

Contents

- Preface
- **Acknowledgements**
- What is the Index?
- Methodology





20 Enabler 1 Stakeholder Support & Adoption

28 Enabler 2 Consumer & Patient **Empowerment**

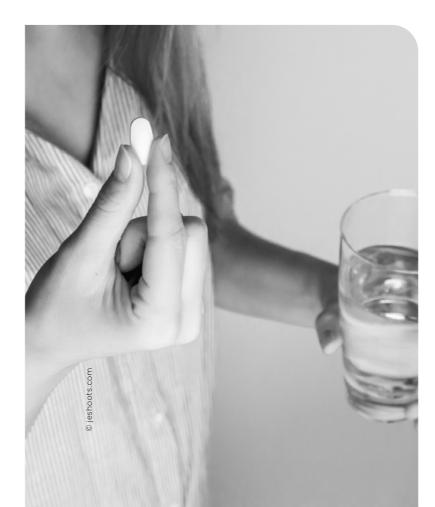
36 Enabler 3 Self-Care Health Policy

42 Enabler 4 Regulatory Environment



47 Country Narratives

- 48 Brazil
- 52 China
- 56 Egypt
- 59 France
- 63 Nigeria
- 66 Poland
- 70 South Africa
- 74 Thailand
- 77 United Kingdom
- 83 United States





87 Appendix

- 88 Appendix A: Interviewees
- 92 Appendix B: Self-Care Readiness at a Glance
- 93 Appendix C: References

Preface

The Self-Care Readiness Index is an advocacy-centered research initiative spearheaded by the Global Self-Care Federation, as part of a broader three-year collaboration with the World Health Organization supporting the implementation of the WHO 2014-2023 Traditional Medicine Strategy.

Its methodology and findings were developed with input from the World Health Organization's Traditional, Complementary, and Integrative Medicine Unit and the Global Self-Care Federation's Sustainability of Healthcare Systems Working Group. At its core, the Index was developed as a conversation starter. It is intended to serve as a practical tool for self-care advocates and a catalyst for further debate on the importance of self-care. It is an effective tool to improve the long-term sustainability and productivity of health-systems and to enhance individual health outcomes.

The very nature of self-care is multifaceted and far-reaching. Self-care encompasses everything from over-the-counter treatments and oral hygiene products to healthy diets and mindfulness practices. It spans the entirety of the wellness spectrum, from prevention to treatment. To optimize the potential of self-care, it is absolutely necessary to have more support from governments and health systems, and much more patient/consumer empowerment. The complexity of the selfcare landscape renders an empirical and objective measurement of a country's "self-care readiness" nearly impossible. Instead, the Index seeks to provide a snapshot of the self-care landscape across 10 countries at this exact moment in time while also extrapolating to wider themes and recommendations. Indeed, the disruption induced by the COVID-19 pandemic in the midst of the Index research process has shown the importance of increased health literacy, access to remote care, and

overall people empowerment - all elements of successful and self-care ready systems.

The Index seeks to develop an interesting and action-oriented picture of today's self-care landscape through the filter of an analytical and narrative approach. Researchers worked in close collaboration with the Global Self-Care Federation's Sustainability of Healthcare Systems Working Group to identify four crucial enablers of self-care, the four areas that have the strongest ability to influence the uptake of science-based self-care practices and products: stakeholder support and adoption, consumer and patient empowerment, self-care health policy, and the regulatory environment. The research approach focused on translating these theoretical enablers into measurable indicators and contextualized results. The research team defined three or four indicators, or proof points, to support each enabler and thus demonstrate self-care readiness. Researchers gathered evidence for each of the Index's indicators through a combination of desk research, surveys, and expert interviews. Findings across all three of these research modalities were coded on a four-point scale, where responses were assigned a number between one (not self-care ready) and four

In recognition of potential research vulnerabilities across the various research methods - such as lack of available primary evidence, comparatively small survey size, and the possibility of interviewee bias - final, composite outcomes for countries were calculated using a weighted system that assigned more value to objective desk research questions, and less value to more subjective survey results. The researchers sought to further explore and culturally contextualize the self-care landscape in each country through extensive narrative sections. The narratives contain details on self-care readiness that may have fallen outside of the scope of the specific desk-research questions within the Index's scoring rubric.

(exceptionally self-care ready).

While the evaluation methodology allowed researchers to designate an overall self-care readiness "score" for each of the countries in this cohort, the numerical performance

of each country was not the point of the exercise. Instead, the research process and evaluation methodology provide analysts and advocates with a window into today's self-care landscape and illuminate common opportunities for improvement across different contexts.

Interestingly, the Index's findings show that the 10 countries demonstrate a similar level of self-care readiness aggregated scores, with minimal variance and just a little more than one point separating the highest scorer from the lowest. However, when examined at the enabler level, performance is significantly diverse, with a spread of two points between highest and lowest score on almost every enabler. This suggests that the paths to a self-care ready system are as varied, multifaceted, and culturally relevant as self-care itself. It is our hope that countries will learn from one another and draw inspiration from the self-care best practices discussed here.

Acknowledgements

The Global Self-Care Federation is grateful to the many people who contributed to the development of this Index. We are particularly indebted to Dr. Zhang Qi and Dr. Aditi Bana of the World Health Organization's Traditional, Complementary and Integrative Medicines and Integrated Health Services Unit for their vision and leadership in steering this project.

We owe thanks as well to the many experts from around the world who generously shared their insights and time with the High Lantern Group research team (see Appendix A). We also are indebted to the Federation member companies and associations who connected us with these experts and facilitated the interview process.

Finally, we would like to thank the esteemed members of our Expert Advisory Committee for lending their support and wisdom to this effort. Research was conducted by High Lantern Group, together with the compilation of the report.

EXPERT ADVISORY COMMITTEE

Prof. Boyd R, Buser, Clinical Professor of Osteopathic Manipulative Medicine; Chair-elect, Osteopathic International Alliance

Dr. Catherine Duggan, CEO, International Pharmaceutical Federation

Prof. David M, Williams, Professor of Global Oral Health, Interim Lead, Centre for Dental Public Health and Primary Care, Bart's and the London School of Medicine and Dentistry

Darin Zehrung, Global Program Leader, Medical Devices and Health Technologies, PATH

Kawaldip Sehmi, CEO, International Alliance of Patients' Organization

Dr. Mphu Ramatalpeng, Executive, Vice President for Implementation, Clinton Health Access Initiative; Minister of Health of Lesotho; Vice Chair, The Global Fund

Prof. Ronald Eccles, Emeritus Professor, Former Director, Common Cold Centre, Cardiff University School of Biosciences, Cardiff University

OBSERVERS

Dr. Aditi Bana, Traditional Complementary & Integrative Medicine Unit, Department of Integrated Health Services, WHO

4 Self-Care Readiness Index 5

What is the Index?

WHY AN INDEX?

The Index is an advocacy-centered research initiative. At its core, the Index was developed as a conversation starter. It is intended to serve as a practical tool to better understand and recognize what the enablers of self-care are and how to improve them. It also serves as a catalyst for further debate on the importance of self-care as an effective tool to improve the long-term sustainability and productivity of health care systems and aims to enhance individual health outcomes.

The index is intended to serve as a practical tool to better understand and recognize what the enablers of self-care are and how to improve them.

WHICH COUNTRIES?

How were the countries covered by the Index selected?

In an effort to be reflective of global concerns and in line with broader policy conversations on issues such as universal health coverage and the management of non-communicable diseases, the Self-Care Readiness Index includes at least one country per each of the WHO's six regions: Africa, the Americas, South-East Asia, Europe, the Eastern Mediterranean, and the Western Pacific.

Further, in order to be considered for inclusion in the Index, each country had to meet the following set of criteria:

- Included a diverse range of developed and less-developed self-care markets to enable fruitful comparison;
- Demonstrated adequate and accessible documentation on self-care policies and practices to facilitate sufficient measurement within the Index's research framework;
- Have resources available in English to facilitate primary and secondary research efforts.



THEME 1

Self-care, as both a term and concept, is culturally relative and defined in a number of different ways.



THEME 2

Individual empowerment hinges on continued efforts to boost health literacy, having credible, consistent sources of information about self-care, and aligned healthcare providers.



THEME 3

Self-care legislation is common, but disjointed—numerous government strategies, plans, and programs touch on self-care, but few call it by name or paint a coherent healthcare policy vision.



Methodology

GEOGRAPHIC SCOPE

To reflect the diversity of global health systems and approaches, the 2021 Self-Care Readiness Index covers 10 countries, including at least one from each of the World Health Organization's six regions: Africa, the Americas, Southeast Asia, Europe, the Eastern Mediterranean, and Western Pacific. The specific countries were chosen in consultation with WHO experts with an eye to including both developed and less-developed self-care markets. We also selected countries that demonstrated adequate and accessible documentation on self-care policies and practices so as to facilitate primary and secondary research efforts.

With regard to the United Kingdom, there are effectively four different health systems in operation in England, Wales, Scotland, and Northern Ireland. Except where otherwise noted specifically, the UK findings in this report are based on research for England only.

UNITED KINGDOM FRANCE POLAND CHINA UNITED STATES NIGERIA THAILAND SOUTH AFRICA

Click to see countries

DEFINING SELF-CARE

Using WHO's definition (see page 10) as a jumping-off point, self-care as defined in this report refers to a broad range of activities, practices, and products that individuals can adopt to improve their health and well-being. In particular, self-care involves making healthy lifestyle choices and avoiding unhealthy habits; making responsible use of both prescription and nonprescription medicines; recognizing symptoms of common illnesses and diseases; managing one's own treatment of colds, coughs, and other minor ailments; and self-monitoring, self-testing, and self-management of health conditions. Self-care products may include nonprescription medicines, dietary supplements, vitamins, and simple medical devices and tests designed for home use.

Given this definition, the Self-Care Readiness Index is based on four key enablers - the broad elements needed to realize the full potential of self-care in a given health system:









8 Self-Care Readiness Index 9

HOW WHO DEFINES SELF-CARE

The World Health Organization defines self-care as

"the ability of individuals, families, and communities to promote health, prevent disease, maintain health, and cope with illness and disability with or without the support of a healthcare provider."

The scope of self-care under WHO's definition includes "health promotion; disease prevention and control; selfmedication; providing care to dependent persons; seeking hospital/specialist care if necessary; and rehabilitation including palliative care. Inherent in the concept is the recognition that whatever factors and processes may determine behavior, and whether or not self-care is effective and interfaces appropriately with professional care, it is the individual person who acts (or does not act) to preserve health or respond to symptoms."

WHO sees self-care as "a broad concept which also encompasses hygiene (general and personal); nutrition (type and quality of food eaten); lifestyle (sporting activities, leisure, etc.); environmental factors (living conditions, social habits, etc.); socioeconomic factors (income level, cultural beliefs, etc.); and self-medication. Fundamental principles for self-care include aspects of the individual (e.g., selfreliance, empowerment, autonomy, personal responsibility, self-efficacy) as well as the greater community (e.g., community participation, community involvement, community empowerment)."

WHO states that "supporting self-care interventions has the potential to:

- Strengthen national institutions to maximize efficient use of domestic resources for health;
- · Create health sector innovations, including by catalyzing digital and mobile health approaches;
- · Improve access to medicines and interventions through optimal interfacing between health systems and health care delivery sites." 1



RESEARCH APPROACH

Each of the four enablers is supported by three or four measurable indicators of self-care readiness - which in some cases are broken down into even more concrete sub-indicators or proof points. For each indicator and subindicator, the research team gathered evidence through a combination of extensive desk research, expert interviews, and online surveys of healthcare providers and consumers.

The team interviewed more than 40 people at least two in each of the target countries and in some places as many as a half-dozen or more - including healthcare providers, self-care and public health academic experts/researchers. and policy/regulatory experts from both public and private sectors as well as nongovernment organizations. Each interview ran for 30 to 60 minutes, and most were conducted via videoconferencing platforms such as Zoom or Microsoft Teams; a few interviewees chose to submit their responses in writing. The list of interviewees can be found in Appendix A.

The consumer survey garnered roughly 840 responses and the healthcare provider survey was completed by more than 1,200 doctors, pharmacists, nurses, and other skilled healthcare workers. Both surveys were distributed in English as well as in Chinese, Polish, Portuguese, and Thai, and the healthcare provider survey was also available in French.

All of the research for the Index was conducted in 2020, during the COVID-19 pandemic, which may have had an impact on the consumer survey responses, both in terms of awareness of self-care in general, and diet and exercise behaviors. Undoubtedly, the pandemic has shone a spotlight on the importance of selfcare, gaps in healthcare systems, and the value of health literacy.

SCORING OVERVIEW

All of the research inputs were assessed on a four-point scale, ranging from 1 (not selfcare ready) to 4 (very self-care ready). These preliminary ratings were then weighted to arrive at a composite score for each indicator and, ultimately, a final score for each enabler. Overall, the evidence was weighted as follows: 50% for the desk research; 30% for the qualitative expert interviews, and 20% for the quantitative surveys. Please see Appendix B for the overall country scores.

Because the scoring system is based on a broad combination of factors contributing to self-care readiness, there may be important variations among countries with similar scores. For example, in the UK, a high score may reflect a generally positive approach to NHS England's management of long-term conditions but that doesn't mean the country has made as much progress in terms of self-care for minor ailments.

ASSUMPTIONS AND LIMITATIONS

The scope of this Index is self-care readiness, and the research was therefore focused on identifying factors that may support or hinder the adoption and use of self-care products and practices. The goal is to identify best practices and areas of opportunity for countries to reap the full value of self-care in terms of both healthcare outcomes and economic impact.

Where reliable secondary data was not accessible or does not exist, or for which the source could not be validated, self-reported data shared by experts via surveys or interviews was used for scoring, and scoring assumes the reliability of these experts. Interviews and data collection took place between June and December of 2020. As such, this Index represents a snapshot of each country's approach to self-care and is not meant to represent a comprehensive analysis or critique of national systems.

Lastly, it should be noted that assessing readiness is not a one-time endeavor. This assessment and the indicators upon which it is based may need to evolve over time.

Key Themes and Recommendations



?

Self-care is not a universally well understood concept.



Self-care is multifaceted and multidimensional.

RECOMMENDATIONS

Launch a global advocacy campaign to clarify and align stakeholders around the WHO's single, universally-recognized definition of selfcare to inspire action and unite diverse stakeholders.

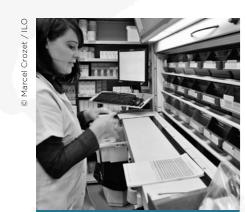
Develop a new global compact on self-care, with the ultimate goal of bringing forward a new World Health Organization resolution on self-care. **Increase** the quantity and quality of self-care information available to consumers.

Educate and **incentivize** healthcare providers on selfcare products and practices.

Scale digital health solutions and the deployment of multidisciplinary care teams.

Forge a broader alliance of self-care advocates to make the case that investments in self-care result in healthier populations and lower costs.

Encourage governments to "connect the dots," ensuring more coherent healthcare policy and regulation across the multitude of strategies, plans, and programs that touch on self-care.



THEME 2



Basic health education remains critical; progress is uneven.



Information available to patients and consumers on self-care products and behaviors is not always accurate or beneficial.



Self-care and a person-centered approach seem to go hand in hand.



Multidisciplinary care teams, deployed at the community level, are best equipped for empowering patients and consumers to engage in self-care activities; low- and middleincome countries have many lessons to share on this approach.



While healthcare workers are interested in advancing self-care, they are often not equipped with the training necessary for best supporting their patients.



THEME 3

\$

Efforts to promote self-care need not cost millions of dollars.



Self-care, when appropriately deployed, has the potential to help solve the world's most pressing macro public health challenges.



There is agreement that self-care is linked to economic efficiencies in health system management, but only a few governments seem sharply focused on capturing this value.



Traditional and complementary medicine is gaining increasing attention from healthcare policymakers and regulators, but its contributions need to be validated and recognized more fully.

12 Self-Care Readiness Index 13

Theme 1

Self-care, as both a term and concept, is culturally relative and defined in a number of different ways.

Self-care is not a universally well understood concept. The term self-care may have different meanings in different countries and, within countries, different meanings to different stakeholders. In some countries, such as Thailand, the term "self-care" is not part of the lexicon (although it is widely practiced), while in others, like the United States, it is used to describe everything from manicures to massages in addition to the health-related practices cited in the World Health Organization (WHO) definition of selfcare. Starting from a shared understanding is critical to ensure effective evaluation of the effect of self-care on health outcomes.1 While most of the countries we studied have launched numerous initiatives to promote healthy eating or encourage self-management of specific medical conditions, there is little being done to link such single-issue campaigns to building a higher-level awareness of self-care and its many components. Also, only a few governments have already made that connection explicit in national healthcare strategies, policies, or programs. The UK is a leader in this regard, though it still has a ways to go toward leveraging self-care for self-treatable conditions and minor ailments.

Self-care is multifaceted and multidimensional. Self-care obviously includes a variety of health-related practices such as good hygiene, behavior change, disease prevention, self-diagnosis, selftreatment, and self-management of different ailments or conditions. But the entire selfcare value chain extends well beyond the health sector. Addressing self-care in a holistic way, therefore, requires coordination and collaboration with stakeholders from other sectors, including food, fitness and sports, education, aging, human rights, and technology.



RECOMMENDATIONS

Launch a global advocacy campaign to clarify and align stakeholders around the WHO's single, universallyrecognized definition of self-care to inspire action and unite diverse stakeholders. Interestingly, today's most significant challenge to self-care readiness is one of semantics. There is no single definition of self-care, nor is there a universal understanding of what sorts of practices and products fall within the scope of self-care. The implications of this are multifold. In some cases, individuals, governments, and care providers are making robust investments of time and resources in self-care-related activities but are not explicitly calling those activities "self-care." In other cases, stakeholders are aware of some components of self-care but not others. This incomplete understanding can leave stakeholders blind to the enormous potential for improved health and decreased expenditure that come along with self-care behaviors. As a result, they are more likely to underinvest in or inadvertently overlook opportunities for health education, awarenessbuilding, and other tools for promoting self-care, which can ultimately lead to better health outcomes at lower costs.

Develop a new global compact on self-care, with the ultimate goal of bringing forward a new World Health Organization resolution on self-care. Self-care advocates have an invaluable opportunity to pair the foundational work of educating the international community on how to think more broadly about self-care with a larger campaign to spur global action. Such a campaign could be packaged as a "global compact" - a formal agreement across policymakers, healthcare providers, industry members, and health advocacy groups to mobilize resources and programs in service of advancing self-care. The compact would ideally do two things: (1) clearly define self-care and the products and practices it represents; and (2) secure commitments for further support of self-care behaviors in recognition of their potential for improving the physical and mental health of populations and easing the burden on resource-constrained health systems. The compact's credibility and long-term feasibility will hinge on the development of indicators that measure the impact of initiatives that encourage self-care - both in terms of financial results and health outcomes. These indicators should be integrated into any new program or policy launched as a result of the compact, and should be tracked longitudinally to demonstrate the impact of self-care on both population well-being and health system costs. Ultimately, the compact should lead to a World Health Organization resolution recognizing the unique value of self-care in managing costs while improving the health of populations.

KEY THEMES AND RECOMMENDATIONS

KEY THEMES AND RECOMMENDATIONS

Theme 2

Individual empowerment hinges on continued efforts to boost health literacy, having credible, consistent sources of information about self-care, and aligned healthcare providers.

Basic health education remains critical; progress is uneven. Some countries have comprehensive school curricula that cover most or all components of health literacy (e.g., chronic and noncommunicable diseases, nutrition, physical activity, sleep, hygiene, substance abuse, mental health, and sexual health). England, for example, made its health curriculum mandatory in 2020, including simple self-care techniques, nutrition, personal hygiene, prevention of health and wellbeing problems (e.g., through exercise and not smoking), and basic first aid.² While this was a positive step. the curriculum does not adequately cover selftreatable conditions, which is a pillar of self-care. Other countries, such as Poland, have not yet marshalled the resources necessary to provide this fundamental health education, or they leave implementation up to local jurisdictions. In some countries, like Thailand and China, pressure to spend more time teaching other academic subjects has deprioritized health education.

Information available to patients and consumers on self-care products and behaviors is not always accurate or beneficial.

Consumers continue to rely on family doctors and other healthcare professionals for medical advice, but often turn to the Internet for health answers and advice. The ease of searching the Internet for health answers is both a blessing and a curse, putting the onus on individuals to differentiate fact from fiction. In some settings, consumers and patients grapple with harmful traditional beliefs and misconceptions in navigating the self-care landscape.

Self-care and a person-centered approach seem to go hand in hand. Our research reveals progress towards making national healthcare systems more oriented toward wellness, prevention, and self-monitoring; this needs

to be encouraged. One example is Egypt, where interviewees cited significant improvements thanks to a variety of public health educational and screening campaigns. Overall, health systems across the 10 geographies tend to do better on the self-management of longterm chronic conditions than on self-care for minor ailments. Across most countries, there is still much work to be done on implementing electronic health records (EHR) - a fundamental step toward empowering patients to take more control of their own health as they allow them to access information about their health and to develop more of a collaborative relationship with their doctor. Our research showed that only China and France have implemented universal EHR systems based on standardized data and protocols. Brazil, the UK, and the US have more decentralized systems but their governments have prioritized EHR integration. Other countries lag well behind.

Multidisciplinary care teams, deployed at the community level, are best equipped for empowering patients and consumers to engage in self-care activities; low- and middle-income countries have many lessons to share on this approach. Bright spots include Thailand's village health volunteer program and South Africa's cadre of community health workers, who bring knowledge about how to manage diabetes, hypertension, and other NCDs to rural areas. And, in many low- and middleincome countries, pharmacists have a fully realized role as members of the patient care team, shifting responsibility away from nurses. Healthcare providers in Brazil, Egypt, Nigeria, Poland, South Africa, and Thailand believe it is possible and (very or somewhat) convenient to be financially compensated for time spent discussing self-care with patients, which is not what we heard from survey respondents in other countries. However, time pressure can make it difficult for healthcare providers to discuss selfcare and educate patients. In Egypt, for instance, the government employs health educators to take pressure off general practitioners (GPs), whose time per patient is limited by the high average number of consultations per day. Our research revealed that GPs in Egypt frequently refer patients to health educators' workshops and information sessions for self-care advice.

While healthcare workers are interested in advancing self-care, they are often not equipped with the training necessary for best supporting their patients. Our research highlighted health professionals' willingness to learn how to better encourage and empower their patients to practice self-care. Some interviewees noted that their own self-care know-how was due more to their own research and experience than to their medical training

or participation in continuing education. Given how medical congress agendas are typically structured, it's unlikely that practitioners will be exposed to best practices in self-care unless they sign up for a conference track dedicated to prevention. Another obstacle is the lack of medical training or continued education around patient empowerment—health education remains widely absent from medical curricula and national guidelines for disease-specific care.

DEFINING HEALTHCARE WORKERS

The Self-Care Readiness Index utilizes WHO's definition of health professionals when referring to healthcare workers: "health professionals study, advise on or provide preventive, curative, rehabilitative and promotional health services based on an extensive body of theoretical and factual knowledge in diagnosis and treatment of disease and other health problems."

Source: www.who.int/hrh/statistics/Health_workers_classification.pdf?ua=1

RECOMMENDATIONS

Increase the quantity and quality of self-care information available. The COVID-19 pandemic has illuminated how important it is to make accurate information easily accessible so people can take immediate steps to protect their own health. In particular, there is an urgent need to create and support high-quality, trusted online channels. The pandemic also highlights the need for an even sharper focus on health literacy, as the more people understand about the links between everyday healthy habits (e.g., good nutrition, oral health, physical activity) and disease, the better equipped they will be to avoid health problems and manage chronic conditions. In some countries, accurate self-care information will not only have to fill knowledge gaps but also address traditional beliefs and misconceptions. To achieve this, information must be available in official, national as well as tribal, local languages. Moreover, ensuring that electronic health records are widely implemented and accessible is key to empowering patients.

Educate and incentivize doctors, nurses, and pharmacists on self-care products and practices.

Doctors, nurses, pharmacists and other members of the care team can catalyze self-care behaviors when equipped with the right tools. Healthcare providers are often stretched thin and may be hesitant to spend time during patient visits on topics that are not included in clinical guidelines or recognized as services deserving of payment. As such, time spent counseling patients on self-care practices – both preventative and treatment-enhancing – ought to be included in national guidelines for well-visits and for the care of noncommunicable diseases, and should be billable and easily submitted to national or private insurers. Further, to enhance clinicians' knowledge of self-care practices and their ability to improve patient well-being, self-care modules should be a standard part of medical school curricula, medical congresses, and other continuing education opportunities. This would help embed and reinforce self-care as a critical element of medical practice. Deploying specially trained health coaches/educators as part of care teams would help patients get essential self-care guidance while freeing up higher-cost resources.

Scale digital health solutions and the deployment of multidisciplinary care teams. There is an opportunity for governments to fully adopt mobile health solutions and encourage consumers to use these applications for improving health literacy and self-care behaviors. Additionally, we noted robust utilization of clinicians such as pharmacists and community health workers in several of the low- and middle-income countries (LMICs) surveyed. This type of care model has the potential for reaching far more patients with messaging and education on self-care.

16 Self-Care Readiness Index Self-Care Readiness Index

Theme 3

Self-care legislation is common, but disjointed - numerous government strategies, plans, and programs touch on selfcare, but few call it by name or paint a coherent healthcare policy vision.

There is agreement among interviewees that self-care is linked to economic efficiencies in health system management, but only a few governments seem sharply focused on capturing this value. The UK authorities, for example, have used studies on the economic benefits of self-care as the basis for policy decisions, recognizing that self-care leads not only to sound financial stewardship of the National Health Service but also to efficient resource management, freeing up doctors to spend more time on complex patient case management. And, private insurers in the US, Brazil, and South Africa - recognizing that increasing self-care can help control costs are offering a variety of incentives to motivate consumers to better manage their own health. In the US, in particular, insurance companies incentivize care providers and health systems to control chronic disease management costs through programs such as wellness counselling and the use of health coaches. Healthcare experts in China, South Africa, Thailand, and elsewhere noted the economic benefits in our interviews, but those countries have yet to fully embrace self-care as a policy priority. In France, the US, and Brazil, efforts to demonstrate the economic value of self-care for the health system are led mainly by industry.





Self-care, when appropriately deployed, has the potential to help solve the world's most pressing macro public health challenges,

including the pursuit of universal health coverage, the prevention and management of chronic conditions, and the provision of highquality care for fast-growing aging populations. While many of the countries we studied seem to recognize the potential for self-care in terms of NCD prevention or management (although they don't always explicitly label it as such), we see opportunities to build institutional capacity to understand and implement the potential of self-care. Initiatives like the UK's NHS Diabetes Prevention Program and the "My Care, My Way" pilot to empower people over the age of 65 represent steps in the right direction. South Africa's Ward-based Primary Health Care Outreach Team (WBPHCOT) strategy exemplifies how community health workers who foster self-care practices can help bridge the gap between remote, disadvantaged populations and healthcare service providers. Examples like these present a policy model for developing countries to leverage self-care in improving health outcomes in low-income, rural communities that face many of the same access challenges and health-worker shortages seen in LMICs.

Efforts to promote self-care need not cost millions of dollars, and often result in cost **savings.** For example, preventing hypertension is a big health priority in many countries, including China. Across that country, but particularly in the northern regions, daily intake of salt is higher than recommended. In order to promote a smaller amount of daily sodium intake, a researcher with China's National Health Commission told us that a salt spoon was distributed to each household, making it convenient to measure actual consumption. In Nigeria, "adherence clubs" represent an interesting and cost-effective communitybased care model that empowers people with hypertension to meet regularly in groups of 10-15 to measure their own blood pressure.³ As mentioned above, countries such as Thailand and South Africa have built cadres of community/village health workers to reach rural populations in a cost-effective way. LMICs have enjoyed particular success in deploying relatively low-cost digital health solutions to promote self-care, pointing to the potential of these interventions.

Traditional and complementary medicine (T&CM) is gaining increasing attention from healthcare policymakers and regulators, but its contributions need to be validated through evidence-based research and recognized **more fully.** In terms of progress toward T&CM oversight and integration with the health system, Brazil, China, South Africa, and Thailand appear to be at the forefront. But even in these countries, healthcare providers and policy experts raised concerns about insufficient scientific evidence and the risk of consumer misuse.

RECOMMENDATIONS

Forge a broader alliance of self-care advocates to make the case that investments in selfcare result in healthier populations and lower costs. A diverse coalition of self-care stakeholders - including employers, self-care industry members, NGOs focusing on issues related to self-care, patient and medical associations, and academics - would be invaluable in garnering government buy-in for harnessing self-care as a powerful tool for reining in healthcare costs while improving health outcomes. Ultimately, the group's work should be aimed at demonstrating the benefits of creating policies and mobilizing resources aimed at enhancing awareness and adoption of self-care behaviors. The argument in a nutshell: Empowering consumers with a mix of self-care educational resources and incentives will make them better equipped to manage their own health, yielding savings for governments and health systems.

Encourage governments to "connect the dots," ensuring more coherent healthcare policy and regulation across the multitude of strategies, plans, and programs that touch on self-care. Self-care, both in concept and execution, is holistic and multi-faceted. It encompasses everything from eating a healthy diet, to using herbal supplements, over-the-counter medicines, and oral care products, to self-monitoring and management of conditions like heart failure and diabetes. As such, the policies and regulations that touch on self-care are incredibly diverse. Ideally, governments should make advancing self-care an explicit strategic healthcare goal and establish clear links between that goal and the many policy and regulatory levers that support increased adoption of self-care behaviors. The optimal approach would be to enact a comprehensive selfcare strategy spanning multiple government departments (e.g., health, public health, education, environment). In addition, policymakers should make self-care related policies stronger through the integration of impact measures. These indicators would equip decision-makers and healthcare providers with the intel to identify best practices in patient empowerment, behavior change, self-diagnosis, self-monitoring, and even self-treatment.

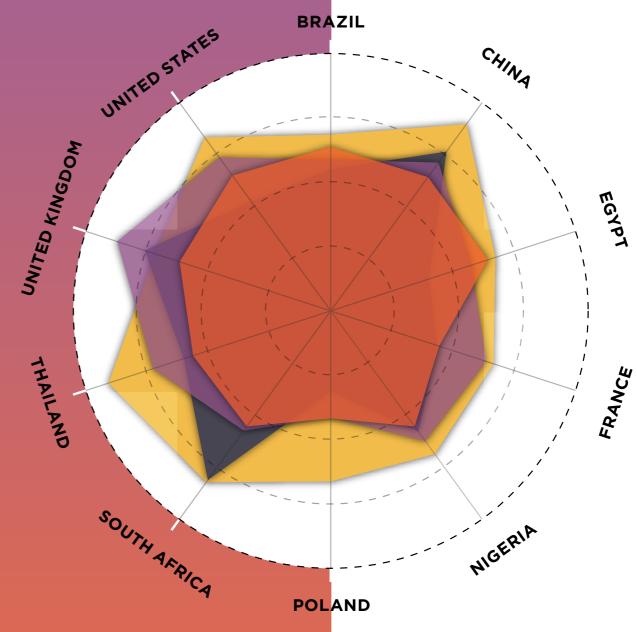
Enabler 1

STAKEHOLDER SUPPORT & ADOPTION

The most important measure of a nation's self-care readiness lies in its people's attitudes and behaviors. To that end, we looked at three key stakeholder segments: healthcare providers, consumers (who are also often patients), and regulators and policymakers. We first considered the degree of trust and support for self-care among healthcare providers and

patients/consumers respectively. Then we sought to measure the extent to which patients and consumers understand the complementary power of medicinal and non-medicinal approaches to self-care. Lastly, we looked for proof that regulators and policymakers have an understanding of selfcare and its benefits for health systems as well as for individuals.





Based on our quantitative and qualitative analyses, stakeholder support and adoption was highest in the United Kingdom, China, and Thailand, and lowest in Poland.

COMPARATIVE SCALE

1 = not self-care ready 4 = exceptionally self-care ready



1.1 Trust in and support for self-care among healthcare providers



1.2 Trust in and support for self-care among patients and consumers



1.3 Understanding of the complementary power of medicinal and nonmedicinal self-care among patients and consumers



.4 Understanding of selfcare among policymakers and regulators

INDICATOR 1.1

TRUST IN AND SUPPORT FOR SELF-CARE AMONG HEALTHCARE PROVIDERS

The extent to which healthcare providers support, value, and adopt self-care products and behaviors, providing useful, accurate information to patients and recommending self-care products for prevention and first-line treatment.

As an objective assessment of whether self-care is part of continuing education for healthcare providers in each country, we examined the official agendas from the most recent congresses of the national associations for cardiology and primary care – specifically looking for sessions on self-care at those events. The United States ranked the highest on this measure, and information was spotty for many countries. As one cardiologist noted, even when self-care is part of the agenda, those sessions are often siloed in a specialized track on prevention and thus not widely attended.

"At cardiology congresses, unless you are following the prevention track, self-care and self-management don't really come up. You have to be predisposed, interested in prevention, to get exposed to best practices in a formal lecture setting."

Dr. Blanche Cupido

Cardiologist, Cardiac Clinic, Groote Schuur Hospital, Cape Town, South Africa

The extent to which self-care practices and patient education and empowerment are embedded in national care guidelines for diabetes offers another good indicator of healthcare provider trust and support. Guidelines in eight of the countries earned top scores in this regard, meaning they contained references to self-care, self-monitoring/assessment or self-management. National diabetes guidelines for Egypt were not readily available online.

A more qualitative perspective came through the healthcare provider survey, which included multiple questions designed to gauge providers' degree of trust and support for self-care.
Across all 10 countries, the majority of providers say self-care is "a core component" of their approach to support patient management. In Thailand, 99% of respondents strongly agreed or agreed with this statement. Likewise, the majority of surveyed providers from all countries agreed that health outcomes improve when patients (1) are empowered with an at-home plan for chronic condition management and (2) safely use over-the-counter (OTC) products as a first-line treatment for appropriate minor ailments.

"Recommendations for self-care practices are the central theme of my care for patients. My treatment is directed to lifestyle medicine - the habits related to health promotion and disease prevention such as healthy eating, regular physical activity and exercise, stress management, avoiding drug use (licit and illicit), constructive relationships, and good quality and quantity of sleep and rest."

Dr. João Paulo de Santanna Pinto Otorhinolaryngologist, Sao Paulo University, Brazil

Responses to other questions, however, were less consistent across the board. When asked how often they recommend that patients undertake the complementary use of self-care products and practices as part of a treatment plan for a specific medical condition, the majority of respondents from all countries, except France and China, say they do so at every visit or often.

Whether or not providers note self-care discussions in their patients' medical records suggests their own level of commitment and the likelihood of follow-up. When asked how often in the past 12 months they have made a note of recommended or reported self-care products or practices in a patient's medical records, respondents in Brazil, Egypt, South Africa, and Thailand say they have done so often or at every visit. Respondents from China, Nigeria, Poland, the UK and US respondents are more evenly split. French providers rarely or never note self-care.

The consumer survey revealed a slightly different perspective based on how frequently the subject of self-care comes up in visits to healthcare providers:

- More than 60% of respondents from all countries except the UK report their healthcare providers speak with them about self-care as part of an ongoing plan for wellness sometimes or at every visit. In the UK, 54% said those kinds of conversations never happen.
- More than 70% of respondents from Poland, Thailand, Brazil, Nigeria, and the US say their healthcare providers speak with them about self-care as part of a treatment plan for a specific medical condition sometimes or at every visit. China, Egypt, France, and South Africa are not far behind. Only 44% of UK respondents say the same thing.

The disconnect between the survey responses from healthcare professionals (HCPs) and consumers suggest that the two groups have different perceptions about what self-care conversations should actually cover and sound like. This suggests the need for more education – for providers and consumers alike – about self-care and how to talk about it.

The rise of telemedicine/virtual care – and the growing acceptance (and reimbursability) of online patient/provider interaction – during the pandemic bodes well for increasing support for self-care among both groups. Adoption of such technology-driven care solutions can increase empowerment – for example, by breaking down (to an extent) the geographic barriers to choosing a provider.

Healthcare providers from France are least likely (relative to their peers from other nations) to recommend specific selfcare products or practices to their patients.

Across all 10 countries, most healthcare providers surveyed say they were never or rarely compensated for telemedicine services over the past year, or that compensation was not possible. However, this likely changed dramatically during the pandemic, as telemedicine visits became a preferred (and reimbursable) option. This bodes well for self-care.

22 Self-Care Readiness Index 23

INDICATOR 1.2

TRUST IN AND SUPPORT FOR SELF-CARE AMONG PATIENTS AND CONSUMERS

The extent to which members of the general public support self-care products and behaviors and view them as their preferred means for prevention and first-line treatment.

To measure consumer trust and support, we looked at social media coverage of International Self-Care Day (ISCD) in 2019 and 2020 and the prevalence of public campaigns on self-care in each country. This provides a good indicator of people's awareness and support of selfcare, and offers comparable data across the 10 geographies, which is otherwise scarce. Not surprisingly, both ISCD coverage and campaign intensity were highest in three countries with active industry associations focused on self-care (Brazil, South Africa, UK).

If self-reported use of self-care products is evidence of consumer trust and support, then the general public seems to be on board. When treating minor illnesses, consumer survey respondents rank using self-care products ahead of consulting healthcare providers. Self-care products are used most regularly as the first and preferred method to deliver relief from pain, coughs, and colds.

Active use of health or wellness applications on smartphones is another indicator of people's interest in practicing self-care. Respondents from China and Nigeria are most keen on such apps, with 88% of Chinese and 62% of Nigerians using at least two of these health or wellness apps regularly. It should be noted, however, that the quality and reliability of health and wellness apps varies widely, and there may be opportunities for trusted healthcare providers and organizations to put their stamp of approval on the better options.

In conjunction with **International Self-Care Day** 2020, Brazil's ABIMIP ran live education programs on social media networks to explain the difference between self-medication and self-prescription, two oftenmisunderstood concepts.

When treating minor illnesses, consumers rank using self-care products ahead of consulting healthcare providers.

Consumers from China and Nigeria report having the most health or wellness applications on their smartphones.



INDICATOR 1.3

UNDERSTANDING OF THE COMPLEMENTARY POWER OF MEDICINAL AND NON-MEDICINAL SELF-CARE AMONG PATIENTS AND CONSUMERS

Evidence that people choose to improve their health through self-care practices.

For this indicator, we researched proxies for healthy behavior in each country, such as consumption of fruit and vegetables and active membership in a sports or recreational organization. We also surveyed consumers about their exercise and dietary habits and their use of other self-care practices and nonmedicinal products linked to healthy outcomes.

Given the rising incidence of obesity and Type 2 diabetes around the world, it's no surprise that most consumers surveyed say they engage in at least 30 minutes of exercise just two or three days a week at best - i.e., less than WHO's guidelines for recommended physical activity.4 Egyptians and Brazilians are reportedly the least active. More than 40% of respondents from Nigeria, the US, the UK, and China say they exercise at least four days a week. According to the World Values Survey, more than 20% of French and UK residents are active members of sports or recreational groups the highest among our target countries.

Several countries - notably France - fund programs to encourage people (especially those diagnosed with diabetes and heart disease) to exercise more. For example, French healthcare providers can write prescriptions for a wide range of physical activities and other healthy practices.

Sticking to a healthy diet every day is hard work, but our consumer survey suggests that people from Nigeria, China, and Poland succeed more often than their peers from other countries. Interestingly, most Egyptian respondents say they eat a healthy diet only weekly at best, yet vegetable consumption in Egypt is the highest among the 10 countries, according to the 2020 Global Nutrition Report, with China and Poland trailing close behind. In terms of fruit consumption, Egypt, Brazil, and Thailand rank highest.

More than 50% of respondents from the UK and South Africa say they have never spoken with their healthcare providers about traditional or complementary medicines. In the other eight countries, these kinds of conversations reportedly happen sometimes but not at every visit.

More than half of consumer survey respondents report using hand sanitizer daily, and more than two-thirds - excluding those from China and Egypt - say they brush their teeth with a fluoride toothpaste every day. More than half of respondents from China, Nigeria, South Africa, Thailand, and the US say they take vitamins, minerals, or supplements more than once a week.

Reliable data on use of T&CM is scarce, so we used media coverage of the benefits of tai chi and gi gong as a proxy for consumer awareness and potential use of these practices - recognizing the obvious limitations of this approach. China, the US, and the UK ranked highest on this measure, with Brazil and France next in line. More detail on T&CM can be found in the country narratives starting on page 47.



INDICATOR 1.4

UNDERSTANDING OF SELF-CARE AMONG POLICYMAKERS AND REGULATORS

The extent to which policymakers and regulators are familiar with the term "self-care" and can articulate its health and cost-saving benefits.

For this indicator, we researched national legislative agendas and discussion records over the past two years to assess whether (and how often) self-care and different aspects of it (self-management, self-medication, health education) are a topic of discussion among policymakers. We also explored whether a government-approved framework or strategy on self-care exists and whether self-care is mentioned in key national health strategy documents - including those related to NCDs in general as well as more specific guidelines for diabetes or cardiovascular disease. Lastly, we looked at whether each country has a national strategy, policy, and/or action plan aimed at boosting physical activity.

Based on our review, themes related to selfcare come up on policymaker agendas most frequently in France, the UK (England), and the US. In seven of the 10 countries - Brazil, China, France, Nigeria, Thailand, the UK, and the US - self-care is directly or indirectly mentioned in at least one key national health strategy document. All countries except Egypt and Thailand have some kind of official effort to encourage people to exercise.

"When you say self-care in the UK, not all people recognize that we mean 'fully supported by the NHS'. To help with this, we use the term 'supported self-care'."

Matthew Cripps

Director of Sustainable Healthcare, NHS England and NHS Improvement, United Kingdom

"In my opinion, education and health in the public system are fundamental. My experience is public health system professionals have little or no knowledge about self-care and lifestyle."

Marcio Atalla Self-Care/Nutrition Expert, Brazil



Enabler 2

CONSUMER & PATIENT EMPOWERMENT

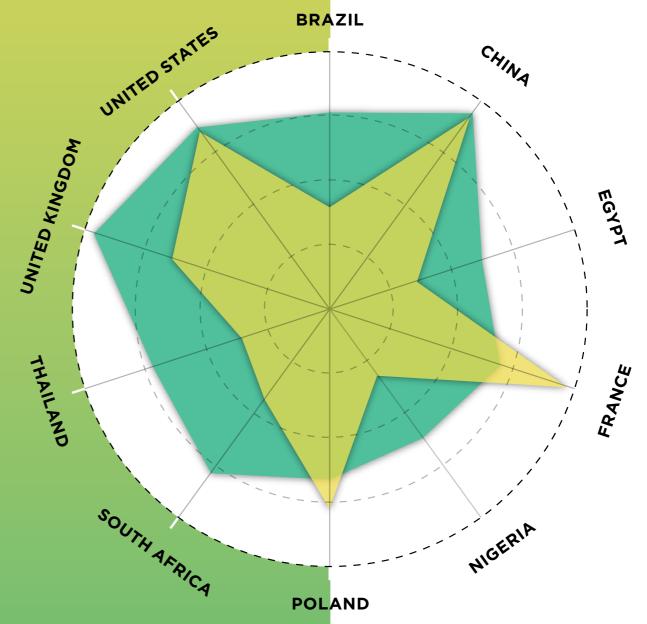
Self-care delivers the greatest patients have a high degree of health literacy, understand the value of disease prevention and management, and feel confident and empowered to make their own health decisions. Studies show that lack of knowledge can result in misuse of valuable healthcare resources. such as unnecessary visits to hospital emergency rooms. While prevention is the gold standard, self-care delivers high value in terms of ongoing selfmanagement of chronic disease - a critical benefit given the rising incidence of chronic disease in many countries around the world.

To assess the degree of empowerment across the 10 countries, we looked at two main indicators: (1) the extent to which individuals can easily access their own health data, which hinges in large part on adoption of EHR, and the inclusion of self-care guidance in those records, and (2) consumer health literacy i.e., the level of understanding of health risks, symptoms, disease prevention factors, and common treatments, including self-care



products and practices. China and the United Kingdom rank highest among the 10 countries on access to personal health records, while Nigeria and Egypt fall at the other end of the scale. China and France top the countries with the best consumer health literacy, again with Nigeria and Egypt at the other end of the scale.

Governments could improve health literacy at scale by making it a public health priority, but they do not always have the incentives or resources to launch broad campaigns or elaborate programs. Yet countries like Thailand have found ways to reach poor rural residents by deploying village health volunteers who are able to build trusting relationships, provide basic health consultations, and teach people about the importance of prevention and self-care. Likewise, South Africa has some 50,000 community health workers (mostly funded by NGOs) doing similar outreach and education. Outreach programs like these seem to offer great promise for LMICs with hard-to-reach rural populations.



"In Brazil, a poor country with many educational and financial difficulties, I would say that people are extremely receptive to information about health yet extremely lacking in it. Empowering people who are trusted by rural, poorer populations and can pass health messages on in a simple and relevant way would be interesting."

Marcio Atalla Self-Care/Nutrition Expert, Brazil

COMPARATIVE SCALE

1 = not self-care ready 4 = exceptionally self-care ready



2.1 Access to personal health data



2.2 Consumer health literacy

INDICATOR 2.1

ACCESS TO PERSONAL HEALTH DATA

The extent to which individuals can easily access their own health data, with self-care products and practices included in health records (paper and electronic) alongside details on prescriptions.

Providing access to EHRs is a fundamental step toward empowering patients to practice self-care. This is no simple task, however; health systems must first overcome barriers related to privacy, security, interoperability, and data integrity - a challenge most easily accomplished when EHRs are connected to a single national system. Among our 10-country group, only China and France have "universal EHRs" i.e., systems based on standardized data and protocols that can be accessed, used, and updated by actors across the healthcare spectrum.⁵ Brazil, the UK, and the US have more decentralized health systems but their governments have prioritized the integration of EHRs, albeit with varying success. Poland has an eHealth strategy based on the Digital Agenda for Europe⁶; while there is little evidence of implementation online, Polish respondents to our consumer survey suggest positive results.

In Thailand, the government is working on a unified health data platform with a standardized EHR system, but this effort is still in the early development phase. Egypt, Nigeria, and South Africa either do not have substantive, up-todate EHR strategies in place, or they have been unable to move past the planning stages.



30 Self-Care Readiness Index

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Most respondents to our consumer survey said they do not have digital access to their personal medical records. The three exceptions were the US, where nearly two-thirds of respondents reported having digital access, and China and Poland, where 56% responded positively.

INDICATOR 2.2

CONSUMER HEALTH LITERACY

The extent to which a country's government systematically strives to improve the health literacy of its people, and the extent to which consumers understand their own health, the risks, symptoms and treatments for common health conditions, and the role that self-care products and practices can play in both preventing and treating these conditions.

WHO's definition of health literacy (see below) makes an explicit connection between empowerment, access to health information and the ability to use that information effectively.⁷ Similarly, the US Health Resources & Services Administration defines health literacy as "the degree to which individuals have the capacity to obtain, process, and understand basic health information needed to make appropriate health decisions."8 The level of health literacy in a population depends on many things - basic literacy, of course, as well as an understanding of health, hygiene, nutrition, and prevention and detection of common conditions. As it relates to self-care. health literacy also refers to the ability of patients to understand medical terminology and the mechanics of the health system in their country - which is more difficult when that system is complex and fragmented.

"Health literacy implies the achievement of a level of knowledge, personal skills and confidence to take action to improve personal and community health by changing personal lifestyles and living conditions. Thus, health literacy means more than being able to read pamphlets and make appointments. By improving people's access to health information, and their capacity to use it effectively, health literacy is critical to empowerment."

WHO Health Promotion Glossary, 1998

To assess health literacy, we researched the extent to which (1) health literacy has been defined as a public health and policy priority; (2) the national school curriculum covers key health and hygiene topics; and (3) the government uses digital channels to communicate health information - particularly relevant in this pandemic year.

Most countries do establish basic health literacy through school health programs. The bestperforming countries have comprehensive school curricula that cover most or all components of health literacy (e.g., chronic and noncommunicable diseases, nutrition, physical activity, sleep, hygiene, substance abuse, mental health, and sexual health).

Only the UK (England) has statutory regulations in place that prescribe the components and implementation of a personal, social, health, and economic education curriculum to local authorities.9 The US, Brazil, and France each has robust sets of health curriculum recommendations, implementation is determined at a local level, resulting in inconsistencies. In other countries such as Egypt, Nigeria, Thailand, and South Africa, establishing schools as a point of access to the healthcare system is a priority over implementing health curricula.

More than half of consumer survey respondents from **China and Egypt - and close** to half from France, Nigeria, and Thailand - said they sometimes, usually, or always had problems understanding written health information.

"In my view, the patient-doctor relationship is more important than health literacy. If patients' trust and confidence in doctors are high, then the adherence rate is bound to be high. On the contrary, if patients distrust doctors or are skeptical of medical advice, the adherence rate won't be high regardless of the health literacy level."

Chief doctor at a community health service center, Beijing, China

More than 75% of consumer survey respondents from all 10 countries say they feel "well-informed and empowered" to undertake their own athome care regimens for preventing illness. At least 50% say the same about managing chronic and acute conditions with self-care. However, there appears to be room for improvement in health literacy campaigns in several countries, notably South Africa and Brazil.

The COVID-19 pandemic has caused a dramatic shift in the way governments communicate health information to the public - a very positive development as it relates to the selfcare landscape. Many government health departments have seized this opportunity to test digital communication channels and have developed mobile apps, are active on social media, or use WhatsApp to communicate directly with people.

According to our healthcare provider survey:

- More than 60% of respondents in all 10 countries agree or strongly agree that most of their patients understand the link between poor diet and diabetes.
- As for patients understanding the link between poor mental health and physical health, only 50-60% believe that's true in most countries, with higher levels of understanding in Thailand, Brazil, and South Africa.
- Providers in Nigeria and South Africa address patient non-adherence to treatment more frequently than their peers from other countries.

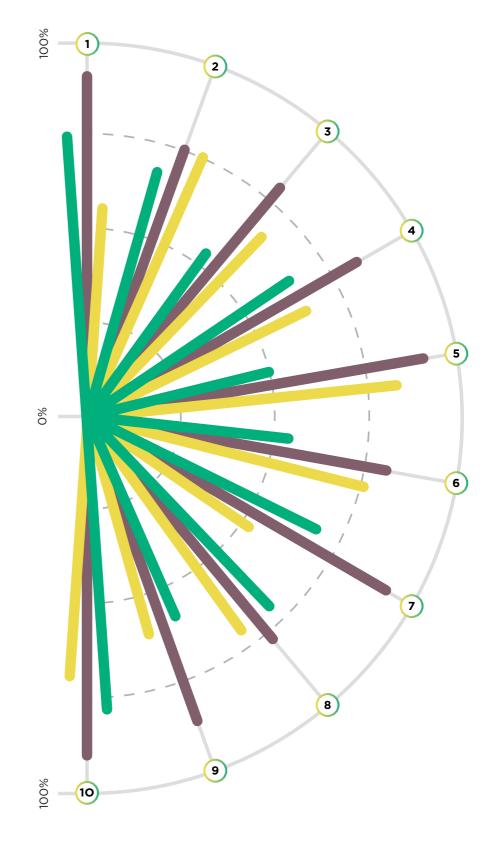
For consumer survey results related to literacy and empowerment, see the graphic on page 33. Interestingly, UK consumers' self-reported confidence in self-care vis-à-vis chronic diseases is comparatively low given NHS England's focus on promoting selfmanagement of NCDs.



CONSUMER EMPOWERMENT VIS-À-VIS **SELF-CARE**

% OF CONSUMER SURVEY **RESPONDENTS WHO** AGREE OR STRONGLY AGREE WITH THESE **STATEMENTS**

- (1) Brazil
- China
- Egypt
- (4) France
- (5) Nigeria
- **(6)** Poland
- South Africa
- Thailand
- United Kingdom
- **United States**



- "I feel well-informed, supported, safe and empowered to undertake my own at-home care regimens for preventing illness."
- "I feel well-informed and empowered to undertake my own athome care regimens for managing my chronic and acute conditions."
- "I feel more educated and empowered to seek out self-care products and practices because of supportive campaigns and programs in my community."

Spotlight on Health Literacy

SPREADING SELF-CARE KNOWLEDGE TO RURAL AREAS

Reaching remote rural populations can pose significant challenges for healthcare policymakers and educators looking to boost health literacy. But experience from both Thailand and South Africa shows that deploying community health workers with a deep knowledge of the local culture and needs can relieve pressure on traditional healthcare resources, complement large-scale health campaigns, and foster self-care practices among potentially underserved populations.

Thailand established its village health volunteer program more than four decades ago to strengthen primary health care through health education and self-care support. The program is overseen by the Department of Health Service Support under the Ministry of Public Health. While the original intent was to support maternal and child health, the program's mandate has expanded to include NCD disease prevention, screening for cervical cancer, and community health promotion campaigns.¹⁰

According to Dr. Suchart Chongprasert of Thailand's Food and Drug Administration, there are more than 1,000,000 such volunteers around the country - local people, sometimes local leaders, who have been trained on how to recognize certain conditions and how to provide basic health consultation. In the event of disease outbreaks, they also represent the community in early warning, surveillance, and rapid response. Dr. Suchart says the program has increased health literacy at the community level, especially during the COVID-19 pandemic.

Similarly, South Africa has a long history of community health worker (CHW) programs. According to estimates from Dr. Nicholas Crisp, a longtime public health specialist, there are around 50,000 such workers currently operating in the country. South Africa's National Development Plan 2030 formally acknowledges the important role of CHW programs in addressing the social determinants of health.¹¹ While these programs were historically implemented and overseen by NGOs, CHWs are increasingly integrated into the country's primary healthcare system.

In 2011, the government adopted the Ward-Based Primary Health Care Outreach Team (WBPHCOT) Strategy to bridge the gap between remote, disadvantaged communities and healthcare service provision. WBPHCOTs are made up of 6-10 CHWs with varying levels of education and skills, who are coordinated by a nurse team leader, and linked to the local primary health care facility via referral, support, and oversight. The revised strategy from 2018 calls for each team to perform healthcare-related functions for approximately 1,500 households by 2024.12 The teams' scope of work adapts to local contexts and the changing burden of disease in South Africa. Over recent decades, it has gradually shifted from a focus on tracing and treating of HIV and other communicable diseases to educating people on the prevention and care of chronic and noncommunicable diseases.¹³ According to Dr. Crisp, CHWs go from door to door to encourage people to look after their health - for example, by spreading self-care knowledge relating to diabetes, hypertension, and other common conditions. While implementation varies widely across districts in South Africa, localized studies show that integrated CHWs can and do improve HIV tracing and treatment,14 maternal and child health and nutrition,15 blood pressure control, 16 and other health outcomes in low-income, rural populations.¹⁷

Spotlight on Innovation in Self-Care

SELF-SCREENING PRODUCTS FOR HUMAN PAPILLOMAVIRUS (HPV)/CERVICAL CANCER

Supporting self-care does more than benefit the health system and the economy of a country. It also empowers patients, which in some cases can indicate a societal and systemic paradigm shift - especially when it comes to women's health issues. For example, significant innovations in human papillomavirus (HPV) self-sampling (HPVSS) are enabling women to monitor their own health and protect their privacy.

The primary cause of cervical cancer is HPV, a common sexually transmitted disease. The standard of preventative care for cervical cancer is a Papanicolaou (Pap) test, a cytologybased screening that requires the right equipment and technicians in order to achieve accurate results. Eighty-five percent of cervical cancer diagnoses occur in LMICs,¹⁸ where high barriers to Pap tests often exist, driven by a range of factors that include cultural or religious traditions as well as limited clinical infrastructure. Fortunately, HPV self-testing is "a valid cervical cancer screening modality," 19 and HPV screenings may also be conducted at home, meaning that women can avoid an intrusive visit to the clinic. This is particularly important if stigma might otherwise prevent a woman from being screened, as is often the case.²⁰

HPVSS is an area ripe for innovation and included in the World Health Organization's 2019 Consolidated Guideline on Self-Care Interventions for Health.²¹ WHO's recommendation notes the importance of linking self-screening results to care as needed and ensuring that testing kits are affordable and accessible. A viable countrywide (or regionwide) model for HPVSS is demonstrated by the STAR (Self-Testing Africa) Initiative for HIV, which has created a phased plan to evaluate products and implement delivery models in Sub-Saharan Africa, including Nigeria and South Africa. As with HPVSS, HIV self-testing is "discreet and convenient, allowing the tester to have control and privacy, and is therefore attractive to people who might not otherwise test."22

Self-screening for HPV is not just an area of focus in LMICs; the Netherlands has studied the HPVSS approach extensively,²³ and it is gaining momentum in the United States.²⁴ Already, there is evidence that self-screening products increase the likelihood that women will undergo preventative screening,²⁵ and the National Cancer Institute is spearheading a study to test the accuracy of HPV homescreening devices, with results expected in 2024.²⁶ Innovation in this area will help give women in both low-income and high-income countries the agency and autonomy to make decisions about their own health.



Enabler 3

SELF-CARE HEALTH POLICY

Building trust among stakeholders and increasing health literacy and digital access to personal health records are good first steps toward increasing selfcare. But if healthcare leaders wish to leverage the full value of self-care, the right policy and regulatory frameworks need to be put in place. This section assesses countries' current health policy vis-à-vis self-care: Do policymakers recognize the economic value of self-care? Are there incentives for patients and providers, respectively, to engage in and encourage self-care? And, given that many self-care practices are rooted in traditional and complementary medicine, in what ways (if at all) does the health system recognize and regulate T&CM?

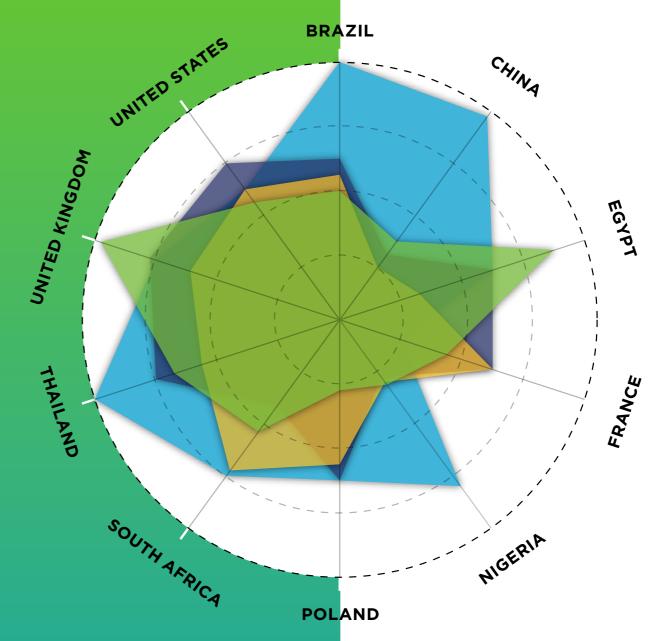
Our research revealed a lack of policy coherence across the multitude of strategies, plans, and programs that touch on self-care. While nearly all of the people we interviewed acknowledged the economic benefits of self-care, governments – with notable exceptions perhaps in the UK and China – do not seem visibly intent on capturing this value.

Lack of money is often a barrier to creating explicit policies, programs, and incentives around self-care, as is the lack of political will. Another potential factor: the payoff from self-care investments and interventions for health system budgets is often hard to see and takes longer to realize than building a hospital or other infrastructure.

Preventing hypertension is a big health priority for many countries. Across China, but particularly in the northern regions, daily intake of salt exceeds recommended levels. A researcher with China's National Health Commission indicated that a salt measuring spoon was distributed to each household, making it convenient for people to measure actual consumption.

"The economic benefits of investing in lifestyle and self-care are undeniable. There are numerous studies showing that for every dollar invested you have an economy at the other end of between six and seven dollars."

Marcio Atalla Self-Care/Nutrition Expert, Brazil



"In my view, self-care has three main economic benefits: it reduces the burden on national healthcare budgets, it allows us to optimize use of healthcare professional resources, and it saves indirect costs and time for patients."

Dr. Suchart Chongprasert
Director of Medicines Regulation
Division, Thailand Food and Drug
Administration, Thailand

COMPARATIVE SCALE

1 = not self-care ready 4 = exceptionally self-care ready



3.1 Recognition of the economic value of self-care



3.2 Policies to promote self-care as affordable health solution



3.3 Provider reimbursement



3.4 Recognition and regulation of T&CM

36 Self-Care Readiness Index 37

INDICATOR 3.1

RECOGNITION OF THE ECONOMIC VALUE OF SELF-CARE

The extent to which policymakers recognize, discuss, and promote the economic value of self-care products and practices for health systems and the economy, including their potential for prevention, better resource utilization, and worker productivity.

To measure this factor, we looked for (1) evidence that policymakers consider the return on investment (ROI) of self-care for the healthcare system and (2) the degree to which national health policy focuses on value for money and patient outcomes.



The economic case for self-care has been put forth by many national industry associations, typically with the focus on capturing savings by shifting from prescription to OTC drugs and by reducing doctor visits, thereby easing the burden on strained national healthcare budgets.²⁷ According to an article published in the Brazilian Journal of Economics and Health (JBES), for example, every \$1 spent on OTC drugs saves \$7 for Brazil's public health system - about the same ratio as observed in similar studies in the US. In the Brazilian case, the responsible use of OTC drugs is calculated to yield net savings of R\$364 million (about US\$117 million), allowing significant funds to be directed to more complex care, treatment of chronic diseases, or the local healthcare infrastructure.²⁸

Still, the UK is the only country in our target group where the government has formally requested studies on the economic benefits of self-care and has taken them into account when making policy decisions. Guidelines published in April 2020 by the National Institute for Health and Care Excellence found that prevention and self-care support interventions conducted by community pharmacists to help people stop smoking or manage their weight are costeffective for the NHS. The same Guidelines recommend further evaluation of prevention and self-care interventions to showcase their medical and financial effectiveness.²⁹ NHS Lambeth's Clinical Commissioning Group found that London Borough of Lambeth spent over £1 million in 2016 on over-the-counter products that people could easily get without a prescription. To encourage people to practice self-care and avoid unnecessary (and costly) visits to GPs, NHS Lambeth no longer supports the routine prescribing of medications for common conditions such as headache, coughs, and colds.³⁰ NHS England has issued guidance in this regard.³¹

As for other countries, the interviewees in Egypt indicated that the government is interested in learning more about how self-care could save money for the healthcare system. In France, experts have highlighted the ROI of self-care to the government, with no positive results so far. And in Thailand and Poland, the ROI of self-care is not part of discussions, even among experts.

The way healthcare providers are paid for the services they deliver influences health system performance. Fee-for-service models, which dominate in the United States and Europe, often result in over-provision of services, inattention to clinical need, and fragmented provision of care, all of which contributes to suboptimal patient experiences and health outcomes, and overburdened budgets.



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In contrast, with value-based care reimbursement models, bills are based on positive clinical outcomes rather than on individual services rendered. Practically speaking, this means that healthcare workers in value-based models are incentivized to focus on achieving the best clinical outcomes while utilizing the fewest number of discrete procedures and least amount of in-office care. Counseling patients to employ self-care practices can often be a critical input leading to better outcomes. Thus, we assume that a fee-for-service model - in contrast to policies and models that measure and reward better outcomes - represents an obstacle to fostering self-care, as providers' financial incentives are aligned with patients' in-office care time and number of procedures completed.³²

Several of the countries we studied – including Egypt, Poland, South Africa, and Thailand – are currently reforming their healthcare systems. Others, like France, are exploring new payment methods. In the UK, even though the healthcare system is already largely outcome-based, there are many discussions around sharpening this focus. Overall, these ongoing reforms and debates are going in the right direction, toward less siloed approaches as well as increased emphasis on clinical outcomes and overall patient experience, which are central to fostering self-care.³³

"It wouldn't be an overstatement to say that encouraging individuals to increase their knowledge about self-care is a highly effective strategy for optimizing government resources and building a sustainable health system."

Marli Sileci Executive Vice-President, Brazilian Association of the Over-the-Counter Medicines Industry (ABIMIP), Brazil

"For patients, proper self-care can enhance their immunity and reduce the risk of illness. And for those patients with chronic diseases, self-care can slow the progression of chronic diseases and extend their lifespan. For healthcare providers, if people use selfcare properly, the frequency of patient consultations can be reduced, resulting in reduced workload. And for the government, overall disease prevalence can be reduced, as well as medical insurance expenditures."

University Professor and Chief Physician, General Internal Medicine, Guangzhou, China

INDICATOR 3.2

POLICIES TO PROMOTE SELF-CARE AS AN AFFORDABLE HEALTH SOLUTION

The extent to which the health system uses policy mechanisms to lower the out-of-pocket costs of self-care products and practices for consumers.

Governments can use policy mechanisms such as tax credits, reimbursement for self-care products or counseling, and funding of patient education and behavioral change programs to encourage self-care as a means of reducing the burden on the healthcare system. For example, medical/health savings accounts and flexible spending accounts – which allow people to set aside pre-tax funds for spending on health needs, including some self-care products – are seen in South Africa and the US. But often these policy incentives are limited to consumers with private insurance.

INDICATOR 3.3

PROVIDER REIMBURSEMENT

The extent to which a country's health policy provides financial incentives for healthcare providers to counsel patients on self-care.

Remunerating healthcare providers for time spent advising patients on how to manage their conditions and discussing healthy lifestyle habits not only encourages such conversations but also is likely to result in better outcomes for patients and lower health costs in the long term.

To ascertain whether providers may seek payment for time spent discussing self-care with patients, we searched for relevant medical billing codes in each country. France, South Africa, and the US scored highest on this measure, with both medical practitioners and pharmacists eligible for reimbursement.

NHS Pharmacy First Scotland encourages patients to go to their pharmacist for minor ailments and self-treatable conditions, and the pharmacist is reimbursed through the **Universal Claim Framework for** advice and treatment of minor common ailments such as acne. allergies, coughs, earaches, and sore throats. This system is considered best practice by many in the self-care pharmacy space. Another example: **NHS England's Community Pharmacist Consultation Service** (CPCS) offers patients the option of having a face-to-face or remote consultation with a pharmacist following an initial assessment by an NHS 111 call advisor, for which the pharmacist is paid £14, as of 2021.^{35 36}

We also asked providers whether they can be compensated for self-care-related services during our interviews and in the healthcare provider survey. The responses were mixed (and inconsistent with the desk research).

The majority of respondents to our healthcare provider survey in Brazil, Egypt, Nigeria, Poland, South Africa, and Thailand believe it is possible and (very or somewhat) convenient to be financially compensated for time spent discussing self-care with patients.



INDICATOR 3.4

RECOGNITION AND REGULATION OF T&CM

The extent to which the health system recognizes and regulates T&CM.

Many of the healthcare providers we interviewed mentioned that their patients use TC&M as part of their self-care routines. At the same time, they expressed concern that their countries lacked formal oversight for T&CM in the form of policies, laws and regulations, national programs, and/or expert committees – thereby limiting opportunities to have constructive, inclusive discussions on the benefits and shortcomings of these treatments.

Based on our desk research, T&CM seems to be gaining attention from healthcare policymakers and regulators, opening up a new potential domain of self-care. Brazil, China, South Africa, and Thailand appear to be at the forefront in terms of progress toward T&CM oversight and integration with the health system. But even in these countries, both providers and policy experts raised concerns about insufficient scientific evidence and the risk of consumer misuse.

Self-Care Readiness Index 41

Enabler 4

REGULATORY ENVIRONMENT

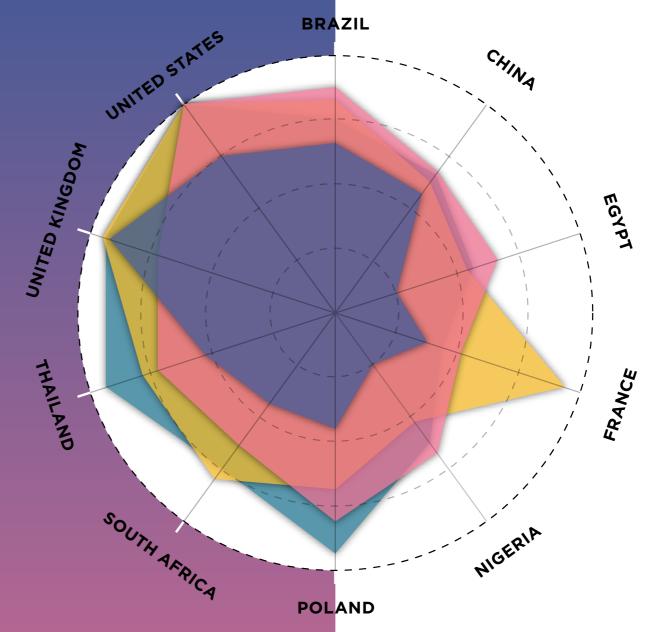
Regulations and processes governing the approval of new products and Rx-to-OTC switches, distribution, advertising, and pricing determine the ease of consumer access to self-care products as well as industry's ability to drive innovation and adoption of self-care solutions.

Overall, the US has the most supportive regulatory environment for self-care, marked by the transparency of its approval process for OTC medicines, broad retail access, and absence of advertising and price controls. France ranks last in the group because of its relatively strict rules on drug reclassification, access,

advertising, and pricing. While some countries notably China - are working to streamline the marketing authorization process for OTC products, there is room for improvement on the regulatory front in many countries.

It should be noted that WHO has a global benchmarking tool for evaluating national regulatory systems governing medical products,³⁷ as well as a working document describing good regulatory practices.³⁸ However, the scope of our project did not include an in-depth examination of country regulatory practices in light of these guidelines.





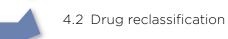
The South African **Health Products Regulatory Authority** (SAHPRA) is building an online directory of OTC medicines that will make it easy for consumers and **HCPs** to access drug information.

COMPARATIVE SCALE

1 = not self-care ready 4 = exceptionally self-care ready



4.1 Approval process







INDICATOR 4.1

APPROVAL PROCESS

The extent to which regulatory review of self-care products is transparent, efficient, and based on scientific evidence.

For each country we assessed whether the approval process and evaluation criteria for self-care products - specifically OTC medicines - are clearly described in writing, and whether this information is easily accessible to the public. We also examined whether the time from application to decision is largely predictable, and whether the regulatory agency tracks its performance with respect to predefined timelines. Lastly, we looked at whether applicants (sponsors) have opportunities to communicate with the regulatory agency at all stages of the approval process. For European Union members, most OTC medicines are authorized at national level, as are most decisions to switch from Rx to OTC status.

The top three ranked countries in this category are the US, the UK, and France all of which have easy to navigate websites that provide essential information for applicants. The approval process is least transparent in Nigeria, Egypt, and China, although China has a draft policy that promises to ease documentation requirements and accelerate approval of OTC medicines. Some countries (e.g., Brazil) reportedly require just as much documentation and evidence for OTC drugs as they do for prescription drugs, which slows the approval process and hinders innovation.

While there are obvious limitations to this approach - notably that the information shared on regulators' websites does not necessarily reflect the experience of applicants vis-à-vis the actual process or timelines - gathering real-life data from individual companies was beyond the scope of this project.

INDICATOR 4.2

DRUG RECLASSIFICATION

Whether the process for switching drugs from prescription to over-the-counter status is welldefined, there are examples of such switches in line with global best practices, and innovation is rewarded with protection of proprietary product data.

The economic arguments for switching, including easing the cost burden on public health systems, have been laid out by numerous studies. From a self-care perspective, the rationale is that switching enhances consumers' choice and access to treatment options without risking their safety or well-being. Since products being considered for switching are not novel and therefore not eligible for patent protection, data exclusivity offers an incentive for companies pursuing what may be a "costly, time-consuming, and often risky" switch project.³⁹ Ideally, there is a balance between the data required for regulatory approval and the intellectual property protection afforded that data, so as to encourage continued innovation.

The key research questions here were as follows:

- Most importantly, is there a well-defined regulatory pathway for Rx-to-OTC switches (i.e., is this information both easily accessible and comprehensive)?
- Has the country made Rx-to-OTC switches in line with global best practices within these six drug classes: proton pump inhibitors for heartburn; topical corticosteroids for allergies; smoking cessation aids; antiviral cream for labial herpes; triptans for migraines; and PDE5 inhibitors for ED? (We looked at specific drug classes rather than the total number of switches over the past decade because the latter information was available for only a handful of countries - see table on page 45 - and also because recency may not be the best indicator of openness to switching for countries that were early movers).

• For how many years does each country legally protect data submitted to support switches, with an eye to rewarding innovation?

The UK leads the group in having well-defined switch regulations, followed by Brazil, Thailand, and the US. The US provides the longest period of data exclusivity, three years, while France, Poland, and the UK offer one year. Brazil, China, Egypt, Nigeria, South Africa, and Thailand either offer no such safeguards or they lack publicly accessible information on data exclusivity for switches.

The OTC drug monograph process, which is unique to the US, strengthens predictability of approvals by establishing standards for classes of OTC drugs. The process was streamlined in 2020, which should accelerate changes and approvals and make it easier to bring innovative self-care products to market. In terms of switches in the six drug classes compared across countries, the leaders are the UK and South Africa (at least four switches). The next tier comprises Brazil, China, France, Poland, Thailand and the US (at least two switches). We were unable to confirm examples of switches in Egypt and Nigeria.

There appear to be some positive developments among some countries in the middle-tier group. For example, the rising number of Rx-to-OTC switches in recent years suggests that China is gradually aligning with global best practices as the government looks to reduce spending and encourage consumers to take responsibility for their health. And Poland often leads Europe in expanding self-care options through switches although it lacks a formally defined Rx-to-OTC reclassification process.

Recent developments suggest China is gradually aligning with best practices on Rxto-OTC switching - at least partly because of government efforts to cut spending and encourage self-care.



TOTAL NUMBER OF RX-TO-OTC SWITCHES IN LAST 10 YEARS⁴⁰

	# of Switches	Type of Reclassification
China	42	Rx to OTC
United Kingdom	35	POM/Rx (prescription-only medicine) to P (drugs sold in pharmacies only) (17), P to GSL (general sale list) (15), and POM to GSL (3) since start of 2011
Thailand	17	Dangerous/non- dangerous to GSL/ grocery medicine status
United States	12	POM/Rx to OTC



INDICATOR 4.3

ACCESS/DISTRIBUTION

The extent to which companies may distribute, and consumers may access, self-care products through a variety of channels, both in-store and online.



Here we examined whether (and, if so, where) consumers are free to browse and select products, without intervention or supervision; the highest scores went to countries where self-care products are available for self-selection in pharmacies

and other retail outlets, including online.

The US leads the group in terms of ease of consumer access to self-care products, followed by Poland, Thailand, and the UK. France, which has some of Europe's most restrictive access policies, falls at the other end of the spectrum: sales of all drugs. both prescription-only and OTC, are limited to pharmacies with qualified pharmacists. Moreover, the French regulatory authority has tightened consumer access to self-care products in 2020.

INDICATOR 4.3

ADVERTISING AND PRICING

The ability of companies to advertise self-care products directly to consumers and to price products based on market forces.

Only the US imposes no restrictions on advertising and pricing of self-care products. Among the remaining countries, Brazil and Poland are the least restrictive and France is the most.

Brazil's removal of all price controls on OTC products in 2020 should give rise to greater investment in innovation - not only in new molecules but also in products that have been on the market for years.





Country Narratives

- 48 Brazil
- 52 China
- 56 Egypt
- 59 France
- 63 Nigeria

- 66 Poland
- 70 South Africa
- Thailand
- 77 United Kingdom
- 83 United States

COUNTRY NARRATIVES COUNTRY NARRATIVES BRA7II

Brazil



Stakeholder Support & Adoption

Consumer & Patient Empowerment

COMPARATIVE SCALE

1 = not self-care ready 4 = exceptionally self-care ready







Regulatory **Environment**

STAKEHOLDER SUPPORT & ADOPTION

Brazil's Strategic Action Plan to Tackle Noncommunicable Diseases (2011-2022) mentions the importance of self-care and the rational use of medication for healthy aging, for the good management of cardiovascular diseases, and the importance of selfmanagement for NCDs in general.⁴¹ However, concerns that people were not self-medicating in a safe way have occured despite national and local government campaigns emphasizing the risk of self-medication.^{42 43} A proposed new law⁴⁴ calls for establishing a national self-care day aligned with International Self-Care Day (July 24th); if enacted, public health promotion policies reinforcing the importance of rational medicine use are expected to gain prominence.45

Brazil's National Policy on Integrative and Complementary Practices (Portuguese acronym: PNPIC) mentions self-care as a way to improve disease management and health promotion at the individual level and calls for healthcare providers to stimulate patients' self-care and autonomy in disease management.46 The National Policy and Program for Medicinal Plants and Herbal Medicines does not encourage self-care as such, but it does establish a basis for developing safe access and rational use of medicinal and herbal plants. 47 A 2017 ordinance recognizes that self-care practices must be integrated in health networks, with the goal to institutionalize practices such as Ayurveda, meditation, and osteopathy. 48

The Brazilian healthcare providers we surveyed indicated willingness to recommend self-care to their patients, including as part of

a treatment plan for a specific medical condition. However, it appears that self-care and patient education are not always discussed in medical congresses focused on primary care and cardiology.

Brazilian consumer survey respondents strongly agree that they know which self-care products and practices to utilize when they have a headache or digestive issues. They also feel very well-informed and empowered to undertake their own at-home care regimens to manage their chronic and acute condition(s) and prevent illnesses

According to government research, regular consumption of fruits and vegetables grew nearly 5% from 2008 to 2017, and consumption of soft drinks and sugary beverages dropped 53% from 2007 to 2017. Meanwhile, physical activity during free time reportedly increased 24% from 2009 to 2017.49

"Self-care has taken on greater importance in Brazilians' lives in recent years, as evidenced by improvements in healthy eating and increased physical activity. However, with the social isolation brought on by COVID-19, these two pillars have been most affected. We hope that growth rates will return to pre-pandemic levels when this situation comes to an end."

Marli Sileci

Executive Vice-President, Brazilian Association of the Over-the-Counter Medicines Industry (ABIMIP), Brazil

CONSUMER & PATIENT EMPOWERMENT

Despite considerable investment and efforts from the government side, Brazil has struggled to digitize medical records.⁵⁰ In 2016, the Ministry of Health and the Ministry of Science, Technology and Innovation signed an agreement intended to stimulate the development of technological solutions in the Brazilian health system and set aggressive deadlines for implementation of the "Electronic Citizen's Record" (PEC).51 However, discrepancies between state and municipal IT systems have stymied implementation, as has been the case in many other countries.

A historical overview of health promotion in Brazil from the International Union for Health Promotion and Education emphasizes health education as an important element of the Brazilian government's health strategy.⁵² Indeed, the Health at School Program (PSE), part of Brazil's NCD 2011-2022 Action Plan,⁵³ "aims to contribute to the integral training of students through actions of promotion, prevention, and health care, with a view to addressing the vulnerabilities that compromise the full development of children and young people in the public school system."54 The government considers the PSE - a collaboration between the Ministries of Education and Health - an innovative approach to the integration of education and health policy that, "treats health and education as part of a comprehensive training for citizenship and the full enjoyment of human rights."55 Importantly, however, curriculum decisions are made at a local level.

The National School Health Survey (PeNSE) is designed to monitor the health of school children and provide evaluation metrics for the PSE. Among other things, it evaluates access to educational materials (e.g., on STDs and AIDS) in schools.

Some of our Brazilian interviewees take a less rosy view of health education. According to Marcio Atalla, a well-known expert on self-care and nutrition, "Concern for selfcare is practically zero in public schools and even in private ones. Training teachers and school coordinators, and passing on this

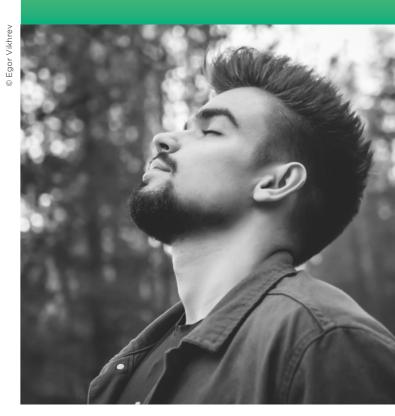
content [regarding healthcare and hygiene] regularly within the school is essential." Atalla also emphasized the need for constant reinforcement of the core elements of self-care - from both healthcare providers and government.

The Brazilian government has been actively using WhatsApp to distribute health information for several years, and in March 2020, the Ministry of Health partnered with WhatsApp to launch a new information channel on COVID-19.56 The ministry is also active on social media platforms such as Facebook, Twitter, YouTube, and Instagram.

treatment adherence. I agree with the Brazilian Diabetes Society Guideline, which [suggests] that educating is not just informing, but generating results through behavior change."

Dr. Marcelo Dratcu

Managing Partner, Health and Wellness Medical and Educational Services, Brazil



SELF-CARE HEALTH POLICY

Primary care is one of the main pillars of Brazil's single-payer healthcare system - the Sistema Único de Saúde (SUS), which serves a diverse population of 212 million. While the COVID-19 crisis has raised awareness of the importance of self-care, our research and expert interviews suggest that policymakers tend not to "see the big picture" or appreciate the economic arguments for investing in self-care education and programs.

"My research [a multifaceted intervention in Jaquariúnal showed that 40% of the population started adopting regular selfcare habits after nine months, resulting not only in better health but also in a decrease in public health spending, especially in hospitals, and better control of chronic diseases. But we also found that if you do not have a constant stimulus, [this effect] gets a little lost over time. That's why selfcare requires constant reminders about maintaining a healthier lifestyle and good hygiene, and other pillars - including the training of healthcare professionals. It really needs to be a public health policy and done with government support."

Marcio Atalla

Self-Care/Nutrition Expert, Brazil

The Brazilian government does not have any broad policies or programs aimed at making self-care an affordable health solution. However, it does support a number of programs specifically aimed at selfmanagement of diabetes. For example, the National Policy for Diabetes Prevention and Comprehensive Assistance to the Diabetic Person establishes that publicity and awareness campaigns will be held on the importance and the need to regularly measure and control blood glucose levels.⁵⁷ Private insurance companies, in contrast, do see the value of promoting self-care, offering plan members partial reimbursement for some self-care activities and drugs.

As for provider reimbursement, HCPs can bill for a wide range of activities under the umbrella of "health promotion and prevention actions," including giving advice on physical activity, weight measurement, and oral hygiene.

In terms of T&CM oversight and integration with the health system, Brazil is one of the most progressive countries - although there are concerns about scientific and regulatory rigor. Two national policies, one on medicinal plants⁵⁸ and the other on integrative and complementary practices (2015),59 were first promulgated in 2006; the latter now covers close to three dozen practices ranging from acupuncture to aromatherapy and is administered by National Coordination Office on Integrative and Complementary Practices under the Ministry of Health. Herbal medicines are categorized as both prescription and nonprescription medicines, and sold with medical and health claims. 60 T&CM education is provided at a university level, and students can pursue a variety of programs in homeopathy, herbal medicines, and acupuncture. The government also officially recognizes certified T&CM training programs. 62 63

"Complementary practices receive little evaluation of effectiveness and cost-benefit ratio. Currently, there are many practices in the National Health System that are approved, but with little scientific evidence that they really work."

Dr. João Paulo de Santanna Pinto Otorhinolaryngologist, Sao Paulo University, Brazil



REGULATORY ENVIRONMENT

Brazil's National Health Surveillance Agency (ANVISA) is responsible for the approval and supervision of food, cosmetics, tobacco, pharmaceuticals, health services, and medical devices, among others. The ANVISA website offers well-structured information on the approval process but no details on the evaluation criteria. An Analytical Information Portal provides key performance data, including the volume and speed of approvals.64 The agency also boasts multiple communication channels.65

"The level, clarity, and frequency of information needs to be improved, in order to facilitate patient access to innovative self-care products."

Dr. Marcelo Dratcu

Managing Partner, Health and Wellness Medical and Educational Services, Brazil

Brazil liberalized its regulations governing Rx-to-OTC switches in 2016. Under the revised rules, once an active ingredient has been deemed safe for OTC use, all products with the same active ingredient can be reclassified as OTC. Resolution 98/16 outlines seven criteria for reclassification: existing time on the market, proven safety record, identifiable symptoms, short recommended treatment time, manageability for patients, low potential risk, and nonaddictive nature. 66 A regulatory expert from private industry described the situation in Brazil as "not the worst but far from the best," noting that the switching guidelines have only been in place for a few years and that resourcing challenges remain.

Sales of OTC drugs (both in-store and online) are restricted to licensed brick-andmortar pharmacies and drugstores that have a responsible pharmacist present at all times. Industry groups representing drugmakers and supermarkets are pressing the government to permit sales in other retail establishments, which would widen consumers' access to self-care products.⁶⁷

"The regulation of medicines is very robust and judicious (both for products with restricted sale and those for sale without prescription). In practice, this regulation works well in large urban centers, whereas in smaller cities further inland there is little supervision. Regarding nutritional supplements. regulation and inspection is much less strict and the promises of results not always proven happen more often."

Dr. João Paulo de Santanna Pinto Otorhinolaryngologist,

"One of the regulatory requirements that hinders innovation in the OTC market and often slows down the approval process is the requirement for the same documents and scientific evidence as for a prescription drug."

Marli Sileci

Association of the Over-the-Counter Medicines Industry (ABIMIP), Brazil

In general, only products classified and registered as medicines may include health claims in advertising. Advertising of OTC drugs to consumers is permitted in all types of media, and comparative advertising is allowed. Claims must be scientifically proven, and ads must recommend that consumers seek medical advice if symptoms do not disappear. Although medicine advertising is controlled by law and supervised by ANVISA, the National Council for Advertising Self-Regulation (CONAR) sets guidelines for OTC drugs.⁶⁸ Brazil removed all price controls on OTC products in 2020, following a 15-year industry-led effort.⁶⁹

China



Stakeholder Support & Adoption

Consumer & Patient Empowerment

COMPARATIVE SCALE

1 = not self-care ready 4 = exceptionally self-care ready







Regulatory **Environment**

STAKEHOLDER SUPPORT & ADOPTION

"Public awareness of self-care is gradually increasing [as] more and more people learn about environmental pollution or disease-related information through public media or online articles. And they share it with others on social media. As a result, more people pay special attention to their own health status and resort to selfcare to maintain their health. However, there is also a downside because many people lack basic medical knowledge [and] confuse the concepts of Chinese medicine with that of Western medicine...which leads to inappropriate self-care."

University Professor and Chief Physician, General Internal Medicine, Guangzhou, China

"We speak with patients about the complementary use of self-care practices quite often, and doing so is one of our key performance indicators. For patients who visit our hospital for the first time, especially those with chronic diseases, we normally spend at least 10-15 minutes teaching preventive measures. The self-care practices we typically recommend are maintaining a healthy lifestyle, doing physical exercise, taking medicines on time, and monitoring one's personal health status."

Chief doctor at a community health service center, Beijing, China

"Patients often ask us questions about traditional Chinese medicine (TCM) or tonics. We will definitely not recommend [these] to patients if there is no evidencebased support. Rather, we will suggest they find a qualified TCM institution that meets the standards."

Prof. Yu Kang, MD

Professor of Clinical Nutrition, Peking Union Medical College, China

In 2016, the Chinese State Council released "Healthy China 2030," a 15-year blueprint to improve public health; a corresponding action plan was launched in 2019. As the plan outlines, the goal is to help everyone learn, understand, and master information and skills related to disease prevention, early detection, emergency rescue, timely medical treatment, rational drug use, and other aspects of health maintenance: to enhance health awareness; and to constantly improve health management capabilities many of which are key elements of self-care.70 71

A majority of Chinese consumer survey respondents say they take vitamins, minerals or supplements on a regular basis in order to prevent illness. They report feeling well educated and empowered to seek out self-care products and practices because of supportive campaigns and programs in their communities.

In our interviews with healthcare providers, we heard that counseling patients on self-care is a standard practice and that the government sometimes collaborates with community hospitals and organizes public health education programs, including online initiatives. For example, WeChat is widely used, and some HCPs encourage their patients to join relevant WeChat groups where video clips and other health care promotion materials are posted directly.

CONSUMER & PATIENT EMPOWERMENT

As part of its sweeping health system reform strategy, China introduced a national EHR system in 2009, and several provinces, including Beijing, Jiangsu, and Fujian soon began piloting IT projects to integrate data from various providers.^{72 73} One of the eight core action items in the "Healthy China" initial plan for 2016-20 was to develop a personal healthcare information system covering the entire population.⁷⁴ According to a 2020 Deloitte report, China's EHR system has been widely implemented and "technologies for capturing and storing health data are now mature."75

Schools in China use a state-approved curriculum that teaches components of health and nutrition. According to several of our expert interviewees, the government sees health education as a very important part of its "Healthy China 2030" goals, but intense academic pressure on students has left limited time for teaching self-care. China was an early participant in WHO's strategy to unite the "Mega Countries" to improve health promotion in schools, and it continues to pilot initiatives to promote health in schools.⁷⁶ ⁷⁷

The Chinese government actively communicates health information through television (including a daily health education show on CCTV) and digital channels such as WeChat and Weibo. One of the healthcare providers we interviewed mentioned encouraging patients with similar conditions to join a WeChat group where relevant video clips and other healthcare promotion materials are posted. He observed that such campaigns are very effective in improving health literacy and promoting self-care, especially among the elderly. At the same time, however, fake news about healthcare products is rampant, and older people tend to be more susceptible to such tactics. Finding the right regulatory balance between cracking down on unscrupulous advertisers and allowing legitimate healthcare industry players to educate consumers about their self-care options is a big challenge.

The National Health Commission conducts annual nationwide health literacy surveys, and reports steady upward progress in recent years. The 2017 survey covered 85,000 individuals in 31 provincial regions.⁷⁸

in our schools, and we believe the earlier you begin this education, the more effective it is. But we've also met many challenges implementing this curriculum amid pressures to reduce the educational load on students. One of the priorities of Healthy China 2030 has been to add health education back to the curriculum."

Dr. Gu Shenbing

Chairman, Shanghai Health Education Association; Deputy Director, Institute of Health Communication, Fudan University, China



level, maybe we can talk to them more about knowledge. But if the parents are less educated, we need to talk to them more about practices."

Dr. Dai Yaohua

Chief Physician, Beijing Jingdu Children's Hospital: Director of WHO Child Health Cooperation Center, China

52 | Self-Care Readiness Index

SELF-CARE HEALTH POLICY

"Healthy China 2030" does not explicitly mention the ROI of self-care, but the policy framework does focus on encouraging people to adopt healthy lifestyles, increasing health literacy, and facilitating early disease detection, diagnosis, and treatment.⁷⁹

Based on our interviews and research, a feefor-service model predominates, and HCPs cannot bill specifically for self-care advice or counseling (although they do provide such counsel). While there are many broad performance targets associated with "Healthy China 2030," we found no evidence of discussions linking provider rewards to patient outcomes. The government piloted medical savings accounts in the 1990s and early 2000s, but there do not seem to be any programs currently in place.

According to WHO, China has a "relatively complete policy system on traditional Chinese medicine" (TCM).8081 Various national plans over the past decade have called for the "promotion of standardization and normalization of TCM,"82 83 84 85 and "Healthy

"I see the economic benefit of selfcare as improving the patient's cost effectiveness - by investing in daily self-care, he or she can save more money for treatment of serious diseases in the future....We are doing some relevant research now. but it's difficult because self-care is a long-term process [often involving] lifestyle adjustments, the results of which accumulate over a number of years. Still, based on existing data, we can preliminarily think that the use of correct self-care products can effectively save money for families and societies while helping patients get healthy benefits."

Prof. Yu Kang, MD

Professor of Clinical Nutrition, Peking Union Medical College, China

China 2030" sets out a series of tasks and measures to that end.

The drug administration law (revised in 2001) provides the national regulatory system on traditional Chinese medicines and natural (herbal) medicines. A 2016 White Paper on the Development of Traditional Chinese Medicine in China states that by 2020 every Chinese citizen will have access to basic TCM services, and by 2030 TCM services will cover all areas of medical care.86

"For doctors and patients, it is difficult to accurately distinguish which traditional and complementary medicines are beneficial, which are uncertain, and which are harmful. Thus, I am very cautious about recommending T&CMs to my patients."

Associate Researcher, Health Development Research Center, National Health Commission, China

"China has no national policies specifically for self-care. However, a key component of 'Healthy China 2030' is the promotion of healthy lifestyles, physical exercise, and healthy diet. But these plans merely advocate; they are not mandatory policies."

Associate Researcher, Health Development Research Center, National Health Commission, China



REGULATORY ENVIRONMENT

China's National Medical Products Administration (NMPA) is responsible for regulating pharmaceuticals, medical devices, and cosmetics. The Provisions for Drug Registration outline the application process and the timeline for approval decisions for both prescription and nonprescription drugs. However, these provisions are buried in the NMPA website news stream, and performance tracking data is not readily available.87 Draft technical guidelines for OTC chemical drugs, if implemented, could mitigate this lack of transparency, as well as speed up and simplify the approval process by easing requirements for preclinical trials.88

The switching process in China starts when applicants make applications are made for manufacturing an OTC version of a prescription drug, and product switches are approved case by case.89 NMPA does not offer legal protections for data submitted in support of such applications, which simplifies the switching process but also disincentivizes innovation.90 Recent developments suggest China is gradually aligning its system with global best practices: the number of Rx-to-OTC switches is rising as the government seeks to reduce spending and encourage consumers to take responsibility for their health. Between 2014 and 2019, a total of 18 drugs and 59 TCM products were switched to OTC status.91





Chinese consumers may purchase OTC drugs in pharmacies (or through their online operations), but many common medications require a doctor's diagnosis and interaction with a qualified person is required. The "online to offline" (O2O) sales channel, through which customers can consult with a doctor and order self-care products to be delivered from a bricks-and-mortar store, is growing quickly, and technology giants such as Alibaba and JD Health have teamed up with (or acquired) pharmacies to build successful omnichannel delivery services.92

Advertising of OTC products to the general public is permitted but requires pre-review in accordance with new measures (effective March 2020) that aimed to standardize a number of overlapping laws and regulation. Ads must display the special OTC mark and advise consumers to "purchase and use according to the instruction in package leaflet or under the direction of pharmacist." Comparative advertising is not allowed.93 Prices of OTC medicines reimbursable under the national medical insurance scheme are fixed or guided by the government.94

Egypt



Stakeholder Support & Adoption

Consumer & Patient Empowerment

COMPARATIVE SCALE

1 = not self-care ready 4 = exceptionally self-care ready







Regulatory **Environment**

STAKEHOLDER SUPPORT & ADOPTION

Egypt does not have a self-care strategy, and the Egypt Multisectoral Action Plan for Noncommunicable Diseases Prevention and Control 2018-2022 does not mention selfcare as such. However, it does highlight the importance of a healthy diet and physical activity, and focuses on healthcare system changes needed to improve the management of NCDs. Plan objectives include increasing public awareness of the importance of diet and physical activity, establishing health education campaigns targeting schools, and launching mass media campaigns to warn people of the danger of tobacco.95

Based on our interviews, self-care is well understood by Egyptian healthcare providers, but they sometimes have difficulty convincing patients to practice self-care and, when pressed for time, rely on others to educate patients. The government employs health educators, mostly physicians and nurses, to teach diabetic patients how to manage the disease. Pharmacists are often a trusted source of advice.

"In Egypt, lots of people listen to their neighbors, ask them what they take for their disease. We also have so many drugs that don't need a prescription, so people ask the pharmacist what they should take, and they get it."

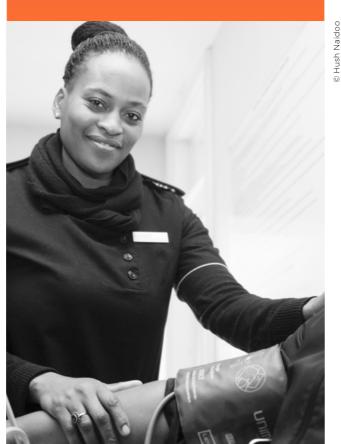
Prof. Laila Kamel

Professor, Department of Public Health and Community Medicine, Faculty of Medicine, Cairo University, Egypt

"Clinical community pharmacists are a good medium for self-care in lowand middle-income countries. Their communication skills are high, and they are eager to serve patients. People like them, respect them, and therefore listen to them."

Prof. Hassan Farag

E. Professor of Tropical Health, Tropical Health, High Institute of Public Health, University of Alexandria, Alexandria, Egypt; Expert, Global Polio Eradication Initiative (GPEI), Expanded Program on Immunization (EPI) and Emergency Risk, Egypt



CONSUMER & PATIENT EMPOWERMENT

Though Egypt's President declared 2019 as "the year of education," there is still little evidence that health and hygiene are taught in public schools. The National Strategic Plan for Pre-University Education Reform in Egypt (2007/08-2011/12) did cite the importance of, "enriching students' school life through social activities, sports, healthcare, and nutrition". However, the plan focused on making schools a platform for accessing healthcare rather than on educating students about health.96

Government use of WhatsApp to communicate health information predates the pandemic. In 2016, the Ministry of Health and Population launched WHO's "health in a message" SMS service, which provides advice on living with diabetes and other medical information related to NCDs.97 In terms of social media, however, the Ministry of Health and Population does not seem to be an active user.

Our expert interviewees said that Egypt has made big progress in raising health awareness in the population, and all agree that health literacy is improving significantly. The government funds screening campaigns, and there are a number of communityled initiatives where medical student provide education.98

healthcare providers and to medical drugs. But this attitude has changed a little. Now patients know that they for their own health."

Prof. Hassan Farag

Risk, Egypt

SELF-CARE HEALTH POLICY

While we found no evidence of policies acknowledging the economic value of selfcare, the Egyptian government sponsors many screening programs, especially for women's health, school-aged children, and communicable and noncommunicable diseases. These include the 2018-19 "100 Million Healthy Lives" campaign, which screened people nationwide for Hepatitis C and NCD risk factors.99 A more recent presidential initiative focuses on chronic diseases such as diabetes and hypertension, including how to self-diagnose and self-manage.¹⁰⁰



Some interviewees told us that the government is interested in programs that promote selfcare, but it would need industry support. Pilots for a new healthcare system modeled on the UK's National Health Service (NHS) are being implemented, which might lead to growth of self-care programs, but there is scant public information regarding the new system.

There seems to be increasing attention paid to measuring and rewarding health outcomes. A 2019 WHO analysis recommends shifting away from a fee-for-service model in order to incentivize preventive and promotive care vs. curative care under the new universal health insurance system. 101 102

Egypt has had laws and regulations governing traditional and complementary medicine since the mid-1950s. T&CM are subject to the same laws as conventional pharmaceuticals under the National Drug Policy issued in 2001, and the same requirements for good manufacturing practices apply.¹⁰³

"In Egypt, there are policies and strategies connected to self-care, but these are not always implemented. There are now national initiatives supported by the government on maternal care and non-communicable diseases that touch upon prevention and wellbeing. All these initiatives are at the health facility level, and have been started to be implemented at the community level according to the presidential direction, a condition that needs to be expanded and sustained if we want to achieve sustainable self-care in the population."

- Prof. Ammal Mokhtar Metwally

Professor of Public Health and Preventive Medicine, Community Medicine Research Department, National Research Centre of Egypt, Egypt

REGULATORY ENVIRONMENT

The Egyptian Drug Authority (EDA), which reports directly to the prime minister rather than to the Ministry of Health, oversees the regulation and approval of self-care products, including human medicines, medical devices, and food supplements. Drug product evaluation by the National Organization for Drug Control and Research (NODCAR) is a prerequisite for marketing authorization.¹⁰⁴ The National Organization for Research and Control of Biologicals (NORCB) sanctions market authorization of biological products, including botanical drugs that may qualify as self-care products. Online information for applicants regarding the approval process is limited and not easily accessible.

"Advertising of traditional and complementary medicines should be authorized only when the products have been proved to be effective and safe. Currently, in Egypt, health claims

Dr. Ekram Wassim

Health, High Institute of Public Health, Alexandria University, Egypt

are increasingly properly regulated."

According to our research and interviews with regulatory experts, Egypt does not have clear guidelines for Rx-to-OTC switches, nor is there any data nor marketing exclusivity protection periods for medicinal products. Consumers may obtain OTC drugs in pharmacies (including online), but interaction with a qualified employee (e.g., a pharmacy technician) is required. Advertising requires preapproval from the EDA.¹⁰⁵

"Poor people can only purchase self-care products and medical devices from the local market sometimes they are available, and sometimes not. Buying online is not available to everyone."

Prof. Hassan Farag

E. Professor of Tropical Health, Tropical Health, High Institute of Public Health, University of Alexandria, Alexandria, Egypt; Expert, Global Polio Eradication Initiative (GPEI), Expanded Program on Immunization (EPI) and Emergency Risk, Egypt

France



Stakeholder Support & Adoption

Consumer & Patient Empowerment

COMPARATIVE SCALE

1 = not self-care ready 4 = exceptionally self-care ready







Regulatory **Environment**

STAKEHOLDER SUPPORT & ADOPTION

France's National Health Strategy 2018-2022 does not explicitly refer to self-care, but it does mention many aspects of self-care: the importance of a healthy diet and physical activity, preventing the loss of autonomy, promoting sexual education and health, and following basic hygiene rules like hand washing and cleaning of public spaces.¹⁰⁶ Several national programs encourage physical activity, good nutrition, and well-being.¹⁰⁷ In general, policymakers focus heavily on prevention and regularly discuss self-management for chronic conditions. However, the concept of selfcare as such, and self-care products, are not reflected in any governmental policies.

According to our healthcare provider survey, France is the country where HCPs trust and support self-care practices and products the least. Based on our research and interviews, patient education and empowerment are rarely discussed among healthcare providers and in medical curricula.108

Our interviews suggest that French HCPs who care for patients with cardiovascular disease

"One value of the pharmacy is that people who don't believe they are sick come to interact with pharmacist, and this helps engage [them] in prevention, [seek] advice on health habits, and if need be ask for additional services."

Mr. Luc Besancon

Executive Director, Nères,

and diabetes have a good understanding of the benefits of self-care, self-monitoring, and self-management. Professional guidelines for self-management of diabetes exist; however, HCPs say they often don't have time to educate patients based on these guidelines.

We heard from several interviewees (including two doctors) that French consumers tend to rely heavily on healthcare professionals for guidance, rather than take the initiative to educate themselves about their conditions. Given France's generous national health system, which reimburses consumers for most prescription medication as well as most OTC drugs that might be prescribed by healthcare providers, people tend to visit their GP to get prescriptions for both Rx and OTC drugs so they can be fully reimbursed, and they tend to think that drugs that are not reimbursed are not effective.

"In our center, we identify patients most in need of self-care training for their asthma, which include those visiting emergency rooms or admitted to hospitals for asthma crises or repetitive crises. They tend to have low health literacy. Overall, it's a way to improve health-related quality of life, to prevent avoidable crises, and to save health resources."

Prof. Eric van Ganse

Associated Professor of Pharmacoepidemiology, Claude-Bernard University, & Respiratory Medicine, Croix Rousse University Hospital, Lyon, France

CONSUMER & PATIENT EMPOWERMENT

The French Ministry for Solidarity and Health asserts that its system of universal electronic medical records is highly accessible to patients. Patients can access their shared medical records on a web or mobile app and can add information, hide certain data, and control which health professionals have access to their records. The ministry is active on Twitter and Facebook, and it created a WhatsApp channel for COVID-19.

"I think we should talk about 'enlightened self-care' to make clear that patients need to be educated, empowered, and that the self-care provided is efficient."

Prof. Eric van Ganse
Associated Professor of
Pharmacoepidemiology, Claude-Bernard
University, & Respiratory Medicine, Croix

Rousse University Hospital, Lyon, France

According to a 2014 European Commission study, the terms "health literacy" and "empowerment" are not common in France, and there are no national or regional policies directly focused on these concepts. 110 That said, France's national curriculum, the Common Core. includes health education as a component under the domain of citizen education ("Forming the Person and the Citizen"), which aims to teach students to live as functioning members of society who respect individual choices and responsibilities.¹¹¹ The parcours éducatif de santé (PES), implemented in 2016, represents a comprehensive framework for health education in kindergarten, primary, and secondary schools.¹¹² While national authorities offer guidance and support, the PES gives local schools and authorities the freedom and responsibility to adapt the proposed curriculum to the local context. students' needs, and available resources. and implementation is managed by local health and citizenship committees.

"With my patients in cardiology,
I talk about three aspects of self-care:
prevention, including keeping a healthy
diet, being physically active, and avoiding
smoking; how to 'self-diagnose,' e.g.,
how to take your blood pressure properly
and know the symptoms of common
cardiovascular diseases; and how to
manage one's cardiovascular condition
following treatment."

Dr. Jacques BlacherCardiologist, Hotel-Dieu Hospital,
Paris, France

At least two government-funded programs focus on oral health self-care among France's oldest and youngest population segments. A multifaceted national oral health promotion program targets the elderly and people with special needs. The program focuses on training both residents and staff at nursing/care homes and involves toothbrushing workshops and the introduction of personalized dental records. For young people, the French National Health System's M'T dents program offers free dental checkups every three years, and care if necessary, to children aged 3-12 and to young people up to 24 years old. In the second second



SELF-CARE HEALTH POLICY

Several studies show that the French government does not pay attention to the economic value of self-care and self-medication. Even the National Health Strategy does not articulate the economic benefits of NCD prevention. *NèreS*, the French OTC industry association, has published a number of studies showing the economic benefits of self-care, but the government reportedly is not receptive. ¹¹⁵ ¹¹⁶ ¹¹⁷ The government has also been unreceptive to conducting a campaign on self-care, despite repeated asks from the industry.

A fee-for-service (FFS) model dominates in France. Primary and outpatient specialist services are currently funded on a negotiated FFS basis, although pay-for-performance schemes and bundled payments schemes have been introduced increasingly in recent years in public hospitals.¹¹⁸

The French government funds many programs on nutrition, physical activity, and diabetes management. One example is *Activité Physique Adaptée*, a program to help people with NCDs play sports and stay healthy. Under this program, healthcare providers can write a prescription for a wide range of physical activities and other healthy practices such as going to the gym, Nordic walking, swimming, yoga, and qigong. In addition, the French National Authority for Health (*Haute Autorité de Santé*) has published a guide to facilitate the prescription of physical activity for all patients, to encourage HCPs to talk with their patients about the importance of staying active.

Since 2015, French pharmacists have been remunerated for advising customers when they deliver drugs reimbursed by the national health system. There is an ongoing debate as some pharmacist associations would like to receive a fee for self-care advice and for it to be reimbursed, even though the fee already exists indirectly for prescribed medicines (the "dispensing fee"). 121 122 123 Since September 2018, doctors may be reimbursed for telemedicine video consultations – reportedly a first in Europe. 124

In France, complementary and alternative medicines are referred to as "unconventional practices with a therapeutic aim" (*Pratiques* non-conventionnelles à visée thérapeutique), giving them a non-medical identity.¹²⁵ 126 In 2009, the Technical Support Group on Unconventional Therapeutic Practices was established to conduct new research in this area, and to provide the Director General of Health with assistance in the design, implementation, and monitoring of policies aimed at combatting unconventional practices with dangerous therapeutic aims, as well as to participate in the design and monitoring of information and preventative actions aimed at the public.¹²⁷

France recognizes acupuncture and homeopathy as practices that can be practiced by certain health professionals. The professional titles of osteopath and chiropractor were recognized by law in 2002.¹²⁸ However, these recognitions of professional titles are not validations of these theories. 129 Non-medical practitioners have come together and started to supervise the professions to guarantee the quality of its teaching and the competence and ethics of its practitioners; they also hope to start a dialogue with the Ministry of Health about gaining legal recognition, as evidenced by questions submitted to the authorities from different groups over recent years. Despite this push from stakeholders, there is no sign of official consideration. 130 131 132 As of January 2021, homeopathic products no longer qualify for reimbursement.¹³³

"Prevention was identified as a key pillar of France's national health strategy 'Ma Santé 2022'; however, the concept of selfcare as a whole or of self-care products is not reflected in any governmental policies."

Mr. Luc BesançonExecutive Director, Nères,
France

REGULATORY ENVIRONMENT

The French system for granting marketing authorization to nonprescription medicines follows the European rules (proof of quality, safety and efficacy). The National Security Agency of Medicines and Health Products (ANSM) has a comprehensive, well-structured website that explains the journey of a drug from laboratory to market and lays out the regulatory approval process for all kinds of drugs and medical devices as well as three different authorization processes for herbal medicines.¹³⁴ ANSM publishes a yearly activity report tracking key performance indicators, including speed of approval.¹³⁵ The 2019 report notes efforts to streamline the process resulted in greater efficiency. ANSM's Innovation and Orientation Window allows drug and medical device innovators to request scientific advice and regulatory support, and to schedule presubmission meetings with agency staff. 136

According to industry sources, the process for Rx-to-OTC switches is defined in legislation and based on an active pharmaceutical ingredient. In recent years, however, there have been more reverse-switches (i.e., OTC-to-Rx) prompted by safety considerations (precaution principles).¹³⁷ Legal protections for data submitted to support switches are harmonized under the European framework, which provides one year of data exclusivity.





According to legal experts, France has some of the Europe's most restrictive access policies: all drugs, whether prescriptiononly or OTC, may only be sold in pharmacies and dispensed by pharmacists or pharmacy technicians. 138 In the past year, ANSM has moved to tighten consumer access to selfcare products, requiring pharmacists to put non-Rx medicines containing paracetamol, ibuprofen, or acetylsalicylic acid, as well as alpha-amylase medicines, behind the counter. The list of products approved for direct access is updated regularly and posted on the ANSM website.¹³⁹ While Directive 2011/62/EU obliges EU Member States to allow online sales of OTC drugs, France limits such sales to websites owned by brick-and-mortar pharmacies and forbids the use of online platforms as intermediates between patients and community pharmacies. 140

Advertising of nonprescription medicines is allowed except when a product is reimbursable or its marketing authorization from ANSM specifically restricts or prohibits advertising due to public health risks.¹⁴¹ Likewise, non-Rx drugs eligible for reimbursement are subject to price controls.142

Nigeria







Consumer & Patient Empowerment

COMPARATIVE SCALE

1 = not self-care ready 4 = exceptionally self-care ready







Regulatory **Environment**

STAKEHOLDER SUPPORT & ADOPTION

Nigeria's National Policy and Strategic Plan of Action on Prevention and Control of Non-Communicable Diseases, launched in 2013. mentions aspects of self-care, including selfexamination to prevent breast cancer and self-measurement of blood pressure for people with diabetes. 143 The National Health Promotion Policy stresses the importance of empowering people to manage their health, but it does not mention self-care as such or the importance of self-management of diseases.¹⁴⁴

Based on our desk research and interviews with healthcare providers, the government sponsors a number of screening campaign and awareness-raising campaigns on diabetes. Nigerian respondents to our healthcare provider survey - especially those caring for patients with diabetes or cardiovascular disease - strongly support self-care, selfmonitoring, and self-management.

"In Nigeria, there are many herbal concoctions and traditional medications that patients may use, and sometimes they abandon their prescribed medications, which is a problem. This happens 60-70% of the time, so we have to emphasize the importance of medication adherence. We talk about it with colleagues in medical congresses, and try to find ways to educate our patients the best possible way."

Dr. Murtala Ngabea Cardiologist, Abuja, Nigeria

According to our consumer survey, Nigerians rely heavily on traditional and complementary medicine practices or products as part of their self-care regimens. The healthcare providers we interviewed do not oppose patients taking traditional and complementary medicines as long as they continue taking their prescribed medication and do not spend money on T&CM in lieu of purchasing prescriptions.

"I encourage my patients to record their blood pressure at home and to monitor their weight and sugar intake. During visits, I ask them where they stand, using a virtual chart, always in a nonjudgmental way."

Dr. Godsent Isiguzo

Consultant Physician/Cardiologist, Cardiology Unit, Department of Medicine, Alex Ekwueme Federal University Teaching Hospital Abakaliki, Ebonyi State, Nigeria

"From what I have seen in rural communities, where access to medical care is limited, people tend to engage in self-care more often."

Dr. Akinyemi Aje

Cardiologist, Department of Medicine, University College Hospital, Ibadan, Nigeria

62 Self-Care Readiness Index

CONSUMER & PATIENT EMPOWERMENT

Several academic studies suggest that health literacy in Nigeria is low. 145 The population faces major health issues exacerbated by inadequate information, particularly in areas of nutrition and reproduction. According to WHO, only 70% of Nigerian children enroll in primary schools nationwide. The Federal Government of Nigeria employed WHO's Rapid Assessment and Action Planning Process (RAAPP)¹⁴⁶ in the early 2000s to improve health education. The outcome included a five-step action plan, with Step 3 focused on "increasing ministerial capacity to access and utilize current information to improve school health programs and thus the health status of students."

The 2013 National Policy on Education mandates general health and physical education at each level (primary, junior secondary, and senior secondary). However, lack of specificity suggests a lessthan-comprehensive school health curriculum. Additionally, the plan's preface concedes that there are many barriers to implementation of a standard curriculum, including the need for improved quality assurance and better teachers. 147

The Federal Ministry of Health is active on Twitter; in March 2020, a WhatsApp channel was launched with the Nigerian Center for Disease Control (NCDC), allowing the public to chat with NCDC staff. But there does not seem to a channel or platform for general health information beyond social media.

SELF-CARE HEALTH POLICY

Through our desk research we could find no evidence that Nigerian healthcare experts or policymakers are conversant in the ROI of self-care. Overall, the healthcare system seems poorly developed and regulated, and the government wants to harness private-sector capabilities in providing health services.148 149

Nigeria lacks adequate resources (both human and financial) for health promotion interventions and activities. In our interviews with HCPs, we heard that government support for health promotion initiatives and self-care activities is nonexistent, and providers often take the initiative to organize patient support groups. NGOs sometimes support these groups, as well as local screening and education on self-management of diabetes and cardiovascular disease. While Nigerian HCPs do talk about self-care with their patients - especially self-management of NCDs - they cannot seek reimbursement for the time spent on those activities.

Nigeria has a national expert committee, a national policy, laws, and regulations, and a national program for T&CM.¹⁵⁰ ¹⁵¹ ¹⁵² The Nigerian Traditional, Complementary and Alternative Medicines Department, under the Ministry of Health, aims to, "develop, implement, review, and monitor compliance of policies and initiate legislation relating to Traditional, Complementary and Alternative Medicines as well as provide related services; promote the development and commercialization of indigenous Nigerian Traditional Medicine; and integrate Traditional, Complementary and Alternative Medicines into the national healthcare system." 153 154 155 A T&CM research center was established in 2017 to support WHO's program integrating traditional medical practice into public healthcare. 156

"Patients ask me a lot of questions about T&CM. They want me to know what they are taking, and I have to spend a lot of time reading about these products, some of which have beneficial effects. [But] many are expensive, and here cost is a big issue, so I wouldn't advise anything not backed up by science. For patients struggling to get medication and wanting to invest in T&CM, I need to advise them to be more focused on their care, not encourage T&CM and supplements."

Dr Tina Anya

Head of Cardiology Unit, Federal Medical Centre, Jabi, Abuja, Nigeria

REGULATORY ENVIRONMENT

The National Agency for Food and Drug Administration and Control (NAFDAC) is responsible for approving the sale of drugs, medical devices, herbal medicines, etc. in Nigeria. Information on the NAFDAC website is easily accessible and clearly spells out the application/registration process and timeline for approval. The site does not reveal evaluation criteria, however; nor does it track performance vs. timelines. 157

According to our interviews and research, Nigeria does not have any clear guidelines on switching; furthermore, most drugs are available as OTCs.¹⁵⁸ NAFDAC's 2019 drug registration regulations specify that a "drug product may be registered as an OTC on the basis of its OTC status from its country of origin if it has been marketed as an OTC for a minimum of five continuous years in the country of origin and in sufficient quantity, or as may be required by the agency."159

Several of our interviewees commented on inadequate regulation of self-care products and the lack of enforcement of existing NAFDAC guidelines. Curbing substandard, falsified, and counterfeit medicines is a stated agency priority.¹⁶⁰

According to the law, OTC products may be sold by or in premises owned by pharmacists, as well as by licensed "patent and proprietary medicine vendors" (PPMVs) - a retail category established by the Ministry of Health to provide access to essential health commodities for people in rural communities. PPMVs lack formal training but are licensed by the Pharmacists Council of Nigeria. However, interviewees noted that many products "are sold not very legally" through a variety of retail outlets. Insufficient regulation of online drug sales is another problem, as some platforms are neither managed by pharmacists nor linked to registered pharmacies.¹⁶²

OTC drugs may be advertised to the public, but such ads require pre-clearance and approval from NAFDAC. Drug pricing is not regulated. 163

"Self-care products are partially regulated; anything you bring in, NAFDAC will check. The problem is that people abuse the system and things that you find on the shelf should not be on the shelf. We need to have a roundtable with all of the stakeholders and see what is genuine. There are different ways to receive medications (like ordering straight to your home) and no one regulates that."

Dr. Akinyemi Aje

Nigeria

"Sometimes, my patients stop their medications because they think that supplements will be more beneficial, which is not good at all. I don't know how they acquire them, and where they purchase them, but for sure sellers don't advertise [these products] properly."

Dr. Augustine Odili

Professor and Physician, University of Abuja, Nigeria

"In Nigeria, we have a department for traditional medicines under the Ministry of Health. Any traditional medicines [here] must be certified by this governmental agency. Unfortunately, enforcement is poor and traditional medication that hasn't been approved is being advertised and sold to people."

Dr. Kabiru Sada

Endocrinologist, Federal Medical Centre, Department of Medicine, Gusau, Nigeria

Poland



Stakeholder Support & Adoption



Consumer & Patient Empowerment

COMPARATIVE SCALE

1 = not self-care ready 4 = exceptionally self-care ready







Regulatory **Environment**

STAKEHOLDER SUPPORT & ADOPTION

Based on what we heard during our interviews, policymakers in Poland are generally not supportive of self-care; they put heavy emphasis on the dangers of OTC and complementary products.

"There is no definition of self-care in Poland... but self-care is generally very widespread. The first instinct of people in Poland especially now during COVID - is not to go to a doctor but to look for their own solution, go to a pharmacy, and only then to go to a doctor. Many people treat themselves; sometimes this is good, sometimes bad."

Mr. Michał Byliniak

Vice President, Polish Pharmaceutical Chamber, Poland

Our interviews suggest that Polish healthcare providers who work with patients with cardiovascular disease and diabetes have a good understanding of the benefits of selfcare, self-monitoring, and self-management. The importance of patient education and empowerment tends to be well understood, though HCPs would like to see more support from the government in this regard.

Polish consumers are interested in self-care and have shown more interest in health during the pandemic, but they tend to not make distinctions among prescription drugs, OTC drugs, and complementary medicine - highlighting the need for better health education. There appears to be a keener interest in taking food supplements

compared with people in other countries. In response, several industry associations and nongovernmental organizations have launched initiatives to educate consumers about the importance of self-care and the need to take responsibility for their own health. For example, PASMI, the Polish Association of Self-Medication Industry, has created a campaign encouraging people to "heal responsibly." 164 And the Healthily Engaged Citizens Foundation (Fundacja Obywatele Zdrowo Zaangażowani) runs the "Healthy Involved" campaign (among others) and offers publications on responsible self-treatment. 165 166

Research conducted in 2019 revealed high levels of trust in pharmacists (over 90%), yet only 13% of Poles said they sought a pharmacist's advice on minor health problems and only 10% sought advice on medication. In response, an educational campaign titled "Pharmacists First" encourages Poles to consult a pharmacist before self-medicating.¹⁶⁷

"Self-care in Poland is generally defined only as stand-alone use of the medicines by the patients. There is no widely known definition of self-care in its entirety, which also includes elements such as selfmanagement and self-treatment. Building public awareness and education is the key to a proper understanding of the process of safe self-care. This is a work to be done by all of us for the next years."

Monika Zagrajek

General Director, The Polish Association of Self-Medication Industry), Poland

CONSUMER & PATIENT EMPOWERMENT

According to a 2016 index of European health literacy, Poland ranked close to the average among the eight EU countries studied, with roughly 55% of those surveyed having excellent or sufficient levels of general health literacy. Poland was on par with Germany and Ireland and ahead of Austria, Spain, and Bulgaria but lagged behind the Netherlands and Ireland. 168

Conversations with several interviewees, as well as academic analyses, however, suggest that Polish health literacy could be improved. For example, a study of the occupational health system argues that the "low level of health literacy among both employers and employees lies at the forefront of a passive approach towards the safeguarding of workers health" and recommends the design of a Polish tool for assessing health literacy.¹⁶⁹ Another academic study ties the high prevalence of premature mortality and unhealthy lifestyle behaviors in Lower Silesia to low health literacy. 170

The Polish government puts great emphasis on promoting physical activity and other healthy habits. Though it subsidizes numerous programs related to these goals, interviewees told us the government is not reaching many citizens. Examples include the following:

- The Sport Development Program 2020 is designed to increase physical activity, develop good habits among children and youth, and foster the role of sport in the process of social inclusion and building social capital.¹⁷¹
- The School Sports Club Program aims to boost sports and recreational activities for primary and secondary school students under the supervision of physical education teachers.¹⁷²
- The Ministry of Labor and Social Policy runs a program that promotes older adults' participation in recreational and touristic physical activity and sports.¹⁷³

• The National "Keep Fit" Program - under the auspices of the Chief Sanitary Inspectorate and the Polish Federation of Food Industry - aims to educate school children and their families on healthy eating habits and the benefits of maintaining an active lifestyle and balanced diet.¹⁷⁴

In 2020, the Polish Commissioner for Patients' Rights proposed the introduction of a separate school subject called "Knowledge about Health," which would cover most health literacy components: healthy lifestyle, rights and duties of patients, stress reduction, healthy diet, assessment of pro-health measures and the importance of sport, first aid, learning about selected diseases, etc.¹⁷⁵ Although the government decided against introducing health knowledge as a separate subject, it may still include some or all of the recommended components in the core curriculum. (Notably, sex education is not part of the proposal.) Physical education has long been a component of the national curriculum in Poland and was recently redesigned to "empower individuals to develop life skills that lead to lifelong, selfdirected engagement in physical activity."176

Poland participates in the European Union School Fruit Scheme (since 2009) and the School Milk Scheme (since 2004).¹⁷⁷ It is also a member of the Schools for Health in Europe network and the Healthy Eating and Physical Activity in Schools project within that network. However, these initiatives are implemented in a limited number of cities.¹⁷⁸

Polish health authorities are active on Twitter and LinkedIn. During the coronavirus pandemic. Poland has used selfie apps to monitor and track high-risk citizens.

They are open to taking advantage of this possibility, especially during a pandemic, they care more about their health and become more involved in this issue. The key to shaping the right attitudes of society is education. Unfortunately, there are no credible and reliable sources of knowledge that could be used in health education. It should be pointed out that opinion leaders and the government do not support the self-care process, the pharmaceutical and medical community is mostly critical and does not support the patient's independence in this area. The patients are still treated subjectively, and

PASMI makes an effort to educate the public, through various educational projects, increasing the role of OTC medicines, for both the patient and the entire health care system. Nevertheless, in order to achieve a lasting effect, it is necessary to conduct consolidated activities involving each of the links in the health care system."

Monika Zagrajek

General Director, The Polish Association of Self-Medication Industry, Poland

SELF-CARE HEALTH POLICY

The Polish government has not commissioned any studies on the value of self-care. Likewise, our interviews and research yielded no evidence of policymaker or expert discussions on this topic. Rather, the focus of conversations is on OTC switches and access channels for OTC medication and T&CM, especially food supplements.

Healthcare reform is ongoing, with discussions on how to make the system more outcomebased and efficient. In 2016, the Polish Ministry of Health embarked on a far-reaching reform program aimed at improving access to care and care coordination, improving efficiency, and reducing duplication.

The National Health Programme 2016-2020, the basic document defining Polish public health policy, calls for investment in disease prevention, with a focus on reducing smoking and alcohol consumption. But it does not include specific actions related to self-care (e.g., self-management of NCDs, self-medication and self-monitoring, health literacy). 179 180

The "40 Plus Prevention Program," which was slated for launch in 2020, targets people aged 40-65 for early diagnosis of cardiovascular disease, cancer, and diabetes. The program does not mention self-care or patient empowerment as a form of prevention, but it does offer preventive checks every five years for a number of conditions linked to aging.¹⁸¹

Doctors are eligible for reimbursement for a number of procedures related to providing diagnostic and psychological advice for patients.

Poland's national legislation for T&CM covers only herbal medicines. The Office for Registration of Medicinal Products, Medical Devices and Biocidal Products oversees herbal and homeopathic medicinal products, and the National Medicines Institute in Warsaw carries out research on the quality of such products. The Act on Food Safety and Nutrition and its amendments regulate dietary supplements and foodstuffs. 182 The Main Sanitary Inspector is responsible for the supervision of the foodstuff market, including dietary supplements. 183

"In Poland, self-care is seen as the private domain of the citizen.... The Polish system is not built around the patient but around the doctor - the doctor is God. GPs are reimbursed for their patient list, irrespective of services rendered or outcomes achieved. This is a remnant of the communist system. But the situation is changing."

Mr. Michał Byliniak

Vice President, Polish Pharmaceutical Chamber, Poland

REGULATORY ENVIRONMENT

The Polish Office for Registration of Medicinal Products, Medical Devices and Biocidal Products (URPL) oversees licensing of drugs and medical devices. According to law, the approval process for medicinal products takes 210 calendar days, but evaluation criteria and performance tracking information are not publicly available.¹⁸⁴ Timelines for the mutual recognition procedure for authorization under the European Medical Agency are 90 days and are usually adhered to by the authorities.¹⁸⁵

Poland's Rx-to-OTC switch process is not formally defined. However, Poland has reportedly one of the "most progressive" OTC markets in Europe, often leading the way in switches. While advisory meetings are not possible ahead of filing switching applications, URPL staff are available during the evaluation of a switch through a dedicated contact point. Legal protections for data submitted to support product switches are harmonized under the European framework, which provides one year of exclusivity. 186

While Poland's Rx-to-**OTC** switch process is not formally defined, the country often leads Europe in expanding self-care options through switches.

OTC drugs are available for self-selection in pharmacies, and a subset of products (based on a list published by the Ministry of Health) may be sold in other retail outlets, such as supermarkets and petrol stations. Pharmacies are the dominant OTC channel, accounting for about 90% of sales. Online sales are permitted only through online pharmacies, of which there were more than 200 in 2019. The government has moved in recent years to tighten ownership conditions for new pharmacies, but these efforts are not likely to reduce access to self-care for consumers. 187

Advertising of nonprescription medicines to the general public is allowed in all media, and comparative advertising is allowed. However,

ads may not suggest that by consuming a product the user may avoid consulting a doctor or that a product might improve a healthy person's condition (or, conversely, that not taking it would result in deterioration). Also, ads may not say that a medicinal product constitutes a foodstuff or cosmetic, or that a product's effectiveness or safety is a result of its "natural character." 188

OTC medicines may be priced freely.¹⁸⁹ According to OECD research, high pharmacy margins result in Poles spending almost as much on OTC drugs as they do on prescription drugs.¹⁹⁰



"Today, there are about 80,000-100,000 places to buy medicine outside of pharmacies - including clothing stores and gas stations. There is no registry, so we don't know the exact number. The availability in Poland is the biggest compared to other countries in Europe. Because so many businesses benefit from the sale of OTCs and medical devices, each time someone proposes to regulate it, even just to introduce a registry, there is a huge backlash."

Mr. Michał Byliniak

South Africa



Stakeholder Support & Adoption



Consumer & Patient Empowerment

COMPARATIVE SCALE

1 = not self-care ready 4 = exceptionally self-care ready



Self-Care Health Policy



Regulatory **Environment**

STAKEHOLDER SUPPORT & ADOPTION

South Africa's NCDs Plan (2013-2017) states that "there is a need to fully integrate non-communicable diseases into the re-engineering of primary health care in South Africa with the view to increasing community-based prevention, screening, and self-management."191

Self-care, health education, and behavior change are discussed in medical congresses as part of primary care. In conferences for specific disease areas, however, these topics tend to be siloed within the prevention track. As one of the interviews with a cardiologist indicated, it is necessary to have been previously exposed to self-care in order to learn about best practices in the area.

"The starting point of self-care is to teach people to look after themselves. In South Africa, however, only 15% of the population has the resources to actually think about self-care. ... Traditional medicines and household remedies are the first line of treatment in many communities, and many people in rural South Africa do not have access to OTC medicines or supplements. While some of their traditional beliefs are positive and should be enhanced, others are obviously harmful and must be moderated."

Dr. Nicholas Crisp

Public Health Specialist and National Health Insurance Fund Developer, Ministry of Health, South Africa

Our desk research revealed that most South Africans do not follow a healthy diet. despite numerous government campaigns in recent years. Based on our interviews, this is the result of large inequalities that hamper access to healthy food, and to the healthcare system overall.





CONSUMER & PATIENT EMPOWERMENT

South Africa's National Health Promotion Policy and Strategy 2014-2019 provides a framework, "to integrate health promotion into all health programs to allow people to increase control over their health and to make healthy choices." ¹⁹² And in its Strategy for the Prevention and Control of Obesity in South Africa 2015-2020, the government states that, "it is our responsibility to empower people to make informed decisions in this regard and to ensure that they have access to healthy food by raising awareness and increasing the availability of effective initiatives and interventions."193

The government sponsors National Healthy Lifestyles Day, which highlights the dangers of obesity, an unhealthy diet, and physical inactivity as risk factors.¹⁹⁴ National Recreation Day, held each year on the first Friday in October, encourages broad participation in a variety of recreational activities such as walking, cycling, and dancing. 195

Similar to Nigeria, South Africa focuses on schools as places to provide basic healthcare, such as immunization and screening for conditions like tuberculosis, vision or hearing loss, or STDs. In addition to strengthening health services at schools, the Department of Basic Education and the Department of Health have identified health promotion as one of nine priority areas in the Care and Support

for Teaching and Learning (CSTL) Program. The 2012 Integrated School Health Policy states that "health education is a critical component" of the school curriculum, through the Life Orientation learning areas. However, it is acknowledged that there is not often enough time to, "fully address issues related to sexual and reproductive health as well as other health and social issues." Life Orientation learning areas cover nutrition and exercise; personal and environmental hygiene; chronic illnesses (including HIV and TB); abuse; sexual and reproductive health: menstruation: contraception; STIs, and male circumcision.¹⁹⁶ However, recent research indicates "widespread non-compliance" due to "insufficient stakeholder integration." The 2019 education action plan references the 2012 integrated school health policy but does not provide any progress update specifically on health promotion, focusing instead on improving teacher quality and consistent execution of core curriculum. 198

The Department of Health's COVID-19 web platform, https://sacoronavirus.co.za/, makes frequent references to the importance of self-care, particularly in the context of mental health and management of chronic conditions. 199 The department is active on Twitter and has developed a WhatsApp platform for the pandemic, praekelt.org, that was adopted by WHO. This platform also contains useful resources for new mothers and adolescents.

"Health literacy is not a training priority more focus in the last few years from public providers, because they understand that better health literacy could help reduce their workload. Still, most health literacy campaigns are driven by academic researchers and not those in clinical practice."

Cardiologist, Cardiac Clinic, Groote Schuur Hospital, Cape Town, South Africa

Dr. Blanche Cupido

SELF-CARE HEALTH POLICY

While the coronavirus pandemic has certainly put a spotlight on self-care in South Africa. as elsewhere, we found no evidence that the government recognizes the economic value of self-care. Some of our interviewees said that making too loud a case on the economic benefits could be perceived by consumers as a form of abandonment by the health system, as most people still don't have health insurance or adequate access to care.

"People generally don't tend to make a distinction between homeopathy, supplements, and complementary medicines. At the end of the day, they care about whether it works or not and whether it gives negative effects; they want to take something that make them feel better, not worse, primarily based on reputation and word of mouth - not necessarily on verifiable scientific results."

Dr. Neil Gower

Senior Lecturer, Department of Homoeopathy, University of

Private health insurance plays a large role in South Africa, but work is under way to put a universal health insurance system in place. Currently, out of South Africa's 60 million people, about 16% (mostly white and wealthy) have private insurance. This group is served by 70% of the nation's doctors and accounts for almost half of all spending on medical care. The remaining 84% of the population rely on crowded, underfunded government hospitals and clinics. Doctors in South Africa's private system operate under a fee-for-service model and have wide discretion in how they treat patients, which encourages interventions. 200 201

Voluntary medical savings accounts (MSAs) offer a way for consumers to reduce healthcare costs, but they are available only to individuals who purchase private insurance. Moreover, MSAs in South Africa are also guite limited in what they cover, excluding key cost drivers

such as hospital, technology, and HIV/ AIDS expenses.²⁰³

Doctors in South Africa can be reimbursed for counseling activities related to self-care, for example, for talking with patients about HIV risks and testing or about homeopathy.²⁰⁴ Pharmacists are given a fee for delivering behind-the-counter products, similar to France.²⁰⁵

South Africa has had regulations for complementary medicines in place since the mid-1990s, and the Chiropractors, Homeopaths and Allied Health Service Professions Second Amendment Act governs the practice of complementary medicine. 206 ²⁰⁷ The Department of Health took a first step toward recognizing and institutionalizing African traditional medicine by establishing the Directorate of Traditional Medicine in 2006.208 While COVID-19 has increased the urgency of having evidence-based research around traditional medicine, regulation remains a challenge given the difficulty of identifying and quantifying ingredients.²⁰⁹ The government-funded South African Medical Research Council has a Herbal Drugs Research Unit that uses modern scientific techniques to study the country's indigenous botanical assets in medicine and potentially increase the development of phytomedicines (herbalbased traditional medicine).²¹⁰

"Traditional medicines and household remedies are the first line of treatment in many communities, and many people in rural South Africa do not have access to OTC medicines or supplements. While some of their traditional beliefs are positive and should be enhanced. others are obviously harmful and must be moderated."

Dr. Nicholas Crisp

Public Health Specialist and National Health Insurance Fund Developer. Ministry of Health, South Africa

REGULATORY ENVIRONMENT

The South African Health Products Regulatory Authority (SAHPRA) regulates all health products, including orthodox medicines (drugs), biological products, medical devices to in vitro diagnostic products, and T&CM. The SAPHRA website is notably modern and well organized by product category, and it provides key contacts as well as an online status checker for new product applications (among other e-services). SAPHRA's annual report measures annual performance against 28 KPIs, including volume and speed of approval decisions.²¹¹

South Africa has three tiers of nonprescription drugs. Schedule O medicines, which include aspirin, low dosages of paracetamol, and most vitamins, may be "sold anywhere to anyone." Schedule 1 medicines, such as topicals, some concentrated vitamin supplements like Vitamin C, and higher doses of ibuprofen or other pain medication, may be sold only in pharmacies under appropriate supervision. Schedule 2 products (e.g., certain smoking cessation aids, nasal decongestants, and antifungals for infections of the mouth) can be bought without a prescription from a medical practitioner but are known as "pharmacist prescription medicines": only a pharmacist or a holder of a dispensing license may sell these products.²¹²

In partnership with the Self-Care Association of South Africa, SAHPRA is building an online directory of all Schedule 0, 1, and 2 registered OTC medicines. This mobile-friendly directory will make it easy for consumers and healthcare professionals to access drug information and is targeted to launch in May 2021.²¹³



"SAPHRA is under-resourced and does not have the capacity to evaluate the impact of complementary products or document their use. Suppliers have to register as traders, but there is no regulation of their products... We will get there, but right now we regulate food better than we regulate complementary medicines."

Dr. Nicholas Crisp

Health Insurance Fund Developer, Ministry of Health, South Africa

South Africa has established switching guidelines for switching from prescription to nonprescription status, with decisions guided primarily by patient safety concerns. However, there is no data nor marketing exclusivity protection periods for medicinal products.²¹⁴

In terms of access. Schedule 0 medicines are available off the shelf or without prescription in a supermarket. Schedule 1 and 2 medicines are available without prescription, but only from a pharmacist. They are referred to as "over the counter medicines." Schedule 5 medicines are available only from a pharmacist on prescription by an authorized prescriber. Pharmacies are allowed to sell OTC drugs online.²¹⁵

For self-medications in Schedules 0 and 1, advertising to the general public is permitted subject to the Code of Practice for the Marketing of Health Products in South Africa. Self-care products listed in Schedule 2 may be marketed only to healthcare professionals.²¹⁶

Only Schedule O drugs are exempt from price controls under the National Drug Policy's single exit price (SEP) mechanism.²¹⁷

Thailand



Stakeholder Support & Adoption



Consumer & Patient Empowerment

COMPARATIVE SCALE

1 = not self-care ready 4 = exceptionally self-care ready







Regulatory **Environment**

STAKEHOLDER SUPPORT & ADOPTION

Although "self-care" may not be a familiar term or part of the formal healthcare lexicon in Thailand, interviewees say that Thai people typically practice self-care on a daily basis. It is common for people to self-diagnose minor illnesses and to access household remedies. OTC medicines, and other safe, non-controlled drugs prior to consultation with healthcare professionals.

Self-management and the importance of behavioral change and patient education are often discussed at Thai medical congresses. Healthcare professionals play a key role in educating consumers how to prevent diseases and treat simple ailments at home rather than visiting a healthcare setting.





Thailand's Healthy Lifestyle Strategic Plan Phase II 5-Year Non-Communicable Diseases Prevention and Control Plan (2017-2021) mentions self-care multiple times. It encourages citizens to self-screen, promotes self-care for patients with NCDs, and calls for building the capacity of public health and family volunteers to manage NCDs in the community, with an emphasis on health literacy. To that end, a series of information, kits, and manuals were made available for citizens and local administrators. 218 219 220

Health occupies an important place in the National Strategy, which sets out Thailand's goals and methods for sustainable national development. "Enhancing well-being among Thai people" is among the key priorities, including "promoting well-being-related knowledge" and "preventing and controlling health risk factors". The National Strategy also calls for, "enhancing capacity for addressing preventive measures of emerging and re-emerging infectious diseases."221

CONSUMER & PATIENT EMPOWERMENT

An update to Thailand's 2008 Core Curriculum included good physical and mental health, hygiene, and preference for physical exercise as an important goal. Health and physical education used to be part of the national test taken by students at the end of general primary, lower secondary and upper secondary levels but this was removed in 2015.²²² Since 2003, the Thailand Ministry of Education has partnered with the Thai Health Promotion Foundation, an autonomous government agency, to encourage healthy behaviors, particularly among young people.²²³

The Thai Ministry of Public Health is not active on Twitter as a separate entity from the Thai government. Over the past year, the health authorities have grappled with the "COVID-19 Infodemic" and mitigating the harm from a flood of misinformation about the disease. To that end, the health communications strategy has centered on using traditional media platforms such as daily TV briefings by a national spokesperson, from which information can be further disseminated via social media.²²⁴

Under the Ministry of Public Health's eHealth Strategy (2017-26), the government is working on a unified health data platform with a standardized EHR system. However, this effort is still in the early stages of development, and the timeframe for completion is uncertain.²²⁵

"Those who need more, regular care, than doctors themselves. For many people, however, health literacy is low; we try to educate them about health and self-care but they ignore it because they have to work. For example, we see taxi drivers who have kidney failure because they have no time to drink water or go to the restroom."

Orajitt Bumrungskulswat Assitant Secretary General,

SELF-CARE HEALTH POLICY

According to some of our interviewees, Thai policymakers understand the link between selfcare and good health, but we found no explicit evidence that the ROI of self-care figures in government policy decisions.

Thailand has had a tax-funded universal health insurance scheme in place since 2002. A feefor-service model dominates but there are some indications of a move away from that system.²²⁶ A majority of respondents to our HCP said that they can bill for self-care.

A national plan for integrating T&CM into national health delivery has been in place since 1992. Thailand's T&CM policy is part of the National Health Act (B.E. 2550) of 2007. The national policy and law on T&CM was updated in 2016, and regulations were updated in 2013. As of end-2016, the government allocated more than US\$30 million in research funding to T&CM. There is also a national policy exclusively on traditional Thai medicine (TTM), which is included in the 10th National Health Development Plan, 2007-2011. Herbal medicines are subject to regulation B.E. 2510, issued in 1967 under the Drug Act and its amendments.

The Department of Thai Traditional and Alternative Medicine, established in 2002 under the Ministry of Public Health in Nonthaburi, serves as the national office for T&CM.²²⁸ While no single committee oversees all the aspects of T&CM, there are a variety of expert bodies related to TTM, such as the committee on the protection and promotion of TTM, the network of graduate school deans, and the national expert working group on selection of herbal medicinal products. 229 230 231

REGULATORY ENVIRONMENT

The Thailand Food and Drug Administration (FDA), under the Ministry of Public Health, oversees the regulation of drugs, medical devices, cosmetics, and other products. During our interviews, we were informed that the agency has established clear guidance and requirements, as well as a clear process and timeline for the registration of self-medication. It is difficult, however, for non-Thai speakers to find this information on the English version of the FDA website, which is slow to load and challenging to navigate, and may not contain as much content as is available on the full FDA Thai site.²³²

According to Dr. Suchart, the current lead time for approval is 135 working days for selfmedication in the generic medicine category. He also told us that Thai FDA, "tracks approval lead time of every single application in every step as a key performance indicator." However, information about lead times does not appear on the FDA website, and other sources say the process takes longer.²³³ On the plus side, sponsors can track the status of their application online, and the agency's Health Products Service and Consultation Center allows registered users to submit questions about health products.²³⁴

Thailand has four types of drug product classifications: (1) specially controlled drugs (prescription-only medicines), (2) dangerous drugs (pharmacist-only medicines), (3) non-dangerous and non-specially controlled drugs (pharmacy-only medicines, closest to OTC) and (4) household remedies, or General Sell List (GSL) medicines, available in grocery stores and other retail outlets. It is fairly common for pharmacists to dispense medicines that typically require a prescription in other countries (e.g., antibiotics) without a doctor's prescription.²³⁵

When drugs are switched to OTC status, Thailand requires a patient information leaflet, which encourages consumer decision-making and empowers them to make use of available self-care products. Every leaflet needs to pass user testing to ensure consumer understanding of the provided information.

The 2017 reclassification guideline lays out the documents needed to apply for a switch in classification of a drug. It also provides an overview of the types of classifications available, and lists the information required to conduct the process. Of the six product types we compared across countries. Thailand switched heartburn and indigestion products from the non-dangerous category to household remedies/GSL and smoking cessation aids from the dangerous to non-dangerous category in 2018. Non-sedative antihistamine products - which were not among the six product classes we examined - were switched from the dangerous to non-dangerous category as of 2019. Reclassification is based on ingredients, and there are no legal protections for data submitted in support of switches. Hence, once an application for reclassification by one company succeeds, it benefits the industry as a whole.²³⁶

Advertisements of non-dangerous drugs or household remedies directly to the public require additional FDA review and approval. All drug advertisements - whether on television or radio, or in print media or online - must state their FDA approval number. Despite this rule, many ads are being run online without permission.²³⁷ Self-care medicines are not subject to price controls.



United Kingdom







Consumer & Patient Empowerment

COMPARATIVE SCALE

1 = not self-care ready 4 = exceptionally self-care ready







Regulatory **Environment**

STAKEHOLDER SUPPORT & ADOPTION

The Department of Health and Social Care. which oversees care and the National Health Service (NHS) in England, defines self-care as, "the actions people take for themselves, their children and their families to stay fit and maintain good physical and mental health; meet social and psychological needs; prevent illness or accidents; care for minor ailments and long-term conditions; and maintain health and wellbeing after an acute illness or discharge from hospital."238

NHS England has an extensive plan for personalized care, which embeds most aspects of self-care as defined by WHO. The latest NHS Long-Term Plan, launched in 2019, mentions self-care as key to community health. It calls for ramping up "supported self-management" and self-care education programs for people living in deprived areas through personal health budgets, both examples of self-management for long-term chronic conditions.²³⁹ ²⁴⁰ The plan identifies the knowledge, skills, and confidence ('activation') people have to manage their own health and care, using tools such as the Patient Activation Measure® (PAM®). While a quick search of the NHS website yields a number of resources dedicated to self-care as well as case studies that detail self-care measures

"We believe the doctor is the expert in disease and the patient is an expert in themselves."

Dr. Helen Crawley

International Medical Director for Membership and Networks, Royal College of General Practitioners, United Kingdom

and personalized care operating models,²⁴¹ the industry is calling for creation of a more comprehensive and user-friendly national self-care information hub.²⁴²

From the perspective of self-care product companies, the NHS is very good at encouraging self-management of chronic and long-term conditions. Where it falls short is in supporting self-care in the case of minor ailments - self-treatable conditions for which people don't need to see a doctor but can manage on their own or with advice from a pharmacy.

The UK's "My Care, My Way" initiative is a new integrated care service for people over age 65. The aim: to empower people to manage every aspect of their care in partnership with their GP.²⁴³

Based on our interviews, healthcare providers in England generally trust and support selfcare practices, and they told us they strongly encourage prevention and self-monitoring among patients and encourage self-treatment of minor ailments. HCPs also direct patients toward the NHS resources on self-care of long-term or chronic conditions, including the self-care toolkit,²⁴⁴ and recommend visiting community pharmacists for advice on how to treat minor ailments before visiting a GP. Self-management was not on the agenda at the last UK cardiology congress; however, the primary care congress in 2019 included sessions about personalized care and working with communities to anticipate health needs.²⁴⁵ ²⁴⁶

While the NHS and HCP providers put great emphasis on self-care, UK respondents seem to have a different perception. When asked about the frequency of self-care conversations with their HCPs, UK consumers say these occur far less often than respondents from other countries. A survey conducted around the same time (July 2020) by PAGB, the Consumer Healthcare Association, shows that among those who previously sought a GP appointment as their first option, more than half (51%) said they were less likely to do so after the pandemic. Almost seven out of ten respondents (69%) who might not have considered self-care as their first option before the pandemic said they were more likely to do so in future.²⁴⁷ In an earlier PAGB survey, conducted in 2016, 92% of respondents agreed that it is important for people to take more responsibility for their own health to ease the burden on the NHS, and 87%

said they were confident in dealing with self-treatable conditions.²⁴⁸

"The Primary Care Network (PCN) brings together GP practices with other local NHS, social care and voluntary sector organizations. Their aim is to focus services around local communities and allow GPs and primary care practitioners to deliver a new model of care for their patients and communities. This includes reducing health inequalities and tackling the wider social determinants of health, including housing and employment, as these can be drivers of demand on primary care. In order to deliver this PCNs will be able to employ a range of new roles such as health coaches, social prescribers, occupational therapists, paramedics and mental health practitioners."

Ruth Rankine

Director, Primary Care Network, NHS Confederation, United Kingdom

CONSUMER & PATIENT EMPOWERMENT

The UK government launched the National Program for Information Technology, then described as "one of the world's biggest IT projects," back in 2002, with the goal of implementing electronic patient records to reduce the burden on medical professionals.²⁴⁹ It was eventually closed down in 2011.²⁵⁰ Nearly 20 years later, however, the country's digital records system remains far from centralized and coordinated.²⁵¹

As of September 2020, England's mandatory national curriculum includes updated statutory guidance on personal, social, health, and economic education (PSHE) as well as sex and relationships education. Among the topics addressed are simple self-care techniques, nutrition, personal hygiene, prevention of health and wellbeing problems (e.g., through exercise and not smoking), and basic first aid.²⁵² However, the curriculum does not cover self-treatment of minor ailments. Previously, the PSHE curriculum was recommended but not compulsory. In July 2019, the Department

of Education released the "Health Schools Rating Scheme" designed to recognize and encourage schools' contributions to pupils' health and well-being. It celebrates the positive actions that schools are delivering in terms of healthy eating and physical activity and aims to help schools identify next steps.²⁵³

While these are encouraging developments, other research may suggest a need for adult health education. According to a 2014 observational study, 43% of working-age adults in England are unable to understand or make use of everyday health information. This share rises to 61% when numeracy skills are also required for comprehension. ²⁵⁴ On the other hand, roughly three-quarters of UK (and South African) respondents to our consumer survey said they never or rarely had problems learning about their health because of difficulty understanding written information.

The Department of Health and Social Care England is active on Twitter and LinkedIn. In March 2020, the department launched a coronavirus information service on WhatsApp.²⁵⁵ As in many countries, the NHS websites were updated with comprehensive information about coronavirus, including a symptom checker tool which people could use to assess their symptoms and get advice on what to do next. The government's main message – "Stay at home, protect the NHS, save lives" – was essentially one of self-care. People were encouraged to look after their own health rather than visit the GP or hospital accident and emergency services. Even people with mild to moderate COVID symptoms were advised to stay at home and treat their symptoms with OTC products.

NHS England supports a half-dozen apps focused on self-management of long-term conditions such as asthma, Chronic Obstructive Pulmonary Disease (COPD), and diabetes. For example, "Changing Life" is a lifestyle coaching program designed to help people with Type 2 diabetes lose weight, eat better, and move more.²⁵⁶ This app is free but requires a GP referral; others require a user fee. Babylon's Ask Accident & Emergency tool directs patients to the appropriate NHS service based on the symptoms they input. This includes booking a GP appointment, visiting a pharmacy, or staying at home and monitoring symptoms. After being rolled out by University Hospitals Birmingham NHS Foundation Trust in October 2019, 55% of queries resulted in self-care advice or directed patients to non-urgent care; less than 30% required an A&E visit.²⁵⁷

In 2020, PAGB published an audit of commonly used online health platforms in England. This "Digital Self-Care Audit" recommended establishment of a national self-care information hub, a review of existing and new self-care apps to encourage consistent roll-out across the country, and improvements in digital triaging routes, so that people are referred to self-care when it is the appropriate solution. ²⁵⁸

"Self-care does not come naturally to people who have no particular health condition."

Dr. Rhiannon Corcoran

Professor of Psychology & Public Mental Health, Dept. of Primary Care and Mental Health, Institute of Population Health, University of Liverpool; Director for the Health and Wellbeing Theme, International Self-Care Foundation, England

UK PROGRAMS PROMOTING SELF-CARE IN ORAL HEALTH

The Oral Health Foundation runs two annual campaigns aimed at increasing awareness of the importance of oral health and improving self-care habits at home. **Mouth Cancer Action Month** focuses on the risk factors for mouth cancer and the need for early diagnosis to improve survival rates. With the tagline, "If in Doubt, Get Checked Out," the program is designed to educate the public on signs and symptoms that should trigger a visit to the dentist.²⁵⁹ **National Smile Month** typically promotes three key messages related to self-care: (1) twice-a-day brushing with fluoride toothpaste; (2) cutting intake of sugary foods; and (3) regular dental visits.²⁶⁰

NHS Scotland and NHS Wales both run government-funded programs focused on preventative care for children. **Childsmile**, the Scottish program, is aimed at reducing inequalities in oral health and improving access to dental services. The program equips parents and caregivers with information on how to care for children's oral health at home, including toothbrushing skills and treatments like fluoride varnishing.²⁶¹ **Designed to Smile**, the Welsh program, provides similar free educational services and dental treatments for children from birth through nursery and primary school.²⁶²

SELF-CARE HEALTH POLICY

Health policy in the UK is strongly influenced by a paternalistic approach - that everything is paid for and that patients should go to their local GP and hospital as first points of call which runs counter to the essence of self-care. With this mindset ingrained in UK society since 1948, and before, the shift toward policies encouraging people to prioritize self-care could take years to bear fruit.

The ROI of self-care has been mentioned in UK parliamentary sessions, but not since 2019.²⁶³ The NHS Long-Term Plan puts emphasis on self-management of longterm conditions like diabetes and calls for pharmacists to support patients in increasing medication adherence as well as for a shift from prescription medicine to OTC drugs in order to reduce costs. A 2018 report from the Local Government Association stresses the economic benefit of increasing self-care and profiles how city and county councils are helping people look after themselves.²⁶⁴

"Research shows as many as 50% of patients do not take their medicines as intended and pharmacists will support patients to take their medicines to get the best from them, reduce waste and promote self-care. We will reduce the prescribing of low clinical value medicines and items which are readily available over the counter to save over £200 million a year."

NHS Long-Term Plan, United Kingdom ²⁶⁵

In England, capitation payments - wherein providers receive a capped payment per patient under care - are used for primary care, while a fee-for-service model applies to outpatient specialists. The general practitioner funding formula for capitation payments does adjust for morbidity and mortality, therefore fostering an outcome-based system. The NHS supports many projects and commissions

studies that aim to measure and foster outcomes-based healthcare.²⁶⁶ 267

The NHS Long-Term Plan aims to make personalized care "business as usual" across the health and care system, benefiting up to 2.5 million people by 2024.²⁶⁸ The world-leading "Healthier You: NHS Diabetes Prevention Program" is one example of how the UK supports self-care for patients with chronic diseases. Those referred to the service - more than 600.000 to date - receive free, tailored. personalized support to reduce their risk of Type 2 diabetes, including education on healthy eating and lifestyles, help to lose weight, and physical exercise programs.²⁶⁹ In September 2020, the NHS began piloting "soup and shake weight-loss plans" to tackle Type 2 diabetes. Results from one trial showed that almost half of those who went on the diet achieved remission after one year.²⁷⁰

The NHS supports health coaching approaches and self-management education within routine NHS consultations. However, the billing code manual shows no codes for medical advice or self-care practices.²⁷¹ Our HCP survey respondents indicated that they cannot bill for time spent giving self-care advice, although they apparently are keen on doing so.

Under a new regulation effective Jan. 1, 2021, almost all pharmacies now must have small consultation rooms where they can provide advice to patients.²⁷² In 2019, NHS England and NHS Improvement launched the Community Pharmacist Consultation Service (CPCS), offering patients the option of having a face-to-face or remote consultation with a pharmacist following an initial assessment by an NHS 111 call advisor. Consultations resulting from these CPSC referrals can be charged to the NHS.²⁷³ As a cost-saving measure, NHS England has issued guidance strongly discouraging GPs from writing prescriptions for OTC products.²⁷⁴

T&CM policy is integrated in the UK's national health policy. Prior to marketing, herbal medicines used to treat minor health conditions (e.g., colds) require registration under the

Traditional Herbal Medicines Regulation Scheme. However, there is limited regulation of herbal practitioners and the herbal remedies they may supply to patients following oneon-one consultations.²⁷⁵ According to WHO's report, the Department of Health has a program to develop research expertise in T&CM and to strengthen the evidence base. It also commissions periodic surveys on the use of T&CM.²⁷⁶

"To promote the efficient use of resources, there is a lot of information on the NHS website about self-care. Most GPs appreciate it and most patients have read it. Central NHS executives are keen on it. They created these NHS websites to actively try to manage demand for health services and divert people away from resource-intensive services."

Dr. Stuart Holmes General Practitioner, United Kingdom

REGULATORY ENVIRONMENT

The Medicines and Healthcare products Regulatory Agency (MHRA) is responsible for granting marketing authorizations for medicines (both prescription and nonprescription) and medical devices as well as traditional herbal registrations in the UK. The MHRA section of the gov.uk website offers detailed guidance for drug applicants, including information about different application types, approval processes, and fees.²⁷⁷ Similar guidance exists for medical device applicants.²⁷⁸ The MHRA site focuses more on application formalities than on the evaluation process, but the agency publishes scientific assessments of products that have already been authorized, giving clues about evaluation criteria and allowing sponsors to better understand the process and basis for decision-making.



Speed-to-market is a central element of MHRA's post-Brexit strategy.²⁷⁹ To accelerate the availability of medicines for patients in the UK, the agency recently updated its marketing approval procedures. As of 2021, the 150-day National Procedure is complemented by the Innovative Licensing and Access Procedure (ILAP), which further accelerates the time to market for innovative medicines, including new chemical entities, biological medicines, new indications and repurposed medicines.²⁸⁰ Notably, as a result of the Northern Ireland Protocol, applications to market a product in Northern Ireland must continue to comply with European requirements.²⁸¹ MHRA tracks licensing-time-based performance measures and also keeps a list of approvals by month.²⁸²

In addition to providing detailed contact information, MHRA explicitly encourages sponsors to contact agency staff before submitting their application, and provides relevant email addresses and telephone numbers throughout its application guidance pages.²⁸³ By submitting a request for scientific advice on the website, sponsors can schedule face-to-face and videoconference meetings to consult with staff and receive scientific advice at any stage of the drug journey - from development to market approval. MHRA also offers broader scope meetings that allow sponsors to ask more general questions that are not related to specific products.²⁸⁴

According to PAGB, there are many issues and delays associated with the process, and it is working with MHRA to pave a better and easier pathway to approval.



The UK has three categories of medicine, which determine ease of consumer access:

- Prescription-Only Medicine (POM) must be prescribed by a doctor or other authorized health professional and dispensed from a pharmacy or other specifically licensed place;
- Pharmacy (P) drugs can be bought only from pharmacies and under a pharmacist's supervision;
- General Sales List (GSL) drugs may be bought from supermarkets, other retail stores, and vending machines, as well as from pharmacies.

According to the MHRA, over-the-counter medicines encompass all general sale and pharmacy medicines but the term "OTC" is used informally, not in a regulatory sense. Many self-care products - for example, common painkillers and antihistamines fall under both the "GSL" and "P" categories, with larger pack sizes requiring pharmacist supervision to purchase. Other examples of self-care items designated as pharmacy drugs include tablets for emergency contraception and medicines containing codeine.²⁸⁵

The MHRA sets out clear procedures for requesting a drug classification change and references the criteria used to evaluate switch applications. Different rules govern simple vs. standard reclassifications; the former are based on analogous products. The MHRA keeps a publicly accessible table of approved standard reclassifications.²⁸⁶ Legal protections for data submitted to support switches are still harmonized under the European framework, which provides one year of data exclusivity.²⁸⁷

According to the NHS, medicines can be purchased online through any pharmacy registered with the General Pharmaceutical Council (GPhC). The NHS also warns consumers shopping online to be on guard against fake medicine. The GPhC operates a voluntary internet pharmacy logo scheme to reassure the public that they are purchasing medicines online from registered pharmacies that must meet its standards. Since Brexit, the MHRA is considering alternatives to the EU's "Distance Selling" logo.²⁸⁸



Advertisements of OTC medicines and traditional herbal medicines aimed at consumers require advance approval from PAGB, the consumer healthcare association, subject to PAGB's Consumer Code for Medicines.²⁸⁹ PAGB is the approving body; complaints are handled by PAGB, the MHRA, and/or the Advertising Standards Authority.

Self-care products are largely free from price controls. The 2019 Voluntary Scheme for Branded Medicines Pricing and Access appears to apply to NHS sales of branded P and GSL medicines in a very narrow set of circumstances.290

United States







Consumer & Patient Empowerment

COMPARATIVE SCALE

1 = not self-care ready 4 = exceptionally self-care ready







Regulatory **Environment**

STAKEHOLDER SUPPORT & ADOPTION

In the US - as well as in Canada and parts of Europe - the phrase "self-care" has been so overused by lifestyle gurus and marketers that it means both everything and nothing. Blowing your diet by binge-eating ice cream or French fries, having a glass of wine to ease stress at the end of a hard day, or pampering yourself with a spa treatment or bubble bath? The fact that these types of self-indulgent activities are often cited in feature articles, advertising, and social media under the umbrella of self-care makes the task of assessing stakeholder support for selfcare as defined in this report a challenge.²⁹¹

That said, our surveys of US healthcare providers and consumers suggest that both groups are well aware and supportive of selfcare products and practices based on WHO's definition. And our desk research shows that self-care is often discussed at US medical congresses in cardiology and primary care more often than in other countries. However, several expert interviewees noted that the US lags behind other countries in harnessing selfcare as a way to manage diseases and boost

"I think there is a strong interest [in self-care] in the US from an osteopathic perspective. We do everything we can for patients to stay well, focus on improving their health, and decrease reliance on prescription medicines."

Dr. Boyd Buser

Clinical Professor of Osteopathic Manipulative Medicine: Chair-elect. Osteopathic International Alliance, **United States**

wellness, as evidenced, for example, by the more limited availability of OTC medications. Moreover, global performance rankings on basic health measures such as maternal mortality and childhood obesity highlight the need for a sharper US focus on preventive care and healthy behaviors. 292 293

"In general, the US is behind other countries in terms of the self-care component of disease management and wellness. We have an innovative, progressive healthcare system focused on fixing problems, but we have lost sight of what it means to be progressive and innovative."

Ms. Tamra Geryk

Director of Program Development, Functional Medicine of Idaho, United

In August 2020, the Department of Health and Human Services released "Healthy People 2030," a 10-year plan for tackling pressing public health concerns.²⁹⁴ While this plan does not mention self-care explicitly, several of its core objectives - such as increasing healthy eating, regular exercise, and self-monitoring obviously relate to self-care. Moreover, there are multiple references to the importance of promoting health behaviors and increasing health literacy to achieve these objectives. This suggests that US policymakers acknowledge the role of self-care in achieving public health objectives and have at least a baseline understanding of its foundations.

CONSUMER & PATIENT EMPOWERMENT

Under the Health Information Technology for Economic and Clinical Health (HITECH) Act, the US invested heavily in a project to digitize health records in 2009.²⁹⁵ According to a 2019 analysis, "the first generation of electronic health records are now at an 'awkward adolescent stage of growth."296 Frustrations largely have to do with the fact that systems developed by different vendors format data in different ways, impacting usability.

Though there is no national curriculum for public schools, the US government does recommend a set of standards and quidelines to be used in the development of school curricula, including health education. Federal assistance is in part dependent on adherence to these standards and guidelines. A number of health education frameworks have been used over the years, with the most recent being Whole School, Whole Community, Whole Child model from the Centers for Disease Prevention and Control (CDC). The model highlights the important role that schools play promoting the health and safety of young people and helping them establish lifelong healthy behaviors. It encompasses 10 components of health, including nutrition, physical activity, sleep, health education, and access to health services.²⁹⁷



The CDC uses free mobile apps to disseminate public health information and promote health literacy. These include both general applications plus some specifically geared toward issues like nutrition, child development, and concussions/ helmet safety.

The US Department of Health and Human Services (DHHS) published the National Action Plan to Improve Health Literacy in 2010, in response to several studies identifying limited health literacy as a widespread public health problem.²⁹⁸ Since 2010, the DHHS has produced several resources to help make health information more accessible, including the Health Literate Care Model for providers²⁹⁹ and "Health Literacy Online," which helps organizations create intuitive online sources of health information.³⁰⁰ Most recently. "Healthy People 2030" - the fifth iteration of DHHS's 10-year plan - calls for a renewed focus on healthy literacy in recognition of the "upstream" factors that contribute to well-being.301

"Health literacy is huge. Patients are often unaware of what ingesting certain amount of sleep you get can negatively impact your health, let alone how a medication such as insulin works in the body. The more patients understand about their holistic health, the better they can take care of themselves and others."

Ms. Tamra Geryk

Director of Program Development, Functional Medicine of Idaho, United



SELF-CARE HEALTH POLICY

While the pandemic has heightened public awareness of the need for self-care, there is little evidence that US policymakers are conversant with the economic benefits, despite industry efforts to highlight them. The Consumer Healthcare Products Association's 2019 study, "The Value of OTC Medicines to the US Healthcare System," found that availability of OTC medicine across nine categories creates approximately \$146 billion in savings per year based on reduced spending on drugs and clinical visits. In other words, each dollar spent on OTC medicines saves over \$7 for the US healthcare system.³⁰² Another study calculated that OTC smoking cessation medicines account for \$1.6 billion of direct system savings.³⁰³

On a positive note, the Department of Health and Human Services' "Healthy People 2030" plan talks about influencing outcomes and cites 23 leading health indicators that impact major causes of death and disease in the US. The aim is to help, "organizations, communities, and states across the nation focus their resources and efforts to improve the health and wellbeing of all people."304

In 2010, the Affordable Care Act (ACA) set in motion a new vision for healthcare delivery and reimbursement - value-based care - aimed at replacing the "broken" traditional fee-for-service model, which continues to bear the blame for runaway healthcare spending.305 The concept of value-based care relies on the implementation of alternative payment models that reimburse healthcare providers based on cost efficiency, coordination, value, and quality, rather than on the number of services provided. The US is likely to see a slow shift away from - but not the death of - the fee-for-service model. 306 307 308

The US CDC supports and finances selfmanagement education programs for 12 chronic health conditions.³⁰⁹

To help lower overall healthcare costs, US consumers may set up flexible savings accounts (FSAs) or health savings accounts (HSAs), which allow pre-tax funds to be used for "qualified medical expenses," including OTC medications and and a range of self-care products, from skin and eye care to compression sleeves for

diabetics. Dietary supplements and vitamins (apart from a few exceptions, e.g., prenatal vitamins and glucosamine) are not covered by FSAs or HSAs. Under the Coronavirus Aid, Relief and Economic Security (CARES) Act, OTC medicines and menstrual care products were added to FSA and HAS eligibility.³¹⁰

According to one of our interviewees, some states are trying to pass OTC sales tax exemptions to lower the out-of-pocket costs of self-care products. Currently, there is considerable variability in state sales tax treatment. For example, toothpaste is taxable in New Jersey but not in Texas or Connecticut. In addition, some states are looking at eradicating the "pink tax" - i.e., sales taxes on women's health products such as feminine hygiene products and contraceptives - but policymakers see this a more of a social justice issue than a self-care issue.311

US healthcare providers can seek reimbursement for certain types of counseling, e.g., weight loss, nutrition. Pharmacists can bill for diabetes self-management education. 312 313

The National Center for Complementary and Integrative Health (NCCIH), part of the National Institutes of Health, is the lead agency for scientific research on medical and health care systems, practices, and products that are not generally considered part of conventional medicine. The agency's 2016 strategic plan aims to advance fundamental science and and develop new methods; improve care for hard-to-manage symptoms; foster health promotion and disease prevention; enhance the complementary and integrative health research workforce; and disseminate objective evidencebased information on complementary and integrative health interventions.314

A draft non-binding guidance document for industry, titled "Complementary and Alternative Medicine Products and their Regulation by the Food and Drug Administration," was issued in 2007. It was intended to clarify what kinds of complementary and alternative medicines are subject to regulation under the Federal Food, Drug, and Cosmetic Act or Public Health Service Act. 315

REGULATORY ENVIRONMENT

Comprehensive information for all categories of self-care products (OTC drugs, medical devices, dietary supplements) can be found on the website of the US Food and Drug Administration (FDA). The section on OTC drugs outlines two different approval processes: one for drugs developed under the New Drug Application (NDA) process and another for well-established ingredients in drugs under the OTC drug monograph process. According to the FDA, an OTC monograph is "a 'rule book' of conditions for each therapeutic category that describes the active ingredients, uses (indications), doses, route of administration, and labeling for an OTC drug to be considered 'generally recognized as safe and effective'." OTC Monograph Reform under the 2020 CARES Act replaced a cumbersome three-phase public rulemaking process with a streamlined administrative order process intended to improve efficiency, timeliness, and predictability. 316

The FDA has mandated review timelines for 510(k) applications for medical devices as well as for new drug applications.³¹⁷ OTC drug monograph products do not have mandated timelines because manufacturers are responsible for ensuring that their products are compliant. The agency tracks approval speed in its yearly Performance Report to Congress,³¹⁸ and provides regular updates in online Performance Dashboards.³¹⁹ The FDA maintains a readily accessible database of drugs under NDAs or abbreviated NDAs. as well as a list of approved medical devices by year. 320

FDA contact information is easily accessible online.³²¹ The agency is developing guidance regarding formal meetings between agency staff and sponsors who intend to submit requests for amendments to OTC drug monographs. Until that guidance is published, sponsors can request meetings with FDA staff. Together with the European Medicines Agency, the FDA participates in a program to offer scientific advice parallel to the drug development process.322

Reclassification from Rx-to-OTC status occurs through a manufacturer's submission of additional information to its original NDA (or, in rare instances, an original NDA itself). There are no formal, detailed switch criteria; the key question driving switches is, "whether patients alone can achieve the desired medical result without endangering their safety." The FDA maintains a publicly accessible Rx-to-OTC switch list dating back to 2001. Rx-to-OTC switches supported by clinical trials essential to the approval of the NDA receive three years of data exclusivity. 323

Under the CARES Act, the OTC monograph process now provides an 18-month exclusivity period for the requestor of a monograph amendment to add an active ingredient not previously included in a monograph, or for a new indication or a new combination of monograph ingredients where the request is supported by new human data studies essential to the approval of the change to the monograph. 324

The vast majority of nonprescription drugs are available for consumer purchase in a wide variety of retail outlets as well as online. The exceptions: products containing pseudoephedrine and ephedrine which are subject to federal or state laws requiring logging of purchaser information. Online pharmacies need not be affiliated with bricks-and-mortar pharmacies, and there are issues with the legitimacy and safety of many operators. 325

The US allows advertising of nonprescription medicine and dietary supplements to the public in all media, and with no advance approval is required. The Federal Trade Commission monitors all consumer product advertising and takes action in the event of deceptive or unfair practices. 326 Nonprescription medicines and dietary supplements are not subject to price controls.327



- 88 Appendix A: Interviewees
- 92 Appendix B: Self-Care Readiness at a Glance
- 93 Appendix C: References

Appendix A

INTERVIEWEES



Dr. Akinyemi Aje Cardiologist, Department of Medicine, University College Hospital, Ibadan, Nigeria



Dr. Jacques Blacher Cardiologist, Hotel-Dieu Hospital Paris, France



Dr. Tina Anya Head of Cardiology Unit, Federal Medical Centre, Jabi, Abuja, Nigeria



Ms. Orajitt Bumrungskulswat Assitant Secretary General, Heart to Heart Foundation, Thailand



Mr. Marcio Atalla Self-Care/Nutrition Expert, Brazil



Dr. Boyd Buser Clinical Professor of Osteopathic Manipulative Medicine; Chair-elect, Osteopathic International Alliance, United States



Dr. lain Barton Former CEO, Clinton Health Access Initiative, Principal, Health4Development City of Cape Town, South Africa



Mr. Michał Byliniak Vice President. Polish Pharmaceutical Chamber, Poland



Mr. Luc Besancon Executive Director. Nères, France



Dr. Suchart Chongprasert Director of Medicines Regulation Division, Thailand Food and Drug Administration



Dr. Rhiannon Corcoran Professor of Psychology & Public Mental Health, Dept. of Primary Care and Mental Health, Institute of Population Health, University of Liverpool; Director for the Health and Wellbeing Theme, International Self-Care Foundation



Dr. Marcelo Dratcu Managing Partner, Health and Wellness Medical and Educational Services, Brazil



Dr. Helen Crawley International Medical Director for Membership and Networks, Royal College of General Practitioners, U.K. and practicing General Practitioner



Prof. Matthew Cripps Director of Sustainable Healthcare, NHS England and NHS Improvement, UK



Dr. Nicholas Crisp Public Health Specialist and National Health Insurance Fund Developer, Ministry



of Health. South Africa Dr. Austen El-Osta



Director- Self-Care Academic Research Unit (SCARU) -Department of Primary Care & Public Health-Imperial College London, Primary Care Research Manager - School of Public Health-Imperial College London, General Manager -Directorate of Public Health & Primary Care-Imperial College Healthcare NHS Trust



Dr. Blanche Cupido Cardiologist, Cardiac Clinic, Groote Schuur Hospital, Cape Town, South Africa; President, South African Heart Association, South Africa

Prof. Hassan Farag



E. Professor of Tropical Health, Tropical Health, High Institute of Public Health, University of Alexandria, Alexandria, Egypt; Expert, Global Polio Eradication Initiative (GPEI), Expanded Program on Immunization (EPI) and Emergency Risk Management and Humanitarian Response Department (ERM), World Health Organisation



Dr. Eric van Ganse Associated Professor of Pharmacoepidemiology, Claude-Bernard University, & Respiratory Medicine, Croix Rousse University Hospital, Lyon, France



Dr. Godsent Isiguzo Consultant Physician/ Cardiologist, Cardiology Unit, Department of Medicine, Alex Ekwueme Federal University Teaching Hospital Abakaliki, Ebonyi State, Nigeria

88 Self-Care Readiness Index Self-Care Readiness Index 89 **APPENDIX APPENDIX**



Ms. Tamra Geryk Director of Program Development, Functional Medicine of Idaho, USA

Senior Lecturer, Department

Johannesburg, South Africa

of Homoeopathy, University of

Dr. Neil Gower

Dr. Stuart Holmes

General Practitioner

Dr. Murtala Ngabea

Ms. Ruth Rankine

Director, Primary Care

Network, NHS Confederation,

Cardiologist, Abuja, Nigeria



Prof. Laila Kamel Professor, Department of Public Health and Community Medicine, Faculty of Medicine, Cairo University, Egypt



Dr. Augustine Odili Professor and Physician, University of Abuja; Secretary-General, Nigerian Cardiac Society, Nigeria



Prof. Ammal Mokhtar Metwally Professor of Public Health and Preventive Medicine,



Community Medicine Research Department, National Research Centre of Egypt, Egypt



Dr. João Paulo de **Santanna Pinto** Sports and Exercise Medicine and Lifestyle Medicine, São Paulo University, Brasil



Dr. Ekram Wassim Assistant Professor of Tropical Health, High Institute of Public Health, Alexandria University, Egypt



Dr. Kabiru Sada Endocrinologist, Federal Medical Centre, Department of Medicine, Gusau, Nigeria



Dr. Dai Yaohua Chief Physician, Beijing Jingdu Children's Hospital; Director of WHO Child Health Cooperation Center, China



Dr. Gu Shenbing Chairman, Shanghai Health Education Association; Deputy Director, Institute of Health Communication, Fudan University, China



Prof. Yu Kang MD, Professor of Clinical Nutrition, Peking Union Medical College, China



Ms. Marli Sileci Executive Vice-President, Brazilian Association of the Over-the-Counter Medicines Industry (ABIMIP), Brazil



Ms. Monika Zagrajek General Director, The Polish Association of Self-Medication Industry, Poland

COMPANY MEMBERS



Ms. Elizabeth Brewer Global Lead, Americas - Government Affairs, Public Policy & Advocacy, GSK Consumer Healthcare



Mr. Rodrigo García



Ms. Haidy Ahmed Morsy GSK, Egypt and East/ West Africa

90 Self-Care Readiness Index Self-Care Readiness Index 91

Appendix B

SELF-CARE READINESS AT A GLANCE

The composite scores for each country, depicted below, are based on the four enablers of self-care: Stakeholder Support & Adoption, Consumer & Patient Empowerment, Self-Care Health Policy, and Regulatory Environment. These four enablers, in turn, each comprise three or more indicators and sub-indicators which are described in the detailed analysis section starting on page 20 and the country narratives starting on page 47. As described in the methodology and Appendix B, all of the scores take into account a weighted average of desk research (50%), expert interviews (30%), and quantitative surveys (20%).

READINESS FOR SELF-CARE (4 = HIGHEST; 1 = LOWEST)

Alphabetical Order	Composite Score
Brazil	2.63
China	2.54
Egypt	2.18
France	2.26
Nigeria	2.01
Poland	2.33
South Africa	2.44
Thailand	2.73
United Kingdom	3.06
United States	2.99

Rank Order	Composite Score
United Kingdom	3.06
United States	2.99
Thailand	2.73
Brazil	2.63
China	2.54
South Africa	2.44
Poland	2.33
France	2.26
Egypt	2.18
Nigeria	2.01

HIGHEST/LOWEST SCORING COUNTRIES FOR EACH ENABLER

	Highest-scoring countries	Lowest-scoring countries
Stakeholder Support & Adoption	UK (2.97)	Poland (1.80)
Consumer & Patient Empowerment	China (3.11)	Nigeria (1.73)
Self-Care Health Policy	Thailand (2.86)	China (1.70)
Regulatory Environment	US (3.88)	France (1.95)

Appendix C

REFERENCES

- Erickson, Dawson, & Altringer. (2008). Engaging With Care: A Vision for Health and Care Work Force of England. Cambridge Business School and Nuffield Trust.
- UK Department for Education. "Relationships
 Education, Relationships and Sex Education (RSE) and
 Health Education Statutory guidance for governing
 bodies, proprietors, head teachers, principals, senior
 leadership teams, teachers." Available at: https://as sets.publishing.service.gov.uk/government/uploads/
 system/uploads/attachment_data/file/908013/Rela tionships_Education__Relationships_and_Sex_Edu cation__RSE__and_Health_Education.pdf
- "The CLUBMEDS study aims to improve hypertension control in Nigeria." 15 July 2019. World Heart Federation. Available at: https://www.world-heart-federation. org/emerging-leaders/news/the-clubmeds-studyaims-to-improve-hypertension-control-in-nigeria/
- WHO fact sheet on physical activity, 26 November 2020. Available at: https://www.who.int/news-room/ fact-sheets/detail/physical-activity
- "Moving data to the heart of health systems Future Health Index report 2018." Philips. Available at: https:// www.philips.com/a-w/about/news/future-health-index/reports/2018/moving-data-to-the-heart-of-health-systems.html
- "eHealth Strategy, Poland." World Health Organization Global Observatory for eHealth. Available at: https:// www.who.int/goe/policies/countries/pol/en/
- 7. "Health Literacy," World Health Organization. Available at: https://www.who.int/healthpromotion/health-literacy/en/. See also "The WHO Health Promotion Glossary." Available at: https://www.who.int/healthpromotion/HPG/en/
- 8. "Health Literacy." US Health Resources and Administration. 2019. Available at: https://www.hrsa.gov/about/organization/bureaus/ohe/health-literacy/index.html#:~:text=Health%20literacy%20is%20the%20degree,who%20have%20low%20socioeconomic%20status
- "Guidance: Relationships and sex education (RSE) and health education." UK Government.9 July 2020. Available at: https://www.gov.uk/government/ publications/relationships-education-relationships-and-sex-education-rse-and-health-education
- "Lessons from Thailand's National Community-Based Long-Term Care Program for Older Persons." Asian Development Bank. Available at: https://www.adb. org/sites/default/files/publication/651546/thailandlong-term-care-older-persons.pdf
- "National Development Plan 2030: Our future-make it work." National Planning Commission of South Africa. 2012. Available at: https://www.gov.za/sites/default/ files/gcis_document/201409/ndp-2030-our-futuremake-it-workr.pdf

- "Department of Health of the Republic of South Africa. "Policy Framework and Strategy for Ward Based Primary Health Care Outreach Teams2018. Available at: https://rhap.org.za/wp-content/uploads/2018/04/ Policy-WBPHCOT-4-April-2018-1.pdf
- Schneider, H., Besada, D., Daviaud, E., et al. (2018).
 Ward-based primary health care outreach teams in South Africa: developments, challenges and future directions. Available at: https://www.hst.org.za/publications/Pages/SAHR2018.aspx
- 14. Geng, E.H., Odeny, T.A., Lyamuya, R., et al. "Retention in care and patient-reported reasons for undocumented transfer or stopping care among HIV-infected patients on antiretroviral therapy in Eastern Africa: application of a sampling-based approach." Clinical Infectious Diseases, 62, 935-44. 2016. Available at: https://pubmed.ncbi.nlm.nih.gov/26679625/
- Rotheram-Borus, M.J., Tomlinson, M., Le Roux, I.M., et al. "A Cluster Randomised Controlled Effectiveness Trial Evaluating Perinatal Home Visiting among South African Mothers/Infants." 2014. Available at: https:// journals.plos.org/plosone/article?id=10.1371/journal. pone.0105934
- Ndou, T., van Zyl, G., Hlahane, S., Goudge, J. "A rapid assessment of a community health worker pilot programme to improve the management of hypertension and diabetes in Emfuleni sub-district of Gauteng Province, South Africa." Glob Health Action, 6, 213–8.
 2013. Available at: https://pubmed.ncbi.nlm.nih. gov/23364086/
- Assegaai, T., Reagon, G., Schneider, H. "Evaluating the effect of ward-based outreach teams on primary healthcare performance in North West Province, South Africa: A plausibility design using routine data." South African Medical Journal, 108(4),329–35. 2018. Available at: https://pubmed.ncbi.nlm.nih.gov/29629685/
- V. F. Defo and J. F. Domgue. "Why Consider Self-Sampling for Cervical Cancer Screening in Low- and Middle-Income Countries?" AMA Journal of Ethics. February 2020. Available at: https://journalofethics. ama-assn.org/article/why-consider-self-sampling-cervical-cancer-screening-low-and-middle-income-countries/2020-02
- A. Gottschlich et al. "Barriers to cervical cancer screening and acceptability of HPV self-testing: a cross-sectional comparison between ethnic groups in Southern Thailand." BMJ Open. 3 November 2019. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6858097/
- J. Waller, L A V Marlow and J. Wardle. "The association between knowledge of HPV and feelings of stigma, shame and anxiety." BMJ Open. April 2007.
 Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2598611/

92 | Self-Care Readiness Index | 93

- "WHO Consolidated Guideline on Self-Care Interventions for Health." World Health Organization.
 2019. Available at: https://apps.who.int/iris/bitstream/handle/10665/325480/9789241550550-eng.pdf
- The HIV Self-Testing Africa (STAR) Initiative. Accessed February 2021. Available at: https://www.psi.org/project/star/
- N.J. Polman et al. "HPV-based cervical screening: Rationale, expectations and future perspectives of the new Dutch screening programme." Science Direct. February 2019. Available at: https://www.sciencedirect. com/science/article/pii/S0091743518304006#s0055
- 24. C. Huff. "NIH Spearheads Study To Test At-Home Screening for HPV and Cervical Cancer." KHN. 1 July 2020. Available at: https://khn.org/news/nih-spearheads-study-to-test-at-home-screening-for-hpv-and-cervical-cancer/
- 25. R. Winer et al. "Effect of Mailed Human Papillomavirus Test Kits vs. Usual Care Reminders on Cervical Cancer Screening Uptake, Precancer Detection, and Treatment: A Randomized Clinical Trail." JAMA Network Open. 6 November 2019. Available at: https://pubmed.ncbi.nlm.nih.gov/31693128/
- "Self-Sampling Devices for HPV-Testing-Based Cervical Cancer Screening." National Cancer Institute: SBIR Development Center. 26 October 2020. Available at: https://sbir.cancer.gov/funding/contracts/416
- 27. See, for example, these country studies cited by AESGP (https://aesgp.eu/value-of-self-care) and these two 2019 whitepapers -the first sponsored by RB and produced by the Economist Intelligence Unit (https://bit.ly/3rpU7NL.) and the second commissioned by the US Consumer Healthcare Products Association and produced by IRI (https://bit.ly/3cGqO5q.)
- 28. Antonio Cesar Rodrigues. "Use of non-prescription drugs and savings generated for health systems: a review." Brazilian Journal of Economics and Health (JBES), Volume 9, Number 1.April 2017. Available at: https://www.researchgate.net/publication/317074927_Utilizacao_de_medicamentos_isentos_de_prescricao_e_economias_geradas_para_os_sistemas_de_saude_uma_revisao
- National Institute for Health and Care Excellence. Public Health England. "Community pharmacies: promoting health and wellbeing." 2 August 2018. Available at: https://bit.ly/3pPSVTv.
- 30. National Health Service Lambeth Clinical Commissioning Group. "Self care with other the counter products." October 2017. Available at: https://bit.ly/3azEFrt.
- 31. https://www.england.nhs.uk/publication/conditionsfor-which-over-the-counter-items-should-not-routinely-be-prescribed-in-primary-care-guidance-forccgs/
- OECD Health Policy Studies. "Better Ways to Pay for Health Care." 2016. Available at: https://bit.ly/ 2MW86f6.
- 33. Barber S L, Lorenzoni L, & Ong P. World Health Organization Centre for Health Development, OECD. "Price setting and price regulation in health care: Lessons for advancing Universal Health Coverage." Available at: https://bit.ly/3azFn87.

- 34. NHS Pharmacy First Scotland: information for patients. 29 July 2020. Available at: https://www.gov.scot/publications/nhs-pharmacy-first-scotland-information-patients/.
- 35. NHS England. "NHS Community Pharmacist Consultation Service (CPCS) integrating pharmacy into urgent care." Available at: https://www.england.nhs.uk/primary-care/pharmacy/community-pharmacist-consultation-service/
- 36. NHS England. NHS Community Pharmacist
 Consultation Service: Toolkit for Pharmacy Staff." September 2019. Available at:https://www.england.nhs.uk/wp-content/uploads/2019/11/nhs-cpcs-toolkit.pdf
- 37. World Health Organization. "WHO Global Benchmarking Tool for Evaluation of National Regulatory System of Medical Products: National Regulatory System: Indicators and Fact Sheet." Revision VI, version 1. November 2018. Available at: https://www.who.int/medicines/regulation/benchmarking tool version vi/en/
- 38. World Health Organization. "Good regulatory practices for regulatory oversight of medical products." Working document QAS/16.686/Rev.3. August 2020. Available at: https://www.who.int/teams/health-product-and-policy-standards/standards-and-specifications/pharmaceuticals/working-documents-public-consultation
- C. Stäbler. "Rx-to-OTC switch and the provision of data exclusivity in Europe - specification and elaboration of eligibility criteria based on a status quo analysis." 2013. Available at: https://bit.ly/3p0ds6J
- 40. China and Thailand source: Asia-Pacific Self-Medication Industry (APSMI) Country Report 2019. October 2019. Available at: http://apsmi.net/report/data/CountryReport2019.pdf. UK source: MHRA keeps a publicly accessible table of approved standard reclassifications as a downloadable Excel spreadsheet. US source: https://www.fda.gov/about-fda/center-drug-evaluation-and-research-cder/prescription-over-counter-otc-switch-list.
- 41. "Strategic Action Plan to Tackle Noncommunicable Diseases (NCD) in Brazil 2011-2022." Ministry of Health Brazil. 2011. Available at: https://www.iccp-portal.org/system/files/plans/BRA_B3_Plano%20DCNT%20-%20ingl%C3%AAs.pdf
- "Rio launches campaign against self-medication." JurisWay. 2013. Available at: https://www.jurisway.org. br/en/article.asp?id dh=10681
- 43. "Exaggerated? Check the leaflet before self-medicating." Brazil National Health Surveillance
 Agency Anvisa. 2019. Available at: https://www.gov.br/anvisa/pt-br/assuntos/noticias-anvisa/2019/exage-rou-confira-a-bula-antes-de-se-automedicar
- 44. Draft Law PL nº 9714/2018. Chamber of Deputies. 2018. Available at: https://bit.ly/3pTQzmq.
- 45. "Self-Care Day Interview with Marli Sileci." February 2019. Available at: https://www.febrafar.com.br/dia-do-autocuidado-entrevista-com-marli-sileci/
- 46. "National Policy on Integrative and Complementary Practices of the SUS." Ministry of Health Brazil. 2008. Available at: https://bit.ly/39Re0Hr.

- 47. A. C. Bezerra Carvalho et al. "Regulation of herbal medicines in Brazil: advances and perspectives." Brazilian Journal of Pharmaceutical Sciences. 2011. Available at: https://core.ac.uk/download/pdf/204272108.pdf.
- 48. Ordinance NO. 849, of March 27, 2017. Brazil Ministry of Health. 2017. Available at: http://bvsms.saude.gov.br/bvs/saudelegis/gm/2017/prt0849_28_03_2017.html
- 49. Vigitel Brasil 2017: Surveillance of risk and protective factors for chronic diseases by telephone survey. Ministry of Health, Health Surveillance Secretariat. Available at:http://bvsms.saude.gov.br/bvs/publica-coes/vigitel_brasil_2017_vigilancia_fatores_riscos.pdf
- A. M. Rios. "Brazil: governmental investment in EHR system as of 2017." Statista. January 2020. Available at: https://www.statista.com/statistics/831403/ brazil-government-investment-electronic-health-records/#statisticContainer
- 51. G. S. Hummel. "Brazil eHealth Overview, Trends & Opportunities." Consulate General of the Kingdom of the Netherlands. 2016. Available at: https://www.rvo.nl/sites/default/files/2017/01/Brazil%20Healthcare%20-%20Guilherme%20Hummel.pdf
- A. Carvalho. "Health promotion in Brazil." International Union for Health Promotion and Education. 2007. Available at: https://journals.sagepub.com/doi/pd-f/10.1177/10253823070140010201x
- "NCD Action Plan Brazil: 2011-2022." Brazil Ministry of Health. 2014. Available at: https://www.paho.org/hq/ dmdocuments/2014/NCD-action-Plan-Brazil.pdf
- 54. "Health in Schools Program." Brazil Ministry of Education. 2018. Available at: http://portal.mec.gov.br/expansao-da-rede-federal/194-secretarias-112877938/secad-educacao-continuada-223369541/14578-programa-saude-nas-escolas
- Decree No. 6.286. Brazilian Legislature Sub-Committee for Legal Affairs. 2007. Available at: http://portal.mec.gov.br/index.php?option=com_docman&view=download&alias=1726-saudenaescola-decreto6286-pdf&category_slug=documentos-pdf&Itemid=30192
- 56. "Brazil's Ministry of Health partners with WhatsApp and launches new information channel on COVID-19." Latin American Business Stories. 27 March 2020. Available at: https://labsnews.com/en/notes/brazils-ministry-of-health-partners-with-whatsapp-and-launches-new-information-channel-on-covid-19/
- 57. Government of Brazil. Law No. 13,895. 20 October 2019. Available at: https://bit.ly/3oKkmwJ.
- Ministry of Health of Brazil. "National Policy on Medicinal and Herbal Plants (NPMPHM)". 2006. Available at: https://bit.ly/2LirXon.
- Ministry of Health of Brazil. "National Policy on Practices Integrative and Complementary in SUS." 2015. Available at: https://bit.ly/3rqOqin.
- 60. Habimorad L, et al. "Implementation of Brazil's National Policy on Complementary and Integrative Practices: strengths and weaknesses." February 2020. Available at: https://bit.ly/3jkq2fu.

- 61. De Azeredo Rezende M. "An update in regulatory of the Brazilian herbal medicines and medicinal plants professional prescribers." January 2020. Available at: https://bit.ly/3aDj1Tc.
- 62. Da Costa Albuquerque LV, De Oliveira Lima J W, Gois da Silva A B, Cavalcante Morais Correia I, Rios Osterno Gomes Maia L, & Alencar Costa Bessa OA. "Complementary and Alternative Medicine Teaching: Evaluation of the Learning-Learning Process of Integrative Practices in Brazilian Medical Schools." October 2019. Available at: https://bit.ly/3pT9wph.
- 63. World Health Organization. "Global Report on Traditional and Complementary Medicine." 2019. Available at: https://bit.ly/3jrvJIL.
- 64. "Analytical Information Portal." Brazilian Health Regulatory Agency (ANVISA). Accessed February 2021. Available at: http://portalanalitico.anvisa.gov.br/ ciclo-de-vida-da-analise-de-peticoes
- 65. "Contact Us", "Electronic Form", "Parlatório",
 "Telephone Support". Brazilian Health Regulatory
 Agency (ANVISA). Accessed February 2021. Available at: http://antigo.anvisa.gov.br/contact-us, https://
 www.gov.br/anvisa/pt-br/canais_atendimento/formulario-eletronico, https://www10.anvisa.gov.br/Parlatorio/login.seam?cid=184, https://www.gov.br/anvisa/pt-br/canais_atendimento/atendimento-por-telefone
- 66. "Regulation of Products". ANVISA. Accessed February 2021. Available at: https://bit.ly/3cFWOXn; "Resolution - RDC NO. 98." Ministry of Health. 1 August 2016. Available at: https://bit.ly/3cKIFJK
- 67. OTC Yearbook 2019, Nicholas Hall & Company; Association of the European Self-Care Industry (AES-GP) proprietary databank; "Traditional Medicines & OTC Products: Brazil". PharmaBoardroom. Accessed February 2021. Available at: https://bit.ly/3rqeBG9
- 68. Association of the European Self-Care Industry (AESGP)proprietary databank; J.L. Vianna et al. "Distribution and marketing of drugs in Brazil: Overview." Accessed February 2021. Thomson Reuters Practical Law. Available at: https://uk.practicallaw. thomsonreuters.com/2-618-5402?transitionType=Default&contextData=(sc.Default)&firstPage=true#co_anchor_a526586; Brazilian Advertising Self-Regulation Council. "Brazilian Advertising Self-Regulation." Available at: http://www.conar.org.br/pdf/brazilian-advertising-self.pdf
- 69. Interview with Rodrígo Garcia (GSK Consumer Healthcare).
- P. Chen et al. "Healthy China 2030: moving from blueprint to action with a new focus on public health." The Lancet. 2019. Available at: https://www.thelancet.com/journals/lanpub/article/ PIIS2468-2667(19)30160-4/fulltext
- 71. "The Central Committee of the Communist Party of China and the State Council issued the 'Outline of the Health China 2030' Plan." Xinhua News Agency. 2019. Available at: http://www.gov.cn/zhengce/2016-10/25/content 5124174.htm
- 72. eHealth country profiles: China. Global Observatory for eHealth. World Health Organization. 2015. Available at: https://www.who.int/goe/publications/atlas/2015/chn.pdf?ua=1

Self-Care Readiness Index 95

- 73. C. Sussmuth-Dyckerhoff and J. Wang. "China's healthcare reforms." McKinsey. 2010. Available at: https://www.mckinsey.com/~/media/mckinsey/ dotcom/client_service/healthcare%20svstems%20 and%20services/health%20international/hi10 china_healthcare_reform.ashx
- 74. "Deepening Health Reform in China: Building High-Quality and Value-Based Service Delivery." World Bank Group/China Joint Study Partnership. 2016. Available at: https://openknowledge.worldbank.org/bitstream/handle/10986/24720/HealthReformInChina.pdf
- 75. "Embrace Healthcare Revolution: Strategically moving from volume to value." Deloitte. 2017. Available at: https://www2.deloitte.com/content/dam/Deloitte/cn/ Documents/life-sciences-health-care/deloitte-cn-lshc-embrace-healthcare-revolution-en-180914.pdf
- 76. "The school health component of the Mega Country Health Promotion Network." World Health Organization. Available at: https://www.who.int/ school youth health/mega/en/
- 77. D. Wang et al. "Do health-promoting schools improve nutrition in China?" Health Promotion International. 2015. Available at: https://pubmed.ncbi. nlm.nih.gov/23828912/
- 78. "China's health literacy rate edges higher in 2017." China Daily.6 October 2018. Available at: http://www. chinadaily.com.cn/a/201810/06/WS5bb8270fa310eff-303280d3a.html
- 79. Tan X, Liu X, & Shao H. "Healthy China 2030: A Vision for Health Care." 2017. Available at: https://bit. ly/2YO4rCQ.
- 80. National Health Commission of the People's Republic of China. "Regulations of the People's Republic of China on Traditional Chinese Medicine." Accessed February 2021. Available at: https://bit.ly/2MCbaNN.
- 81. Wang J, Guo Y, & Lan Li G. "Current Status of Standardization of Traditional Chinese Medicine in China." March 2016. Available at: https://bit.ly/2MWGYg6.
- 82. People's Republic of China. "The 13th Five-Year Plan for Economic and Social Development of the People's Republic of China (2016-2020)." Available at: https:// bit.ly/2LqbVZQ.
- 83. People's Republic of China. "Innovation and Development Planning Outline for Traditional Chinese Medicine (2006-2020)."
- 84. Wang J, Guo Y, & Lan Li G. "Current Status of Standardization of Traditional Chinese Medicine in China." March 2016. Available at: https://bit.ly/2MWGYg6.
- 85. Forum on Indian Traditional Medicine. "China's Policy Initiatives for National and Global Promotion of TCM - Scoping Paper." April 2018, Available at: https://bit. lv/2YPx8iK.
- 86. The State Council Information Office of the People's Republic of China "White Paper on the Development of Traditional Chinese Medicine (TCM) in China." 2016. Available at: https://bit.ly/36FkwPJ.
- 87. National Medical Products Administration (NMPA). "Provisions for Drug Registration (SFDA Order No. 28)". Available at: https://bit.ly/3pRWQ27

- 88. National Medical Products Administration. "Technical Guidelines for Registration Application of Over-The-Counter Chemical Drugs." July 2020.
- 89. Asia-Pacific Self-Medication Industry. "Summary of APSMI Country Report". 2019. Available at: https://bit.
- 90. S. Kartha et al. "Switching Drugs from Rx to OTC status-A Regulatory Perspective." 2017. Available at: https://bit.ly/2Mt1S6R; "Affluence, an Aging Population, and Anticipated Rx-to-OTC Switches Boost a Healthy \$32 Billion OTC Market in China, according to Kline." Kline & Company. Accessed February 2021. Available at: https://prn.to/3pTdxKB
- 91. OTC Yearbook 2019, Nicholas Hall & Company.
- 92. "China's changing pharmaceutical E-commerce market." Deloitte. 2016. Available at: https://bit.ly/3aAfAwx: Zhang, H. "In-depth report: How JD health built the largest pharmaceutical retailer in China." 2 March 2020. Available at: https://bit.ly/2YKJUPL
- 93. H. Cheng et al. "Pharmaceutical advertising 2020, China, trends and developments." 2 March 2020. Accessed February 2021. Available at: https://bit.ly/3jjTDG2
- 94. Association of the European Self-Care Industry (AES-GP) proprietary databank.
- 95. Egypt National Multisectoral Action Plan for Prevention and Control of Noncommunicable Diseases 2017-2021. 2017. Available at: https://extranet.who. int/nutrition/gina/sites/default/filesstore/EGY%20 2017%20NCDMAPEgypt21March2017%20FINAL%20 %20RS 0 ndf
- 96. "National Strategic Plan for Pre-University Education 2014-2030." Egypt Ministry of Education. Available at: http://planipolis.iiep.unesco.org/sites/planipolis/files/ ressources/egypt_strategic_plan_pre-university_education_2014-2030_eng_0.pdf
- 97. World Health Organization. "Third phase of 'your health in a message' mobile service" launches in Egypt. 28 May 2017. Available at: http://www.emro.who.int/egy/ egypt-events/non-communicable-diseases.html.
- 98. L. Kamel et al. "Community-based interventions to support maternal and child health practices in Upper Egypt." Eastern Mediterranean Health Journal. 2019. Available at: https://applications.emro.who.int/emhj/ v25/09/10203397-2019-2509-597-603.pdf?ua=1
- 99. The World Bank. "A Healthier Tomorrow for All Egyptians." October 2019. Accessed February 2021. Available at: https://bit.ly/2MULEDe.
- 100. "10 million Egyptians examined under initiative to detect chronic diseases: Health min." Egypt Today. 14 October 2020. Available at: https://bit.ly/3rmyEVU.
- 101. World Health Organization. "Health Financing Case Study No. 13. Implementing the Universal Health Insurance Law of Egypt: What are the key issues on strategic purchasing and its governance arrangements?" 2019. Available at: https://bit.ly/3oVIPjz.
- 102. Al-Youm A M. "All you need to know about Egypt's new comprehensive health insurance system." 2 October 2019. Available at: https://bit.ly/36JRNci.
- 103. World Health Organization. "Global Report on Traditional and Complementary Medicine." 2019. Available at: https://bit.ly/3jrvJIL.

- 104. "About Us". National Organization for Drug Control and Research. Accessed February 2021. Available at: http://www.nodcar.eg.net/main/?page_id=20
- 105. Interview with Haidy Ahmed Morsy (GSK Consumer Healthcare); Youssry Saleh Law Firm. "Traditional Medicines and OTC Products." Pharmaboardroom. Accessed February 2021. Available at: https://bit. lv/3cJcb13
- 106. National Health Strategy 2018-2022. French Ministry of Social Affairs and Health. 2018. Available at: https:// solidarites-sante.gouv.fr/IMG/pdf/dossier_sns_2017_ vdef.pdf
- 107. "Diabetes." French Ministry of Social Affairs and Health. 2018. Available at: https://solidarites-sante. gouv.fr/soins-et-maladies/maladies/article/diabete
- 108. "From the 1st to the last year: the program of medical courses." Premed. Available at: https://premed.fr/etudes-sante/deroulement-cours-faculte/#gref
- 109. Ministry of Solidarity and Health. Government of France. 2019. Available at: https://solidarites-sante. gouv.fr/systeme-de-sante-et-medico-social/e-sante/ article/dossier-medical-partage-dmp
- 110. "Study on sound evidence for a better understanding of health literacy in the European Union." European Commission. 2014. Available at: http://healthliteracycentre.eu/wp-content/uploads/2015/11/Health-literacy-in-the-European-Union.pdf
- 111. "The Common Base of Knowledge, Skills and Culture." French National Ministry of Education. Available at: https://www.education.gouv.fr/le-socle-commun-de-connaissances-de-competences-et-de-culture-12512
- 112. "Establishment of the Health Education Path for All Students." French National Ministry of Education. 2016. Available at: https://www.education.gouv.fr/ bo/16/Hebdo5/MENE1601852C.htm?cid_bo=97990
- 113. "Best Practices in Oral Health Promotion and Prevention from Across Europe: An Overview Prepared by the Platform for Better Oral Health in Europe." 13 October 2015. Available at: https://fdocuments.net/ document/oral-health-2017-12-16-best-practices-inoral-health-promotion-and-prevention.html
- 114. "M'T dents: appointments offered at the dentist," February 9, 2021. Available at: https://www.ameli.fr/ assure/sante/themes/carie-dentaire/mt-dents
- 115. NèreS. "Manifeste pour le dévelopement du selfcare en France." Available at: https://bit.ly/3ttjKPA.
- 116. NèreS. "17ème Baromètre NèreS 2018 des Produits du Selfcare.- Synthèse des Résultats." February 2019. Available at: https://bit.ly/3oN9IFv.
- 117. NèreS. "Etude sur l'impact économique de l'actualisation des délistages et des déremboursements en France." March 2016. Available at: https://bit.ly/3oZRpNv.
- 118. Barber S L, Lorenzoni L, & Ong P. World Health Organization Centre for Health Development, OECD. "Price setting and price regulation in health care: Lessons for advancing Universal Health Coverage." Available at: https://bit.ly/3azFn87.

- 119. France Assos Santé. Accessed February 2021. Available at: https://www.france-assos-sante. org/2018/12/03/activite-physique-adaptee-conseils-pratiques-pour-lintegrer-dans-son-parcours-de-soins/.
- 120. Haute Autorité de Santé. "Activité physique et sportive : un guide pour faciliter la prescription à tous les patients." Available at: https://bit.ly/2LpD5Qw.
- 121. Santé Pratique Paris. "Comprendre les honorairres de dispensation des pharmaciens." 22 July 2015. Available at: https://bit.ly/3pRjRSV.
- 122. L'Assurance Maladie. Avenants. 11 January 2021. Accessed February 2021. Available at: https://bit. lv/3oP94aL.
- 123. Le Pharmacien de France. "Vers une rémunération à l'acte pour les missions." 20 October 2019. Available at: https://bit.lv/3oRaZv2.
- 124. L'Assurance Maladie. Classification Commune des Actes Médicaux. Accessed February 2021. Available at: https://bit.ly/3pTjJST.
- 125. Cloatre E. "Regulating Alternative Healing in France, And the Problem of 'Non-Medicine'." June 2018. Available at: https://bit.ly/3tt2vOP.
- 126. Ministère des Solidarités et de la Santé. Les pratiques de soins non conventionnelles. Accessed February 2021. Available at:https://bit.ly/2YOJsQk.
- 127. Assemblée Nationale. Question N° 43596. Accessed February 2021. Available at: https://bit.ly/36JEU2f.
- 128. République Française, Légifrance. "Loi n° 2002-303 du 4 mars 2002 relative aux droits des malades et à la qualité du système de santé (1)." Accessed February 2021. Available at: https://bit.ly/3cHRa79.
- 129. Ministère de l'Economie, des Finances et de la Relance. Médecines non conventionnelles. 18 December 2019. Accessed February 2021. Available at: https://bit.ly/3cPK3K1.
- 130. Simonian-Gineste H. "La réglementation des médecines non conventionnelles." 2019. Available at: https://bit.ly/3rn7Uoe.
- 131. Assemblée Nationale. Question N°10258. Accessed February 2021. Available at: https://bit.ly/3pRppfX.
- 132. Sénat. Médecines complémentaires et shiatsu. Question écrite n° 10196 de Mme Aline Archimbaud. Published 30 january 2014. Accessed February 2021. Available at: https://bit.ly/3aDXSIy.
- 133. Vidal. Homéopathie: la date du réremboursement total et la liste des produits concernés sont désormais officielles." 10 October 2019. Accessed February 2021. Available at:https://bit.ly/2MVEcaX.
- 134. "Marketing Authorizations." French National Agency for Medicines and Health Products Safety. Accessed February 2021. Available at: https://www.ansm.sante. fr/Activites/Autorisations-de-Mise-sur-le-Marche-AM-M/L-AMM-et-le-parcours-du-medicament/(offset)/3
- 135. "Annual Report." French National Agency for Medicines and Health Products Safety. 2019. Available at: https://www.ansm.sante.fr/S-informer/Points-d-information-Points-d-information/L-ANSM-publie-sonrapport-d-activite-2019-Point-d-Information

- 136. "Innovation and Orientation Window." French National Agency for Medicines and Health Products Safety.

 Accessed February 2021. Available at: https://www.demarches-simplifiees.fr/commencer/ansm-guichetin-novationorientation-v1
- 137. Interview with Luc Besancon (NèreS); Association of the European Self-Care Industry (AESGP) proprietary databank.
- 138. M. L. Combet et al. "Dusting the Regulatory Framework - French Competition Authority Seeks to Liberalize Distribution of Drugs and Private Medical Biology." 26 April 2019. Available at: https://bit.ly/3t-Fq86u
- 139. "Direct access drugs." French National Agency for Medicines and Health Products Safety. Accessed February 2021. Available at: https://bit.ly/3pRLH17; Association of the European Self-Care Industry (AESGP) proprietary databank.
- 140. https://www.aolifescienceshub.com/france-french-supreme-court-confirms-monopoly-of-pharmacists-for-online-sale-of-medicines/; OTC 2019 Yearbook
- 141. International Comparative Legal Guides. "France: Pharmaceutical Advertising Laws and Regulations 2020." Available at: https://bit.ly/3aAdBs8.
- 142. Association of the European Self-Care Industry (AESGP) proprietary databank.
- 143. National Strategy and Strategic Plan of Action on prevention of and control of non-communicable diseases (NCDs). Non-communicable diseases control programme, Federal Ministry of Health Nigeria. May 2013. Available at: https://extranet.who.int/nutrition/gina/sites/default/filesstore/NGA2013National%20Policy%20 and%20Plan%20of%20Action%20on%20NCDs.pdf
- 144. National Health Promotion Policy. Nigerian Federal Ministry of Health. 2019. Available at: https://www.health.gov.ng/doc/NHPP_2019.pdf
- 145. See, for example, "Poor Health Literacy in Nigeria: Causes, Consequences and Measures to improve It." Nigerian Quarterly Journal of Hospital Medicine. 2015. Available at: https://pubmed.ncbi.nlm.nih.gov/27295830/
- 146. "Rapid Assessment and Action Planning Process (RAAPP)." World Health Organization. Available at: https://www.who.int/school_youth_health/assessment/raapp/en/
- 147. National Policy on Education, 6th Edition. Federal Republic of Nigeria. 2013. Available at: https://educatetolead.files.wordpress.com/2016/02/national-education-policy-2013.pdf
- 148. Welcome, M O. "The Nigerian health care system: Need for integrating adequate medical intelligence and surveillance systems." December 2011. Available at: https://bit.ly/2O4sFGN.
- 149. Olakunde B O. "Public health care financing in Nigeria: Which way forward?." January 2012. Available at: https://bit.ly/36FTDv1.
- 150. Ministry of Health of Nigeria. Traditional Medicine Policy. 2007. Available at: https://bit.ly/3oPbYMb.

- 151. Azeez Y A, & Saliu Ishola A. "Alternative medicine in Nigeria: the legal framework." April 2015. Available at: https://bit.ly/3cNxpej.
- 152. Sharma S, Patel M, Bhunch M, Chatterjee M, & Shrivastava S. "Regulatory status of traditional medicines in Africa Region." February 2011. Available at: https://bit.ly/3pMEPSN.
- 153. Federal Ministry of health of Nigeria. Traditional, complementary & alternative medicine. Accessed February 2021. Available at: https://bit.ly/36KNDkC.
- 154. Azeez Y A, & Saliu Ishola A. "Alternative medicine in Nigeria: the legal framework." April 2015. Available at: https://bit.ly/3cNxpej.
- 155. Variguard. "Bill to regulate promote traditional medicine in Nigeria passes 2nd reading." 8 March 2017. Accessed February 2021. Available at: https://bit.ly/3ruGDAp.
- 156. Nigerian Institute of Medical Research. Center for research in traditional, complementary and alternative medicine (CRTCAM). Accessed February 2021. Available at: https://bit.ly/2YPwMso.
- 157. "Human Medicines and Medical Devices." National Agency for Food and Drug Administration and Control. Accessed February 2021. Available at: https://www.nafdac.gov.ng/drugs/
- 158. O. Ajayi. "Traditional Medicines and OTC Products." 6 November 2019. Available at: https://bit.ly/3c-NUKwr; Interviews with Arit Onwusah (GSK) and Murtala Ngabea.
- 159. "Drug and Related Products Registration Regulations".

 National Agency for Food and Drug Administration and Control. 2019. Available at: https://www.nafdac.gov.ng/wp-content/uploads/Files/Resources/Regulations/All_Regulations/Drugs-and-Related-Products-Registration-Regulations-2019.pdf
- 160. "Curbing Substandard, Falsified (SFS) And Counterfeit Medicines." National Agency for Food and Drug Administration and Control. 11 November 2019. Available at: https://www.nafdac.gov.ng/curbing-substandard-falsified-sfs-and-counterfeit-medicines/
- 161. N. Beyeler et al. "A Systematic Review of the Role of Proprietary and Patent Medicine Vendors in Healthcare Provision in Nigeria." PLoS One. 2015. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4309565/; "Procedures and Guidelines." Pharmacists Council of Nigeria. Accessed February 2021. Available at: https://www.pcn.gov.ng/registration-and-licensing/
- 162. Y. Moshood. "Unregulated online drug stores may compound Nigeria's supply chain —PCN registrar." Healthwise. 19 July 2020. Available at: https://healthwise.punchng.com/online-drug-stores-may-compound-nigerias-supply-chain-pcn-registrar/

- 163. "Drug and Related Products Advertisement Regulation." National Agency for Food and Drug Administration and Control. 2019. Available at:https://www.nafdac.gov.ng/wp-content/uploads/Files/Resources/Regulations/All_Regulations/Drug-and-Related-Product-Advertisement-Regulations-2019.pdf; O. Ajayi. "Marketing, Manufacturing, Packaging & Labeling, Advertising." PharmaBoardroom. Available at: https://pharmaboardroom.com/legal-articles/marketing-manufacturing-packaging-labeling-advertising-nigeria/
- 164. Polish Association of Drug Manufacturers Without Prescription (PASMI). "Educational campaign: heal responsibly". Available at: https://odpowiedzialneleczenie.pl/kampania-edukacyjna/
- 165. Healthily Engaged Citizens Foundation. "'Healthy involved' campaign". Available at:http://zdrowozaan-gazowani.pl/.
- 166. Healthy Engaged Citizens Foundation. "Edukacja". Accessed August 2021. Available at: https://bit.ly/3yb6Bfc
- 167. "Pharmacist First' An Image Campaign for the Profession of Pharmacist Has Been Launched." Chief Apothecary Chamber. 2019. Available at: https://www.nia.org.pl/2019/04/11/po-pierwsze-far-maceuta-ruszyla-kampania-wizerunkowa-zawodu-far-maceuty/
- 168. Eur J Public Health, Volume 25, Issue 6, December 2015, Pages 1053-1058, https://doi.org/10.1093/eurpub/ckv043
- 169. "Health literacy as an element of the Polish occupational health system." Medycyna Pracy. 2016. Available at: https://pubmed.ncbi.nlm.nih.gov/27819707/.
- 170. Janik-Koncewicz, K and others. "Building health literacy in a Polish region: protocol for the POWER project in Lower Silesia." Journal of Health Inequalities. 2018. Available at:https://discovery.ucl.ac.uk/id/eprint/10092358/
- 171. Poland Physical Activity Factsheet. World Health Organization. 2014. Available at: https://www.euro.who.int/__data/assets/pdf_file/0003/288120/PO-LAND-Physical-Activity-Factsheet.pdf?ua=1
- 172. "School Club Sporty." SKS. Available at: https://www.szkolnyklubsportowy.pl/
- 173. "Long-term Senior Policy in Poland." European Network of National Human Rights Institutions. 2013. Available at: https://www.ohchr.org/Documents/Issues/OlderPersons/MIPAA/NHRI_Poland_Annex1.pdf
- 174. "Stay Fit!" Chief Sanitary Inspectorate and the Polish Federation of Food Producers Association of Employers. Available at: http://www.trzymajforme.pl/start-16
- 175. "Poland: National Reforms in School Education."

 EACEA. 2020. Available at: https://eacea.ec.europa.
 eu/national-policies/eurydice/content/national-reforms-school-education-50 en
- 176. M. Bronikowski. "Where is Physical and Health Education Heading in Poland." University School of Physical Education. Available at: https://bit.ly/2YTLnD7.
- 177. "School fruit, vegetable and milk scheme."

 European Commission. 2017. Available at: https://
 ec.europa.eu/info/food-farming-fisheries/key-poli-

- cies/common-agricultural-policy/market-measures/ school-fruit-vegetables-and-milk-scheme
- 178. "Reducing childhood obesity in Poland by effective policies." World Health Organization. 2017. Available at: https://www.euro.who.int/__data/assets/pdf_file/0011/350030/Reducing-childhood-obesity-in-Poland_final_WEB.pdf?ua=1
- 179. Dubas-Jakóbczyk K, Kocot E, Czerw A, Juszczyk G, Karwowska P, Menne B. "Health as an investment in Poland in the context of the Roadmap to implement the 2030 Agenda for Sustainable Development and Health 2020. WHO Regional Office for Europe. 2018. Available at: https://bit.ly/3rmSnoo.
- 180. Council of Ministers, Poland (2016), Poland's National Health Program for 2016-20. August 2016. Available at: https://bit.ly/2Wf6LoI
- 181. "UPDATE: Poland launches free medical check-ups for over-40s". Radio Poland. 1 July 2021. Accessed August 2021. Available at: https://bit.ly/3yazQ1x
- 182. Republic of Poland. "Publication of the Act on food safety and nutrition." July 2018. Available at: https://bit.ly/3auC3Lm.
- 183. Service of the Republic of Poland. Chief Sanitary Inspectorate. Accessed February 2021. Available at: https://bit.ly/390H0Qg.
- 184. "National Procedure." Office for Registration of Medicinal Products, Medical Devices and Biocidal Products.

 Accessed February 2021. Available at: http://www.urpl.gov.pl/pl/produkty-lecznicze/zagadnienia-rejestracyjne/nowa-rejestracja/procedura-narodowa
- 185. "About Us." European Medicines Agency. Accessed February 2019. Available at: https://www.ema.europa.eu/en/about-us/what-we-do/authorisation-medicines; Association of the European Self-Care Industry (AES-GP) proprietary databank.
- 186. OTC Yearbook 2019; Association of the European Self-Care Industry (AESGP) proprietary databank; Interview with Michał Byliniak.
- 187. OTC Yearbook 2019; Association of the European Self-Care Industry (AESGP) proprietary databank; A. Piecuch et al. "Improving the provision of OTC medication information in community pharmacies in Poland." Int J Clin Pharm. 2017. Available at: https://doi.org/10.1007/s11096-016-0397-z; "The legal and regulatory framework for community pharmacies in the WHO European Region." World Health Organization. 2019. Available at: https://apps.who.int/iris/bitstream/handle/10665/326394/9789289054249-eng.pdf
- 188. "Poland: Pharmaceutical Advertising Laws and Regulations." ICLG. 2020. Available at: https:// iclg.com/practice-areas/pharmaceutical-advertising-laws-and-regulations/poland
- 189. Association of the European Self-Care Industry (AESGP) proprietary databank.
- 190. "Health at Glance." OECD. 2019. Available at: http://www.oecd.org/health/health-systems/health-at-a-glance-19991312.htm

98 Self-Care Readiness Index Self-Care Readiness Index

- 191. Ministry of Health South Africa. "Strategic plan for the prevention and control of non-communicable diseases 2013-17." Available at: https://extranet.who.int/ncdccs/Data/ZAF_B3_NCDs_STRAT_PLAN_1_29_1_3%-5B2%5D.pdf
- 192. "The National Health Promotion Policy and Strategy."
 Health Department of the Republic of South Africa.
 2015. Available at: https://health-e.org.za/wp-content/
 uploads/2015/09/The-National-Health-Promotion-Policy-and-Strategy.pdf
- 193. "Strategy for the Prevention and Control of Obesity in South Africa." Health Department of the Republic of South Africa. 2015. Available at: https://health-e. org.za/wp-content/uploads/2015/12/National-Strategy-for-prevention-and-Control-of-Obesity-4-August-latest.pdf
- 194. "National Healthy Lifestyles Day 2020." South African Government. 22 February 2019. Available at: https:// www.gov.za/NationalHealthyLifestylesDay2020
- 195. "National Recreation Day." Sport and Recreation Department of the Republic of South Africa. Available at: https://www.srsa.gov.za/content/national-recreation-day
- 196. "Integrated School Health Policy." South Africa Ministry of Health and Ministry of Education. 2012. Available at: https://serve.mg.co.za/content/documents/2017/06/14/integratedschoolhealthpolicydbeanddoh.pdf
- 197. Rasesemola R, Matshoge G, Ramukumba T.

 "Compliance to the Integrated School Health Policy:
 Intersectoral and multisectoral collaboration." 2019.

 Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6407319/
- 198. "Action Plan to 2019: Towards the Realisation of Schooling 2030." Department of Basic Education, South Africa. Available at: https://nect.org.za/publications/nect-and-sector-documents/action-plan-to-2019-towards-the-realisation-of-schooling-2030/view
- 199. South Africa Department of Health, COVID-19 Online Resource & News Portal. Available at: https://sacoronavirus.co.za/
- 200. Kumar A, de Lagasnerie G, Maiorano F, & Forti A. "Pricing and competition in Specialist Medical Services: An Overview for South Africa". OECD Health Working Papers, No. 70. Available at: https://bit.ly/201b8zi.
- 201. Lauerman J, & Kew J. "Universal Health Care, the South African way." 22 January 2020. Accessed February 2021. Available at: https://bloom.bg/36KqLBA.
- 202. Morudu P. "Health shocks, medical insurance and household vulnerability: Evidence from South Africa." February 2020. Available at: https://bit.ly/39ONr5G.
- 203. Justine H S U. "Medical savings accounts: what is at risk?" World health Organization, Background paper, 17. Available at: https://bit.ly/3oPATzu.
- 204. Government Employees Medical Scheme. Tariff Codes 2017. 2017. Available at: https://bit.ly/2LnitbD.
- 205. South African Pharmacy Council. Board notice 27 of 2020. Rules relating to the services for which a pharmacist may levy a fee and guidelines for levying such a fee or fees. 6 March 2020. Available at: https://bit.ly/2MYxP6U.

- 206. WHO Global Report on Traditional and Complementary Medicine 2019.2019. Available at: https://bit.ly/3cIVDGt.
- 207. South African Government. Chiropractors, Homeopaths and Allied Health Service Professions Second Amendment Act 50 of 2000. Accessed February 2021. Available at: https://bit.ly/3jnpYM0.
- 208. South African Government. African traditional medicine day 2020. Accessed February 2021. Available at: https://bit.ly/3tt8jaD.
- 209. Wild S. "Bringing Traditional Healing Under the Microscope in South Africa." 30 December 2020. Accessed February 2021. Available at: https://bit.ly/3twZlcv.
- SAMRC. Herbal drugs. Accessed February 2021.
 Available at: https://bit.ly/2N1QnCY.
- 211. "2019/20 Annual Report." South African Health Products Regulatory Authority. 2020. Available at: https://www.sahpra.org.za/wp-content/ uploads/2020/12/SAHPRA-ANNUAL-REPORT-2020web.pdf
- 212. Fasken. "Traditional Medicines & OTC Products."
 PharmaBoardroom. 12 Oktober 2018. Avaialble at:
 https://pharmaboardroom.com/legal-articles/traditional-medicines-otc-products-south-africa/; "The
 meaning behind medicine schedules." IOL: 2 June
 2017. Available at:https://www.iol.co.za/lifestyle/
 health/the-meaning-behind-medicine-schedules-9496292; "Medicines and Related Substances Act,
 1965 (Act 101 Of 1965) Schedules." Department of
 Health. 2016. Available at: https://www.sahpra.org.za/
 wp-content/uploads/2020/01/f6bf8a532016_Consolidatedschedul[...]00920112012201320142015March_May2016includingprescribers.pdf
- 213. "SAPHRA OTC Online Directory." South African Health Products Regulatory Authority. 6 January 2021. Available at: https://www.sahpra.org.za/ news-and-updates/sahpra-otc-online-directory/
- 214. Interview with Corne van der Schyff (GSK); see also https://sahpra.org.za/wp-content/ uploads/2020/01/8838ecf22.15ProprietaryNamesGuideline_v6_May2019_publiccomment.pdf
- 215. "Traditional Medicines and OTC Products South Africa." PharmaBoardroom. Available at: https://pharmaboardroom.com/legal-articles/traditional-medicines-otc-products-south-africa/
- 216. "National Drug Policy for South Africa." Department of Health. 1996. Available at: https://www.gov.za/sites/default/files/gcis_document/201409/36875rg-10025gon714.pdf
- 217. "National Drug Policy for South Africa." Department of Health. 1996. Available at: https://www.gov.za/ sites/default/files/gcis_document/201409/36875rg-10025gon714.pdf
- 218. Ministry of Health Thailand. "Thailand Healthy Lifestyle Strategic Plan Phase II 5-Year Non-Communicable Diseases Prevention and Control Plan (2017-2021)". Available at: https://extranet.who.int/ncdccs/Data/ THA_B3_Draft%20NCDs%20strategic%20plan%20 Phase%20II%20(EN).pdf
- 219. Thai Health Promotion Foundation. "Happiness Guide For caring for the elderly to have good health. Available at: https://bit.ly/3j2YCee

- 220. Thailand Ministry of Health. "Manual for Family volunteers: Elderly care group." Available at: http://phc. moph.go.th/www_hss/data_center/dyn_mod/LTC.pdf
- 221. Thailand National Strategy 2018-2037. Available at: http://nscr.nesdb.go.th/wp-content/uploads/2019/10/ National-Strategy-Eng-Final-25-OCT-2019.pdf
- 222. "Social science cut from two Onet exams from next year." Bangkok Post. 6 June 2017. Available at: https://www.bangkokpost.com/thailand/general/1263275/social-science-cut-from-two-onet-exams-from-next-year
- 223. P. Erawan. "Health School Promotion: An Experience in Thailand." Social and Behavioral Sciences. 2014. Available at: https://files.eric.ed.gov/fulltext/ED557581.pdf
- 224. S. Sirilak. "COVID-19 Infodemic Management: Thailand Experience." Ministry of Public Health, Thailand. 2020. Available at: https://www.who.int/docs/default-source/coronaviruse/risk-comms-updates/thailand-unga-presentation-infodemic-thailand-21sep2020-final. pdf?sfvrsn=d757509e_6
- 225. Thai Ministry of Public Health. "eHealth Strategy (2017-2026)". August 2017. Available at: https://ehealth.moph.go.th/index.php/resources/draft-ehealth-strategy-ministry-of-public-health-2016-2021?download=7:eng
- 226. Tangcharoensathien V, Prakongsai P, Limwattananon S, Patcharanarumol W, & Jongudomsuk P. "Achieving universal coverage in Thailand: what lessons do we learn? A case study commissioned by the Health Systems Knowledge Network." March 2007. Available at: https://bit.ly/3oT8Tej.
- 227. Barber S L, Lorenzoni L, & Ong P. "Price setting and price regulation in health care: Lessons for advancing universal Health Coverage." World Health Organization, OECD. 2019. Available at: https://bit.ly/3cGAJrG.
- 228. Department of Thai Traditional and Alternative Medicine. Accessed February 2021. Available at: https://bit.ly/2NYON5p.
- 229. The Institute of Thai Traditional Medicine. Accessed February 2021. Available at: https://bit.ly/2MsYVTR.
- 230. Kotsook K. "Thai Indigenous Medicine Law: Protection and Promotion of Indigenous Medicine Wisdom in Community." December 2020. Available at: https://bit.ly/3rCAjab.
- 231. WHO Global Report on Traditional and Complementary Medicine 2019.2019. Available at: https://bit.ly/3cIVDGt.
- 232. See, for example, "Procedural Flow for Entrepreneurs." Thai Food and Drug Administration. Accessed February 2021. Available at: https://www.fda.moph.go.th/sites/FDA_EN/SitePages/Medical.aspx?IDitem=Procedure
- 233. See, for example, A. Adcock et al. "Medicinal product regulation and product liability in Thailand: overview." Thomson Reuters. 1 November 2020. Available at: https://uk.practicallaw.thomsonreuters.com/6-500-8489?transitionType=Default&contextData=(sc.Default)&firstPage=true#co_anchor_a115816;
- 234. "E-tracking.", "Health Products Service and Consultation Center." Thai Food and Drug Administration.
 Accessed February 2021. Available at: http://porta.fda.moph.go.th/E TRACK/, https://thai-fda.com

- 235. Association of the European Self-Care Industry (AESGP) proprietary databank; A. Adcock. "Distribution and marketing of drugs in Thailand: overview." Thomson Reuters. 1 February 2020. Available at:https://content.next.westlaw.com/0-618-6841?__ IrTS=20201108213038162&transitionType=Default&contextData=(sc.Default)&firstPage=true; Interview with Dr. Suchart, Thai FDA.
- 236. "Appendix D Guidelines for Document Preparation for Submission of Submissions to Modern Medicines for Humanity." Thai Food and Drug Administration." Accessed February 2021. Available at:
- 237. https://www.fda.moph.go.th/sites/drug/Shared%20 Documents/reclass/%E0%B8%A0%E0%B8%-B2%E0%B8%84%E0%B8%9C%E0%B8%99%E0%-B8%A7%E0%B8%81%20%E0%B8%87.pdf; Asia-Pacific Self-Medication Industry. "Summary of APSMI Country Report". 2019. Available at: https://bit.ly/3aBcsR1; information provided by TSMIA
- 238. Association of the European Self-Care Industry (AES-GP) proprietary databank; A. Adcock et al. "Medicinal product regulation and product liability in Thailand: overview." Thomson Reuters. 1 November 2020. Available at: https://uk.practicallaw.thomsonreuters. com/6-500-8489?transitionType=Default&contextData=(sc.Default)&firstPage=true#co_anchor_a115816; A. Adcock. "Distribution and marketing of drugs in Thailand: overview." Thomson Reuters. 1 February 2020. Available at:https://content.next.westlaw.com/0-618-6841?__lrTS=20201108213038162&transitionType=Default&contextData=(sc.Default)&firstPage=true
- 239. UK Department of Health. "Self-care A real choice: Self-care support - A practical option." January 2005. Available at: https://improve.bmj.com/improve_post/ self-care-a-real-choice-self-care-support-a-practicaloption/
- 240. United Kingdom National Health Service (NHS).

 "The NHS Long Term Plan." January 2019. Available
 at: https://www.longtermplan.nhs.uk/wp-content/
 uploads/2019/08/nhs-long-term-plan-version-1.2.pdf
- 241. NHS England. Supported Self-Management. Available at: https://www.england.nhs.uk/personalisedcare/supported-self-management/
- 242. NHS England. Universal Personalised Care: Implementing the comprehensive model. Available at: https://www.england.nhs.uk/wp-content/uploads/2019/01/universal-personalised-care.pdf
- 243. NHS. "Publications: Topic: 'self care'." Accessed February 2021. Available at: https://www.england.nhs.uk/publication/?filter-category=self-care
- 244. PAGB The Consumer Healthcare Association. "Digital self care audit." November 2020. Available at: https://www.pagb.co.uk/policy/digital-self-care-audit/
- 245. NHS England. "My Care, My Way." Available at: http://mycaremyway.co.uk/
- 246. NHS England. "The Self Care Toolkit." Available at: https://www.nhs.uk/Planners/Yourhealth/Documents/Self%20Care%20Toolkit%20Booklet%20-%20 Oct%2010%20-%20READ.pdf
- 247. British Cardiovascular Society. Annual Congress agenda 2019.

Self-Care Readiness Index 101

- 248. UK National Association of Primary Care. Annual Conference 2019. Available at: https://napc.co.uk/conference-2019/
- 249. PAGB The Consumer Healthcare Association.

 "Coronavirus will change attitudes to self care and NHS use, PAGB survey suggests." 20 July 2020.

 Available at: https://www.pagb.co.uk/content/uploads/2020/06/Coronavirus-will-change-attitudes-to-NHS-use-and-self-care-survey-suggests.pdf
- 250. Proprietary Association of Great Britain (PAGB). "Self-Care Nation: Self care attitudes and behaviors in the UK." November 2016. Available at: https://www. pagb.co.uk/content/uploads/2016/11/PAGB-SELF-CA-RE-NATION-REPORT-NOVEMBER-2016-1.pdf
- 251. P. Crompton. "The National Programme for Information Technology – an overview." Journal of Visual Communication in Media. 2009. Available at: https://www.tandfonline.com/doi/ full/10.1080/17453050701496334
- 252. Centre for Public Impact. "The Electronic Health Records System In the UK." April 2017. Accessed March 2021. Available at: https://www.centreforpublicimpact.org/case-study/electronic-health-records-system-uk
- 253. Warren RL, Clarke J, Arora S, and Darzi A. "Improving data sharing between acute hospitals in England: an overview of health record system distribution and retrospective observational analysis of inter-hospital transitions of care." April 2017. Available at: https://bmjopen.bmj.com/content/9/12/e031637
- 254. UK Department for Education. "Relationships Education, Relationships and Sex Education (RSE) and Health Education Statutory guidance for governing bodies, proprietors, head teachers, principals, senior leadership teams, teachers." Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/908013/Relationships_Education__Relationships_and_Sex_Education__RSE__and_Health_Education.pdf
- 255. "Healthy schools rating scheme: Guidance for schools." UK Department for Education. 2019. Available at: https://bit.ly/3cK1Q5i.
- 256. G. Rowlands et al. "A mismatch between population health literacy and the complexity of health information: an observational study." British Journal of General Practice. 2015. Available at: https://bjgp.org/ content/65/635/e379.
- 257. "Government launches Coronavirus Information Service on WhatsApp." UK Department of Health and Social Care. 25 March 2020. Available at: https://www. gov.uk/government/news/government-launches-coronavirus-information-service-on-whatsapp
- 258. Changing Health App. NHS. Available at: https://www.nhs.uk/apps-library/changing-health/
- 259. PAGB: The Consumer Health Care Association. "Digital self care audit." November 2020. Available at: https://www.pagb.co.uk/policy/digital-self-care-audit/
- 260. Ibid.
- 261. Oral Health Foundation. "Mouth Cancer Awareness Month November 2020." Available at: https://www.dentalhealth.org/mouthcancer

- 262. Oral Health Foundation. "National Smile Month." https://www.dentalhealth.org/national-smile-month
- 263. NHS Scotland. "Childsmile." Available at: http://www.child-smile.org.uk/index.aspx
- 264. NHS Wales. "Designed to Smile." Available at: https://www.designedtosmile.org/welcome-croeso/welcome/
- 265. UK Parliament's search engine. Available at: https://websearch.parliament.uk/?q=self-care
- 266. Local Government Association. "Self care: Councils helping people look after themselves." November 2018. Available at: https://bit.ly/39R5NDj.
- National Health Service. The NHS Long Term Plan.
 August 2019. Available at: https://bit.ly/39OKZfG.
- 268. Cole A, Cubi-Molla P, Pollard J, Sim D, Sullivan R, Sussex J, & Lorgelly P. "Making outcome-based payment a reality in the NHS." February 2019. Available at: https://bit.ly/3pR2Rfy.
- 269. NHS Croydon. "Provider considerations for delivering an outcome based contact." June 2014. Available at: https://bit.ly/3q51g61.
- NHS. Personalised care. Accessed February 2021.
 Available at: https://bit.ly/3rqM3fK.
- 271. NHS. About Healthier You: NHS Diabetes Prevention Programme. Accessed February 2021. Available at: https://bit.ly/3aCvnLl.
- 272. NHS. Thousands to benefit from soups and shakes diet on the NHS from today. 1 September 2020. Accessed February 2021. Available at: https://bit.ly/2YOxAxS.
- 273. NHS England. 2019/20 National Tariff Payment System. February 2019. Available at: https://bit. ly/3txzXTG.
- 274. Pharmaceutical Services Negotiating Committee.

 "Regs explainer (#14): Consultation rooms and remote consultations." November 6, 2020. Available at: https://psnc.org.uk/our-news/regs-explainer-14-consultation-rooms-and-remote-consultations/
- 275. NHS England. "NHS Community Pharmacist Consultation Service (CPCS) – integrating pharmacy into urgent care." Available at: https://www.england. nhs.uk/primary-care/pharmacy/community-pharmacist-consultation-service/
- 276. "Guidance on conditions for which over the counter items should not routinely be prescribed in primary care," NHS, Available at: https://www.england.nhs.uk/ medicines-2/conditions-for-which-over-the-counteritems-should-not-routinely-be-prescribed/
- 277. Medicines and healthcare products Regulatory Agency and Department of Health and Social Care. "Herbal and homeopathic medicines: detailed information." Accessed February 2021. Available at: https://bit.ly/39Ptvj3.
- 278. WHO Global Report on Traditional and Complementary Medicine 2019.2019. Available at: https://bit.ly/3cIVDGt.
- 279. "Apply for a licence to market a medicine in the UK." Medicines and Healthcare Products Regulatory Agency. Accessed February 2021. Available at: https://www.gov.uk/guidance/apply-for-a-licence-to-market-a-medicine-in-the-uk#which-procedure-to-follow

- 280. "Medical devices: how to comply with the legal requirements", "Medical devices: conformity assessment and the UKCA mark." Medicines and Healthcare Products Regulatory Agency. Accessed February 2021. Available at:https://www.gov.uk/guidance/medical-devices-how-to-comply-with-the-legal-requirements, https://www.gov.uk/guidance/medical-devices-conformity-assessment-and-the-ukca-mark
- 281. N.P.Taylor. "EU Regulatory Roundup: MHRA puts speed-to-market at center of post-Brexit vision." Regulatory Focus. 2020. Available at: https://www.raps.org/news-and-articles/news-articles/2020/6/euregulatory-roundup-mhra-puts-speed-to-market-at
- 282. "Apply for a license to market a medicine in the UK."

 Medicines and Healthcare Products Regulatory

 Agency. Accessed February 2021. Available at: https://

 www.gov.uk/guidance/apply-for-a-licence-to-marketa-medicine-in-the-uk#national
- 283. "Directive 2001/83/EC of The European Parliament and of the Council on the Community Code Relating to Medicinal Products for Human Use." European Commission. 2001. Available at: https://ec.europa.eu/health/sites/health/files/files/eudralex/vol-1/dir_2001_83_consol_2012/dir_2001_83_cons_2012_en.pdf
- 284. "Medicines: licensing time-based performance measures.", "Marketing authorisations: lists of granted licences." Medicines and Healthcare products Regulatory Agency. Accessed February 2021. Available at: https://www.gov.uk/government/statistics/medicines-licensing-time-based-performance-measures, https://www.gov.uk/government/collections/marketing-authorisations-lists-of-granted-licences
- 285. "Contact MHRA." Medicines and Healthcare products Regulatory Agency. Accessed February 2021. Available at: https://www.gov.uk/guidance/contact-mhra#submission-enquiries
- 286. "Medicines: get scientific advice from MHRA."

 Medicines and Healthcare products Regulatory

 Agency. Accessed February 2021. Available at:

 https://www.gov.uk/guidance/medicines-get-scientific-advice-from-mhra
- 287. "Medicines: reclassify your product." Medicines and Healthcare products Regulatory Agency. Accessed February 2021. Available at: https://www.gov.uk/guidance/medicines-reclassify-your-product#classifications-of-medicines
- 288. "Medicines: reclassify your product." Medicines and Healthcare products Regulatory Agency. Accessed February 2021. Available at: https://www.gov.uk/guidance/medicines-reclassify-your-product#classifications-of-medicines
- 289. "MHRA Guidance on the Application for Exclusivity for Change in Legal Status of a Medicine." Medicines and Healthcare Products Regulatory Agency. January 2021. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/949104/MHRA_GUIDANCE_ON_THE_APPLICATION_FOR_EXCLUSIVITY_FOR_CHANGE.pdf

- 290. "Medicines information." National Health Service.
 17 December 2020. Available at: https://www.nhs.
 uk/conditions/medicines-information/; "Providing
 pharmacy services online: information for pharmacy
 owners and pharmacy teams." General Pharmaceutical Council. Accessed February 2020. Available at:
 https://www.pharmacyregulation.org/registration/
 internet-pharmacy
- 291. "Codes of Practice for Advertising Over-The-Counter Medicines Which Are Subject to a Marketing Authorisation or Traditional Herbal Medicines Registration." Proprietary Association of Great Britain. Available at: https://www.pagb.co.uk/content/uploads/2016/07/PAGB_Consumer_Codes.pdf
- 292. "The 2019 Voluntary Scheme for Branded Medicines Pricing and Access." Department of Health and Social Care. December 2018. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/761834/voluntary-scheme-for-branded-medicines-pricing-and-access-chapters-and-glossary.pdf.
- 293. NBS News. "What is self-care? How to cut through the marketing noise and actually practice it." February 18, 2021. Available at: https://www.nbcnews.com/better/lifestyle/what-self-care-how-cut-through-marketing-noise-actually-practice-ncna1134921
- 294. World Health Organization. The Global Health Observatory. "Maternal mortality ratio (per 100 000 live births)." Available at: https://www.who.int/data/gho/data/indicators/indicator-details/GHO/maternal-mortality-ratio-(per-100-000-live-births)
- 295. C. M. Hales et al. "Prevalence of Obesity Among Adults and Youth: United States, 2015-2016." National Center for Health Statistics. 2017. Available at: https:// www.cdc.gov/nchs/data/databriefs/db288.pdf
- 296. US Department of Health and Human Services. Office of Disease Prevention and Health Promotion. "Healthy People 2030: Building a healthier future for all." 2010. Available at: https://health.gov/healthypeople
- 297. "What is the HITECH Act?" HIPAA Journal.

 Available at: https://www.hipaajournal.com/what-is-the-hitech-act/
- 298. J. Hecht. "The future of electronic health records." Nature. September 25, 2019. Available at: https://www.nature.com/articles/d41586-019-02876-y
- 299. "Promoting Healthy Behaviors." Centers for Disease Control and Prevention. 2020. Available at: https:// www.cdc.gov/healthyschools/healthybehaviors.htm
- 300. "National Action Plan to Improve Health Literacy."
 US Department of Health and Human Services. 2010.
 Available at: https://health.gov/sites/default/fi-les/2019-09/Health_Literacy_Action_Plan.pdf
- 301. "Health Literate Care Model: A Universal Precautions Approach." US Department of Health and Human Services. Available at: https://health.gov/sites/default/ files/2019-10/HLCM 09-16 508.pdf
- 302. "Health Literacy Online: A Guide for Simplifying the User Experience." US Department of Health and Human Services. Available at: https://health.gov/healthliteracyonline/

102 Self-Care Readiness Index 103

- 303. "Healthy People 2030." US Department of Health and Human Services. Available at: https://health.gov/healthypeople
- 304. Consumer Healthcare Products Association. "The Value of OTC Medicines to the US Healthcare System." March 2019. Available at: https://bit.ly/3rksZ2s.
- 305. Consumer Healthcare Products Association. "The Value of OTC Medicines to the US Healthcare System." March 2019. Available at: https://bit.ly/3rksZ2s.
- 306. Office of Diseases Prevention and health Promotion. Healthy People 2030 Objectives and Measures. Accessed February 2021. Available at: https://bit.ly/36J9okK.
- 307. PPACA Patient Protection and Affordable Care Act of 2010, Pub. L. No. 111-148, 124 Stat. 119 (2010). Available at: https://www.congress.gov/bill/111th-congress/house-bill/3590/titles
- 308. American Hospital Association. Current and Emerging Payment Models. Accessed February 2021. Available at: https://bit.ly/3aA6gJ3.
- 309. Health Care Payment Learning & Action Network.

 "APM Measurement: Progress of alternative payment models LAN insights into APM adoption." 2018.

 Available at: https://bit.ly/390DPYS.
- 310. Lockner A M, & Walcker C A. "Insight: the healthcare industry's shift from fee-for-service to value-based reimbursement." 26 September 2018. Available at: https://bit.ly/3oRnLK7.
- 311. Centers for Disease Control and Prevention.

 "Self-Management Education (SME) Programs for
 Chronic Health Conditions." Accessed February 2021.

 Available at: https://bit.ly/3jiJHg6.
- 312. Section 3702 of the CARES Act. Available at: https://www.congress.gov/116/plaws/publ136/PLAW-116publ136.pdf
- 313. Interview with Elizabeth Brewer, Global Lead, Americas - Government Affairs, Public Policy & Advocacy, GSK Consumer Healthcare.
- 314. Kliethermes M A. "Understanding health care billing basics." July 2017. Available at: https://bit.ly/39VIpVn.
- 315. Center for Disease Control and Prevention. ICD-10-Cm. Accessed February 2021. Available at: https://bit.lv/2YKx582.
- 316. National Center for Complementary and Integrative Health. About NCCIH. Accessed February 2021. Available at: https://bit.ly/36He6zu.
- 317. US Food and Drug Administration. "Complementary and Alternative Medicine Products and their Regulation by the Food and Drug Administration." February 2007. Available at: https://bit.ly/3oNlcsl.
- 318. US Food and Drug Administration. "Over-the-Counter OTC/Nonprescription Drugs." 7 May 2020. Available at: https://www.fda.gov/drugs/how-drugs-are-developed-and-approved/over-counter-otc-nonprescription-drugs#intro; "An Exciting New Chapter in OTC Drug History: OTC Monograph Reform in the CARES Act." US Food and Drug Administration. 6 August 2020. Available at: https://www.fda.gov/news-events/fda-voices/exciting-new-chapter-otc-drug-history-otc-monograph-reform-cares-act

- 319. US Food and Drug Administration. "Step 4: FDA Drug Review." 1 April 2018. Available at: https://www.fda. gov/patients/drug-development-process/step-4-fdadrug-review
- 320. US Food and Drug Administration. "Performance Report to Congress for the Prescription Drug User Fee Act." 2019. Available at:https://www.fda.gov/media/138325/download
- 321. US Food and Drug Administration. "FDA-TRACK: PDFUA Performance." 30 September 2019. Available at: https://www.fda.gov/about-fda/fda-track-agen-cy-wide-program-performance/fda-track-pdufa-performance
- 322. US Food and Drug Administration. "Recently-Approved Devices." 4 September 2018. Available at: https://www.fda.gov/medical-devices/device-approvals-denials-and-clearances/recently-approved-devices
- 323. US Food and Drug Administration. "Contact FDA." 7 April 2020. Available at: https://www.fda.gov/about-fda/contact-fda#centers-and-offices
- 324. "General Principles EMA-FDA Parallel Scientific Advice (Human Medicinal Products)." European Medicines Agency & US Food and Drug Administration. April 2017. Available at: https://www.fda.gov/media/105211/download
- 325. US Code. Title 21, Chapter 9, Subchapter 5, Paragraph 355. Legal Information Institute. Available at: https://www.law.cornell.edu/uscode/text/21/355
- 326. US Food, Drug, and Cosmetic Act. Chapter 5: Drugs and Devices. Part A, Section 355: New Drugs. Available at: https://www.fda.gov/regulatory-information/federal-food-drug-and-cosmetic-act-fdc-act/fdc-act-chapter-v-drugs-and-devices
- 327. "Internet Pharmacy Warning Letters." US Food and Drug Administration. 30 September 2020. Available at: https://www.fda.gov/drugs/drug-supply-chain-integrity/internet-pharmacy-warning-letters
- 328. US Code. Title 15, Chapter 2, Subchapter 1, Paragraph 45 and 52. Legal Information Institute. Available at: https://www.law.cornell.edu/uscode/text/15/45
- 329. Association of the European Self-Care Industry (AESGP) proprietary databank.





The Global Self-Care Federation exists to create a healthier world through better self-care. We represent associations and manufacturers in the self-care industry, working closely with our members and relevant stakeholder groups to ensure evidence-based self-care products and solutions are recognized as key contributors to health for individuals and systems worldwide. Our work ensures key policy and decision-makers embrace self-care,

recognize its values and use its broad range of benefits as the building blocks to deliver better and more sustainable health outcomes for all.

We represent the self-care and self-medication industry and endeavor to contribute to the World Health Organization's public health goals through our specialized expertise. GSCF is a non-State actor in official relations with WHO.