districts. As of 31 December 2023, over 3.1 million patients are active on the programme. Over 2 million patients are collecting their parcels from a PUP of their choice. A further 100,000 patients are serviced through adherence clubs and community outreach.

The programme has reduced clinician and pharmacy workload, allowing a focus to be placed on seeing patients. Treatment adherence among people living with HIV has improved. The programme mitigates the stigma associated with HIV infection: by using generic packaging, HIV patients are able to access their medication at a place convenient to them without any identifying any factors that could compromise confidentiality.

The CCMDD/Dablapmeds was scaled up beyond the target, and the consistent monitoring of the programme contributed to the availability of reliable data to support its continued implementation. The evaluation findings suggest that the CCMDD/Dablapmeds is overwhelmingly believed to be the National Department of Health's most successful intervention developed during the initial phase of NHI implementation. Similar systems are now being piloted in several southern African countries.

### Why is it featured in the report?

Apart from enhancing access to chronic medication, the importance of task shifting as a strategy to free up resources in constrained health systems was demonstrated during the pandemic. This included allowing non-clinical staff to issue the pre-dispensed parcel to stable chronic patients and shifting the risk of dispensing the script to contracted service providers. Programmes such as this reduce the burden on healthcare professionals and allow their expertise to be best used to service patients, automating other aspects such as renewing prescriptions. A dual burden of infectious diseases and non-communicable conditions is common in low- and middle-income countries, making programmes such as this an effective way of addressing major constraints on the time of healthcare professionals.

**South Africa: Unjani Clinic Network assisting and strengthening government public health infrastructure using community-based clinics run by nurse entrepreneurs in South Africa.**

### What is the challenge?

South Africa has a population of 60 million people. Approximately 84 percent of self-insurers pay out of pocket or rely on the government for their healthcare needs. While public sector clinics are free at the point of use, they can be inconvenient to access quickly if people seeking primary care cannot afford to take time off work.

### What is the case study?

The Unjani Clinics concept was developed from the need for an urgent transformation



A standard semi-rural Unjani Clinic, South Africa. Source: Unjani Clinics.





A nurse poses with a patient in an Unjani Clinic health pod, South Africa. Source: Unjani Clinic.

in the healthcare system in South Africa. It aims to do this by creating a network of clinics staffed by nurse-entrepreneurs that offer affordable primary care and are integrated into the wider South African health system.

The Unjani Clinic Network assists government facilities through infrastructure strengthening and by relieving them of patients who can contribute towards their healthcare. The business focuses on the “missing middle”—those in employment who are uninsured. There are approximately 12–15 million employed, uninsured people in South Africa; the opportunity exists, and Unjani’s strategy is to meet their primary healthcare needs.

Unjani Clinic provides an affordable alternative (US\$15 or ZAR250 consultation fee including medication) to patients in communities that can contribute towards their healthcare needs but cannot afford medical insurance or private-sector general practitioner (GP) rates.

Unjani Clinics use the WeCare Clinic Management and WeCare Patient apps. These apps help manage individual health

and overall healthcare in the clinic more efficiently. By leveraging technology, the clinics can offer better healthcare services, track patient outcomes, and ensure that care is consistent and of high quality.

The initiative is delivered by Unjani Clinics NPC (non-profit company), which acts as the business incubator and support structure in the relationship. The legal structure is that of a non-profit company without members and is a registered public benefit organisation.

#### What is the impact?

As of July 2023, there were 168 clinics, two mobile clinics, and eight health pods operating nationally as part of the Unjani Clinic Network. Founded on an owner-operator model and social franchising principles, the clinics serve low-income and underserved markets, enhancing access to affordable, quality primary healthcare services and the supply of quality medicines. The clinics are based in the communities, ensuring that the service is delivered at the point of need.

Patient statistics reflect the support for this initiative and its innovation. From

January 2013 to June 2022, over 2.9 million consultations have been recorded through the Unjani Clinic Network. The monthly network consultations now exceed 75,000, averaging 700 consults per clinic per month.

The health and development outcomes being achieved through this project include permanent job creation for 475 people as of June 2022, as well as systemic change and transformation within the healthcare system in South Africa.

#### Why is it featured in the report?

In many countries, there exists a missing middle. These individuals are employed and are able to contribute some money towards medical expenses but are unable to afford private healthcare or insurance nor covered by insurance programmes that target lower-income communities. These individuals are either left out by the healthcare system or contribute to overburdened public healthcare facilities. Unjani Clinics aims to address the needs of this community and has demonstrated that this middle-ground approach could apply to other healthcare systems.

## Case study summary: Improving access and increasing affordability for all

### Bangladesh: HEALTHx

Data-driven digital healthcare venture that provides access to telehealth and home health from a single platform, along with technology solutions for physicians and pharmacies to benefit those without proper healthcare facilities in Bangladesh.

#### What is the challenge?

Currently, 60 percent of the population in Bangladesh depend on informal healthcare providers (such as local non-qualified doctors, pharmacy salespeople, and traditional healers) to avail of primary healthcare services. This often results in ineffective treatment, coupled with recurring out-of-pocket expenses.

#### What is the case study?

HEALTHx is a data-driven digital healthcare venture offering one-stop essential health services, affordable health plans for patients, and cloud-based service solutions for physicians, clinics, and pharmacies.

The venture was started by founder Mustafa Mahbub Hasan in March 2021, with a vision to enable accessible and affordable primary and essential healthcare for the 170 million people of Bangladesh.

HEALTHx has been developing a digital health ecosystem connecting the four Ps: patient, physician, provider (pharmacies, hospitals, clinics, and labs), and payor (health insurer). Primary health services offer telehealth, medicine delivery, pathology tests, and caregiving services at home. Their subscription-based health plan offers dedicated 24/7 family doctor service, discounted medicine delivery,



A HEALTHx health assistant explains health plans during a basic health checkup, Bangladesh. Source: HEALTHx.

pathology tests, and insurance coverage on hospitalisation.

The Ministry of Health and Family Welfare (MoHFW) of Bangladesh plays a significant role in the country's digital health strategy, which aligns with the services provided by platforms like HEALTHx. The integration attempted by HEALTHx aligns well with the national digital health strategy's objectives, as it enhances connectivity and coordination among different components of the healthcare system. By integrating various healthcare services, including online doctor appointments, medicine delivery, and lab tests at home, HEALTHx contributes to the broader goal of the national digital health strategy by facilitating access to healthcare services through digital means.

#### What is the impact?

The approach of encompassing all aspects of healthcare, from patients to the providers, alongside the adoption of new technologies

involving digital health, has allowed HEALTHx to reach many individuals in Bangladesh who would otherwise be unable to access adequate healthcare services.

Through their digital campaigns on Facebook, they reached more than ten million patients between March 2021 and July 2023, with a monthly average reach around three million patients; served patients in more than 30 districts in Bangladesh; and recruited more than a thousand doctors to their telemedicine platform, Smart Doctor. Given that pharmacies are often the primary point of contact for healthcare for many in Bangladesh, the programme has partnered with over 500 pharmacies to refer patients to the platform for further services. These partner pharmacies avail HEALTHx's telemedicine services to provide primary healthcare (instant doctor consultations, health plan packages) for walk-in customers of these pharmacies and provide medicine delivery services when needed.

### Why is it featured in the report?

The integrated business model of HEALTHx, which provides all aspects of telehealth and home health from a single platform, along with technology solutions for physicians and pharmacies, has already been successful in bridging the gap of access to quality primary healthcare in its short period of existence. Providing remote access to qualified professionals has allowed many to avoid the use of unqualified local services, ensuring quality healthcare and reducing expenses through the reduction in repeated health visits and recurring out-of-pocket expenditures.

### India: iKure Techsoft

Primary healthcare model that trains members of the local community to become frontline health workers to deal with the shortage of qualified medical staff and inadequate public health expenditure in India.

### What is the challenge?

Eighty percent of healthcare facilities are located in urban areas, but almost 70 percent of Indians live outside the largest cities and lack easy access to primary healthcare. iKure aims to bridge the gaps by delivering affordable, accessible, and quality primary healthcare to underserved communities across India, primarily in rural areas.

There are numerous critical factors within the context of the Indian healthcare system. Primarily, a lack of public health expenditure, at just 1.29 percent of gross domestic product (GDP) in 2019–20 compared to the typical figure of over 10 percent in high-income countries and

a dearth of qualified medical staff. The doctor-to-patient ratio remains very low, at 0.7 doctors per 1,000 people, under the minimum WHO recommendation of one per 1,000 people.

### What is the case study?

iKure is a population health management company that meets primary healthcare and prevention needs through a unique combination of health outreach initiatives, skills development, and technology intervention. The company was founded by Sujay Santra in 2010. iKure's health management services span preventive, promotive, and curative aspects of healthcare. The company mainly focuses on addressing the primary healthcare needs of rural populations in India.

iKure delivers its services through an innovative hub-and-spoke model, where it sets up rural health centres ('hubs') that are resourced with qualified doctors, nurses, and paramedical staff. This is then supported with 'spokes', which use community health workers at the village level. This model strategically fits into the resource constraints of rural settings

where the distance between patients and healthcare providers is reduced through coordination at a local level with ground partners such as self-help groups and NGOs. In this way, community health workers based at the spokes get the support they need from qualified healthcare professionals based in the hubs.

iKure initially provides employees with a fixed salary that decreases incrementally over the first two years. After this period, the employees transition to a self-sustaining model by charging a nominal fee to the community for their services.

Two digital tech platforms have allowed for the expansion of the programme. iKure's population health management system is used for maintaining and tracking the care plan of the patients through apps for use by iKure's community health activist workers, Accredited Social Health Activists (ASHAs), auxiliary nurse midwives, patients and their families, and doctors. Meanwhile, their telemedicine solution enables remote access to consultations with physicians, providing a level of coverage for those who live in areas where healthcare infrastructure is inadequate.



iKure Community Health Activists (iCHAs), India.  
Source: iKure Techsoft.

### What is the impact?

iKure was able to address the challenge of inadequate and inaccessible primary healthcare for the last mile using digital technology. It has impacted nearly 20.7 million people and covers 6,400 villages across twelve states in India.

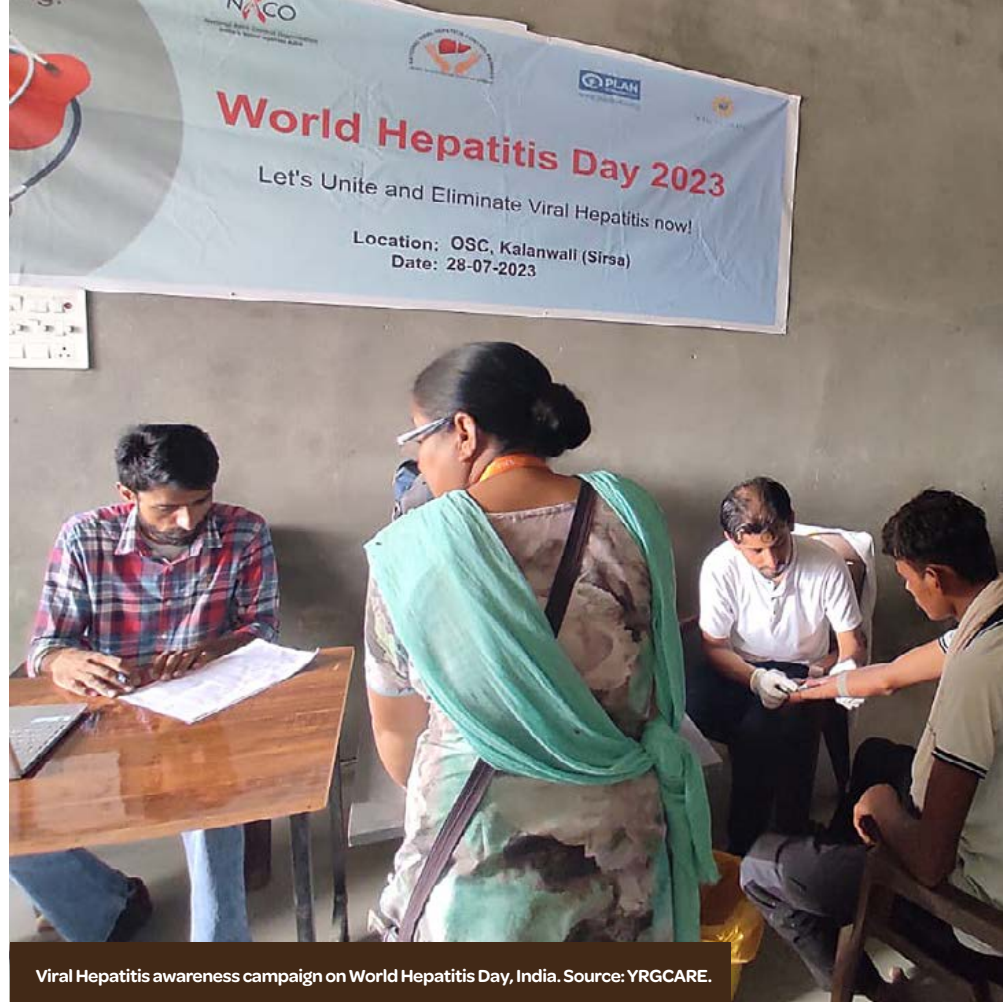
iKure has empowered community health workers through more than 8,700 self-help groups and trained over 4,000 frontline health workers (FHWs), including the government's ASHA workers and the auxiliary nurse midwives. iKure is committed to enabling 200,000 FHWs to provide accessible and affordable primary care to achieve population-scale impact across India. It has empowered women by providing the capacity and skills to earn their livelihood locally and contribute to developing grassroots healthcare services.

They have, however, acknowledged a limitation in terms of scale. While they have made progress, iKure could reach only a fraction of the population when 70 percent of Indians lack primary healthcare in rural villages given the vastness of the country.

### Why is it featured in the report?

iKure's primary healthcare model utilises scarce local resources to become a driver of change. People living in the community are trained to become frontline health workers who are deployed strategically to serve communities that need them. In common with many other low- and middle-income countries, India's public health infrastructure has critical gaps, such as the shortage of qualified medical staff and inadequate public health expenditure.

iKure's community health worker model acts as a catalyst to create transformational change in primary healthcare with the ability to co-create solutions in a sustainable manner.



Viral Hepatitis awareness campaign on World Hepatitis Day, India. Source: YRGCARE.

**What started as a single clinic has now expanded across the country and now has over 1,000 employees in 28 Indian states. It has provided care for over 150,000 individuals across India, reaching 50,000 orphaned and vulnerable children.**

YRGCARE - INDIA

### India: YRGCARE

Foundation dedicated to supporting individuals facing the risk of or living with HIV and associated diseases.

#### What is the challenge?

The foundation was formed during a time when HIV was not widely understood and discussing it was considered a societal taboo. There arose a critical need to connect with individuals affected by HIV and work towards preventing new infections.

Healthcare infrastructure is often lacking in remote areas of India. HIV infections and

associated infectious diseases, such as tuberculosis and viral hepatitis, may spread with little public awareness. This not only poses a risk of allowing the disease to progress but also for the individual living with HIV to unknowingly pass on the disease.

#### What is the case study?

YRGCARE has crafted a multifaceted approach to address the complexities of the HIV/AIDS landscape. With time, it has meticulously refined its interventions, forging effective models in prevention programmes, laboratory services, and care and support initiatives. These accomplishments have garnered global recognition, endorsed by prominent



organisations like UNICEF, WHO, and the Red Cross. The organisation's overarching vision sees a world where individuals living with HIV and AIDS, along with their families, can access care and live with dignity, while the aspiration is to eradicate new infections entirely. Guided by this vision, its mission is to bridge the gap for those who lack access to essential care, support, education, and vital information regarding HIV awareness and prevention.

YRGCARE's approach centres on reaching those who often remain underserved in the context of HIV/AIDS services. The organisation prioritises providing prevention, care, treatment, and support to individuals with limited resources, in marginalised communities, and on the fringes of society. This commitment to extending essential services to those in need underscores the organisation's significant contribution to reducing health disparities and promoting inclusiveness in healthcare.

With a vision to establish a foundation dedicated to supporting individuals facing the risk of or living with HIV, YRGCARE initiated a day clinic in Chennai with a strong focus on counselling. Over time, this initiative evolved into a comprehensive

clinic serving more than 10,000 patients, equipped with a cutting-edge laboratory and a nationwide footprint in implementation research and programme execution. What began as a modest counselling centre for those vulnerable to HIV has grown into a substantial organisation with well-defined sustainability strategies.

From 1993 to 2009, it was largely associated with an inpatient facility for HIV patients, a proficient laboratory, and a walk-in clinic. Occasional prevention efforts were conducted in schools and communities. Since 2009, this scope has expanded beyond Chennai, and by 2023, the institution had extended its reach to encompass most of the country. It has also expanded its scope to include HIV-associated diseases, such as tuberculosis and viral hepatitis.

#### What is the impact?

YRGCARE's impact has expanded extensively, and it now operates across almost 30 Indian states and Union Territories (UTs). It has established over 850 micro venues for direct stakeholder interaction. The foundation receives vital backing from key supporters, including the United States Agency for International Development (USAID), the NIH, the Global

Fund to Fight AIDS, Tuberculosis and Malaria, and various other supporters. The foundation's operational framework boasts well-equipped human resources, modern electronic systems for data management, rigorous compliance protocols, and robust administrative controls overseen by a board of trustees, an institutional review board, and more than ten community advisory boards.

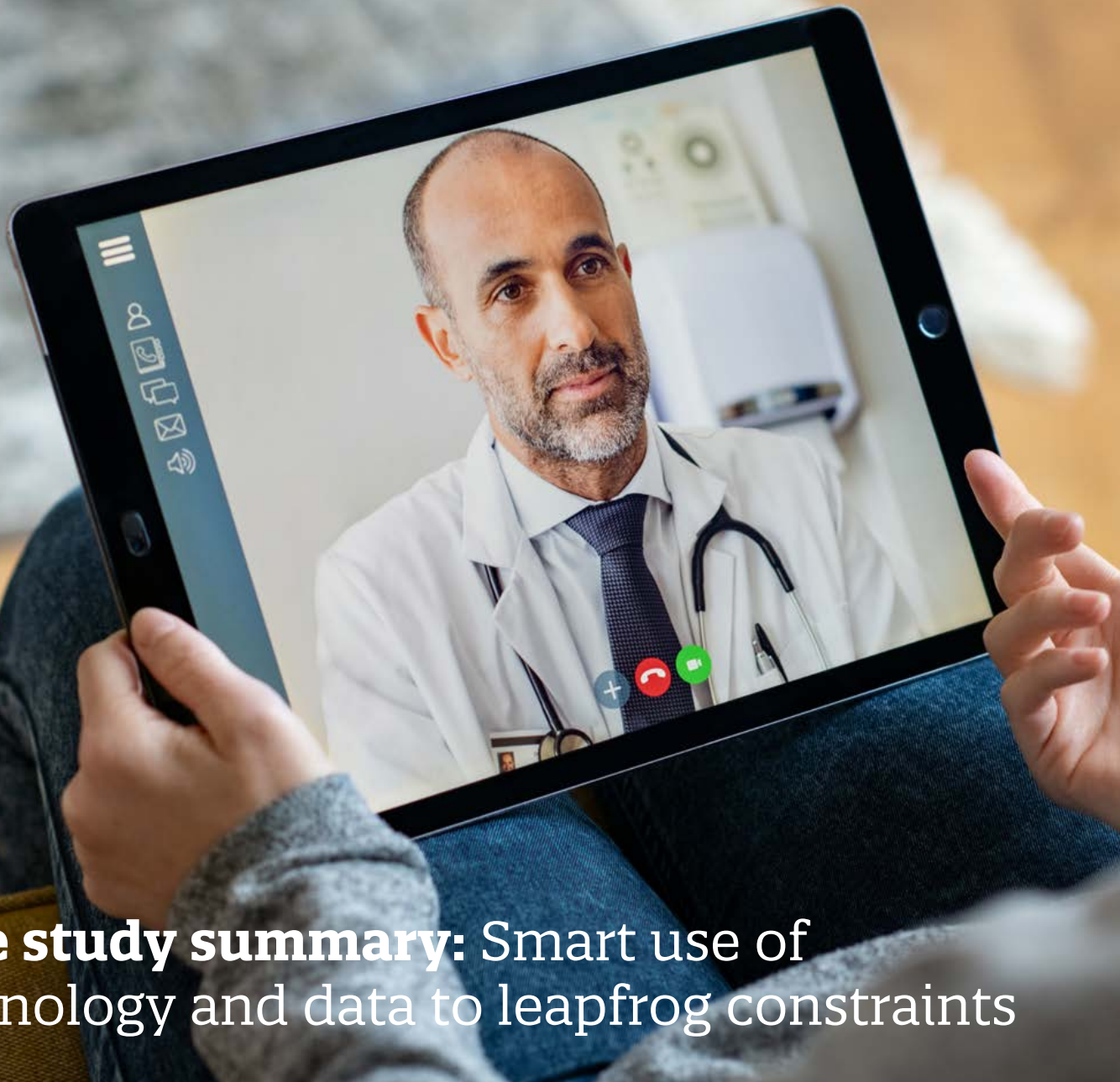
What started as a single clinic has now expanded across the country and now has over 1,000 employees across India. It has provided care for over 150,000 individuals across India, reaching 50,000 orphaned and vulnerable children and enhancing the capabilities of countless civil society partners through counselling and training to provide assistance to those living with HIV and associated diseases.

#### Why is it featured in the report?

YRGCARE is a pioneering organisation established in India by a team of local individuals who tailored their efforts to the unique cultural context. At its inception, there was a lack of existing case studies or knowledge sources to guide their understanding. The transformation of the organisation into a highly valued institution is a testament to the dedication of the core team.



In India, as in globally, a challenge is to ensure that those living with HIV/AIDS receive care and live with dignity. Source: Getty Images/Gideon Mendel.



## Case study summary: Smart use of technology and data to leapfrog constraints

### Morocco: DabaDoc

Online platform for doctor appointment booking and video medical consultations.

#### What is the challenge?

Populations in Morocco encounter great difficulty in accessing doctors due to the regular unavailability of assistants and crowded offices due to poor patient management.

Like many African countries, Morocco suffers from a shortage of healthcare

professionals due to insufficient training of medical staff and the emigration of healthcare professionals to high-income countries. According to WHO, in 2017, the number of physicians in Morocco was 0.7 per 1,000 population, whereas the threshold recommended by WHO to achieve universal health coverage was 4.45 per 1,000.

#### What is the case study?

DabaDoc developed an online platform allowing instant doctor appointments by streamlining the patient-doctor relationship. The platform was launched in

2014 by sibling cofounders Zineb Drissi-Kaitouni and Driss Drissi-Kaitouni with the aim of helping democratise access to healthcare and is now the largest online booking platform for doctors in Africa.

Video medical consultations were launched by DabaDoc in Morocco in March 2020 in the midst of the pandemic. These were quickly adopted by both patients and doctors as a timely alternative to limit the spread of COVID-19. In March 2022, DabaDoc and Orange launched the DabaDoc Consult service in Morocco, allowing the diaspora residing in Europe and the United States to instantly pay for video



medical consultations for their relatives living in Morocco with doctors based in Morocco, by using an online payment service provided by Orange.

DabaDoc is scaling up to other countries across Africa by joining forces with global partners. Orange Santé, a collaboration between Orange and Dabadoc, was launched in Cote d'Ivoire in 2022 to provide a management tool to healthcare centres that allows them to digitise the management of their centre, from making appointments online to creating digital health records. The platform provides member health professionals with visibility,

better patient flow management, and planning optimisation.

The company is also expanding its portfolio to meet the needs of specific populations. In December 2022, DabaDoc launched DabaDoc Corporate—a service focusing on occupational health in large corporations. Current clients include Orange, Axa Maroc, and Ittijari Wafabank. They also launched the service DabaDoc Mind, which enables patients to book video consultations with psychotherapists. This service is also available for employees through DabaDoc Corporate.

#### **What is the impact?**

This platform, initially intended to manage the health processes and records of healthcare professionals and digitise the patient's journey, has also made it possible to digitise the medical files of patients and offer a reliable and secure platform for video consultations with doctors who have opted for this pioneering tool.

As of July 2023, nearly 12 million people used the platform to schedule appointments with more than 10,000 healthcare professionals across more than 100 specialities. The platform is currently used in four African countries: Algeria, Cote d'Ivoire, Morocco, and Tunisia.

#### **Why is it featured in the report?**

Through its expansion beyond Morocco, DabaDoc shows its flexibility to evolve within heterogeneous health systems by adjusting its services to their specific needs. The model adopted in Côte d'Ivoire serves health centres, whereas in Morocco, the services are directly offered to doctors.

DabaDoc Consult aims to improve access to qualified healthcare professionals in resource-limited settings by allowing digital recordkeeping and communication

between patients and doctors across a number of African countries. This has enabled lower-income populations to access health services from practitioners in the private health sector despite being in isolated settings or even no longer in their country of origin. The programme facilitated a continued doctor-patient relationship even during the pandemic while removing the chances of COVID-19 transmission by utilising digital communication.

### **Morocco: National Programme of Telemedicine**

Telemedicine solution for regions isolated from health services.

#### **What is the challenge?**

A study carried out by the Mohammed VI University of Health Sciences (UM6SS) showed that Morocco has more than 160 municipalities isolated from health services, including 123 in a situation of critical isolation.

#### **What is the case study?**

The Moroccan Society of Telemedicine (SMT) was created in June 2018 to address the issue. Its mission is to set up a technological platform to provide teleconsultations and promote telemedicine activities. The university provides these remote consultations through its faculty and doctors trained in teleconsultation practices.

The project is carried out within the framework of a public-private partnership (PPP) involving various actors, including the Ministries of Health, Interior, Vocational Training, National Education, and Scientific Research, and the medical services under the General Inspectorate of the Royal Armed Forces, as well as UM6SS.

The deployment of the initiative started in October 2018. Due to a shortage of funding, it was paused in October 2022.

### What is the impact?

By the end of 2022, it covered 16 areas that were spread across Morocco. The initial phase, which involved deployment at five sites, was intended to test the concept of telemedicine in landlocked rural areas and aimed to capitalise on real experience in the field. This allowed for the launch of 35 pilot sites. The second stage, which was affected by the funding squeeze, was planned to involve regional hospitals



**The initiative aimed to cover 80 percent of regions that did not have access to adequate healthcare in Morocco by 2025 by reaching 1.3 million inhabitants across 123 municipalities.**

NATIONAL PROGRAMME OF TELEMEDICINE - MOROCCO

In Morocco, many remote areas lack access to adequate healthcare. Source: Getty Images/Bulent Kilic.

under the Ministry of Health, which would play the role of regional telemedicine hubs distributed over the national territory.

Doctors from these hospitals would ensure future teleconsultation activities, allowing Mohammed VI University to be a national hub and its medical staff to dedicate itself to tele-expertise for cases that require it.

Data from the programme indicated that, in 80 percent of cases, remote consultations were sufficient to make a diagnosis and treat the patient, so the majority of patients no longer need to go to other sites to complete their treatment using an in-person appointment.

The initiative aimed to cover 80 percent

of regions that did not have access to adequate healthcare in Morocco by 2025 by reaching 1.3 million inhabitants across 123 municipalities.

While the programme had ambitions to scale up to incorporate further areas of Morocco suffering from a lack of access to healthcare, it has not expanded beyond the pilot phase due to lack of funding.

### Why is it featured in the report?

Data from the programme highlighted that, in 80 percent of cases, remote consultations were sufficient to diagnose and treat a patient. This real-world data is useful in promoting the uptake of digital health technologies in other settings.

**Vietnam: IVIE by ISOFH**  
Digital platform designed to improve access to doctors online anytime, anywhere.

### What is the challenge?

In Vietnam, many individuals, especially from rural areas, will travel considerable distances and wait for extended periods of time at large hospitals in the cities, even in cases when a disease may have been better managed at a local level.

### What is the case study?

IVIE is an application that is free to download and helps connect patients with healthcare



providers anytime and anywhere. In 2019, the digital platform was granted the first business registration licence by the Hanoi Department of Planning and Investment with the aim of providing ongoing care for patients after they have been discharged from the hospital.

IVIE began when founder Ta Thi Van Anh saw a photograph of a large queue outside one of Vietnam's leading hospitals at 2 a.m., including people who had travelled more than 200 kilometres to access healthcare. Van Anh has worked in the health system for more than 20 years and understands that the system is very challenging for those living outside large cities. With this knowledge, she set about creating a digital platform to improve access.

The IVIE Digital Health Ecosystem plays an important role in connecting health stakeholders such as people and communities to hospitals, doctors, nurses, and pharmacies, thus helping reduce pressure on hospitals and increase convenience and access. The programme also helps medical staff save time in making diagnoses and treatments by enabling video consultations through the app.

### What is the impact?

IVIE has overcome many challenges and has now won several national awards and cooperated with more than 50 medical facilities from the central level to local clinics and hospitals. Their testing centre accompanies more than 2,000 doctors across the country and gives thousands of patients access to a modern medical diagnostic service.

### Why is it featured in the report?

Like many other countries, Vietnam suffers from a lack of access to healthcare in rural settings. The IVIE Digital Health Ecosystem has demonstrated that, by

bringing together stakeholders and related professionals, a digital system can help to improve access to those who would otherwise struggle to avail healthcare.

**Vietnam: The Electronic Health Book application**  
Health management app on patients' smart mobile devices to help medical staff grasp the patient's health situation and diagnose and treat them more easily.

### What is the challenge?

Larger healthcare facilities in Vietnam are centralised to major cities. The bulk of the population is served by smaller clinics, making centralisation of health records difficult, particularly when dealing with rapidly evolving issues such as the COVID-19 pandemic and the sharp rise in non-communicable diseases (NCDs) in Vietnam.

### What is the case study?

The Electronic Health Book is an application launched by Vietnam's Ministry of Health in July 2021 that helps manage health information on smart mobile devices. A user's health information is stored in the application and directly connected to the personal health record system of the Ministry of Health. In this way, medical staff can easily access the patient's health information and diagnose and treat patients more easily. The privacy and confidentiality of health data in Vietnam, including information stored in the Electronic Health Book, are addressed through a combination of national laws and regulations. In April 2023, Vietnam implemented its first comprehensive data privacy law, Decree No. 13/2023/ND on the Protection of Personal Data.

Launched during the pandemic, the Electronic Health Book app helps citizens track their history of COVID-19 vaccination and related health conditions. Through the app, each Vietnamese citizen who has been vaccinated is provided an electronic Certificate of Immunisation accessible through a QR code, accompanied by a certificate of vaccination against COVID-19, in accordance with the regulations of the Ministry of Health.

Initially developed in response to the pandemic, the aim was to develop the app so that it acted as a patient-held health record which would also provide health advice. It supported people to be proactive in monitoring and preventing disease and taking care of their own health. The health record enables patient to provide doctors with a quick, accurate, and complete health record, medical history, and medical examination and treatment process, facilitating diagnosis and treatment by physicians.

The Electronic Health Book provides physicians with the complete information about the illness, medical history, and risk factors affecting a patient's health, allowing doctors to make a comprehensive assessment. This allows timely and more accurate diagnosis, earlier detection of disease, and timely treatment when the disease is still at an early stage, reducing the cost of medical examination and treatment of each citizen. Moreover, when information about the patient's health is transparent at all levels, it will aid better diagnosis and coordinate treatment.

### What is the impact?

By March 2022, there were more than 30 million downloads of the Electronic Health Book app, covering nearly 88 million vaccinated people. The Electronic Health Book was aiming for AI integration and big data technologies to provide

warnings to patients based on their medical history data. However, the technical challenges associated with an app led to the government deciding to curtail development of the app in favour of a more conventional electronic health record that is stored at health centres and hospitals.

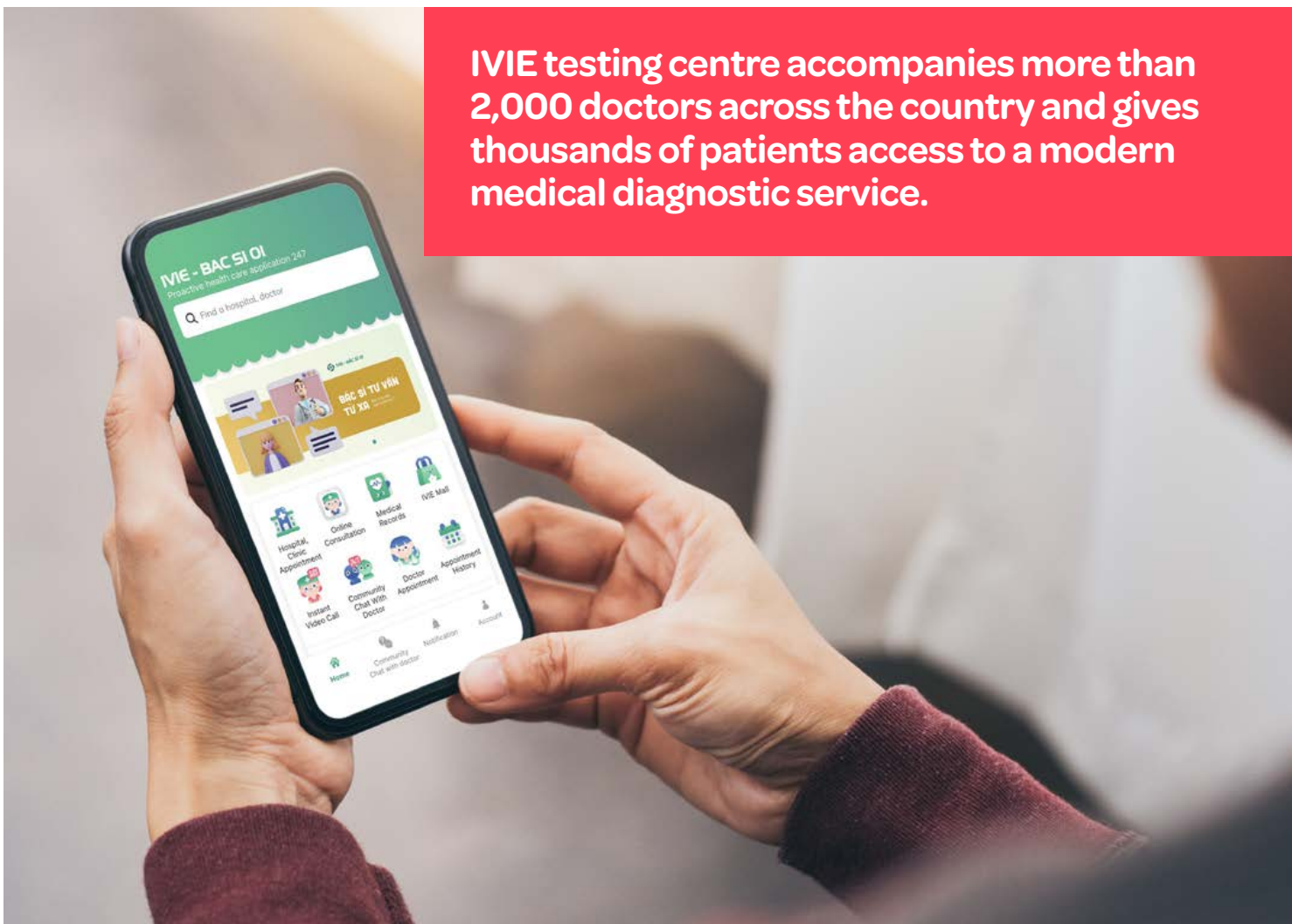
### Why is it featured in the report?

In late 2021, downloads for the Electronic Health Book app surpassed those of TikTok and YouTube to become one of the most popular apps in Vietnam.

It is demonstrative that government programmes to rapidly digitise health records can enjoy a tremendous degree of success. The app holds a great deal of potential, allowing doctors a more streamlined process in dealing with patients and allowing patients to manage their own conditions better.

However, there are significant challenges associated with a secure patient-held medical record on a smartphone. Part of the reason for discontinuing development was the need for healthcare staff to

update data frequently. This applied even to its most basic task of recording COVID vaccinations; while the percentage of people in Ho Chi Minh City who had been vaccinated with the second and third doses was almost 100 percent, the app recorded this as only 65–75 percent. This was due to the sheer volume of people being vaccinated, with healthcare staff being overstretched and too busy to input data during the pandemic. The app also excluded a significant percentage of Vietnam's population (around 15 percent), who do not own a smartphone.



## REFERENCES

- (1) SDG-3: Ensure healthy lives and promote well-being for all at all ages.
- (2) Refers to middle-income individuals and families experiencing financial strain due to the costs of essential goods and services (e.g., healthcare, education, and housing) rising faster than their incomes. This group's financial pressures are compounded by job insecurity and challenges in saving for retirement. Estimates of the extent and definition of the middle class vary, with some analyses considering changes in income distribution, job security, and the ability to afford big-ticket expenses as contributing factors to the squeeze on the middle class.
- (3) For the purpose of this report, HTCs are low- and middle income countries with high loads of both communicable and non-communicable diseases, putting pressure on the health system due to multiple transitions (epidemiological, nutritional, economic, and demographic) involved.
- (4) D. Jamison et al., "Global Health 2035: A World Converging Within a Generation," *Lancet* 382, no. 9908 (2013): 1898–1955, [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(13\)62105-4/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(13)62105-4/fulltext).
- (5) Center for Global Development, "The Future of Global Health Spending Amidst Multiple Crises," January 17, 2023, <https://www.cgdev.org/publication/future-global-health-spending-amidst-multiple-crises>.
- (6) Global Economic Prospects - January 2024: Press Release," World Bank, last modified January 9, 2024, <https://www.worldbank.org/en/news/press-release/2024/01/09/global-economic-prospects-january-2024-press-release>.
- (7) A. Vines, C. Butler, and Y. Jie, "The Response to Debt Distress in Africa and the Role of China: Exploring Solutions to African Debt Distress Through Multilateral Cooperation," Chatham House, 2022, <https://doi.org/10.55317/9781784135201>.
- (8) Christoph Aluttis, Tewabech Bishaw, and Martina W. Frank, "The Workforce for Health in a Globalized Context – Global Shortages and International Migration," *Global Health Action* 7, no. 1 (2014), 10.3402/gha.v7.23611.
- (9) C. Lloyd, "Private Complaints and Public Health: Richard Titmuss on the National Health Service - Edited by Oakley, A. and Barker, J.," *Sociology of Health & Illness* 29 (2007): 476–77, [https://doi.org/10.1111/j.1467-9566.2007.1004\\_3.x](https://doi.org/10.1111/j.1467-9566.2007.1004_3.x).
- (10) Operation ASHA," *Social Innovation in Health Initiative*, <https://socialinnovationinhealth.org/case-studies/operation-asha-2/>.
- (11) World Health Organization, "Substandard and Falsified Medical Products," January 31, 2018, <https://www.who.int/news-room/fact-sheets/detail/substandard-and-falsified-medical-products>.
- (12) J. Uddin et al., "Impact of Mobile Phone-Based Technology to Improve Health, Population and Nutrition Services in Rural Bangladesh: A Study Protocol," *BMC Med Inform Decis Mak* 16, no. 1 (2017): 101, 10.1186/s12911-017-0502-9.
- (13) "Over 92% of Vietnam's population covered by health insurance: VSS," *Vietnam+*, accessed January 20, 2024, <https://en.vietnamplus.vn/over-92-of-vietnams-population-covered-by-health-insurance-vss/246914.vnp>.

## IMAGE CREDITS

Getty Images/William Campbell: page 30/31.  
 Getty Images/Noah Seelam: pages 32.  
 Getty Images/NurPhoto: 45.  
 Getty Images/Gideon Mendel: 53.  
 Getty Images/Bulent Kilic: 56.  
 Shutterstock: pages 1, 8, 12, 16, 18, 24/25, 28/29, 35, 38, 54/55, 58.  
 Baby1: page 26.  
 CCMDD/Dablapmeds: pages 15, 26, 46.  
 DabaDoc: page 36.  
 HEALTHx: pages 12, 50.  
 iKure Techsoft: pages 5, 6, 22, 34, 51.  
 IVIE app: page 58.  
 Unjani Clinic: pages 9, 19, 48, 49.  
 YRGCARE: pages 39, 52/53.

# Laying the foundations

for a fairer, healthier future



For more information about this report, please visit our dedicated webpage to **Health Equity and Inclusion in Action** on the Observer Research Foundation's website: [www.orfonline.org/HEinAction](http://www.orfonline.org/HEinAction)

Date of publication: February 2024