



Self-Care **READINESS INDEX 2.0**

2022

Contents

4	Preface	48	Country Narratives
6	Methodology	50	Australia
		59	Canada
11	Key Themes and Recommendations	69	Colombia
		76	Germany
		83	India
		90	Indonesia
		98	Kenya
		105	Mexico
		114	Singapore
		120	United Arab Emirates
20	Enabler 1 Stakeholder Support & Adoption	128	Conclusion
29	Enabler 2 Consumer & Patient Empowerment	129	Appendices
39	Enabler 3 Self-Care Health Policy	130	Appendix A
		135	Appendix B
43	Enabler 4 Regulatory Environment	147	Appendix C

Preface

The 2022 Self-Care Readiness Index is the second edition of an advocacy-centered research project sponsored by the Global Self-Care Federation, part of a mandate to establish self-care as a global health priority. Its methodology closely follows the first edition of the Index, published in 2021.

The 2022 Self-Care Readiness Index examines the healthcare systems and the extent to which self-care is embedded into current policy documents and conversations in ten countries: Australia, Canada, Colombia, Germany, India, Indonesia, Kenya, Mexico, Singapore, and the United Arab Emirates (UAE). The 2021 Self-Care Readiness Index covered Brazil, China, Egypt, France, Nigeria, Poland, South Africa, Thailand, the United Kingdom (UK) and the United States of America (US).¹ The original methodology for the 2021 Self-Care Readiness Index was developed under the oversight of both the World Health Organization's Traditional, Complementary, and Integrative Medicine Unit, and a dedicated advisory committee comprising public and private experts experienced with self-care practices and products, with competencies spanning diverse disease and medical practice areas. The latest global developments since the publication of the original Index in 2021 include WHO's Conceptual Framework for Self-Care Interventions and WHO's Guideline on Self-Care Interventions for Health and Well-being, which was revised in June 2022.^{2,3} As self-care remains an emerging topic in national and global health conversations, this second iteration of the Index helps close the current knowledge and practice gap.

The 2022 research inquiries are centered around the same four enablers that were defined during the development of the 2021 Index: stakeholder support & adoption, consumer & patient empowerment, self-care health policy, and regulatory environment. The research approach focused on translating these

theoretical enablers into measurable indicators producing contextualized results. The research team defined three to four indicators, or proof-points, to support each enabler and thus demonstrate self-care readiness. Researchers gathered evidence for all indicators through a combination of desk research, online surveys, and research interviews. Findings across all three of these research modalities were coded on a four-point scale, from one (not self-care ready) to four (exceptionally self-care ready). Slight changes were made to reflect learnings from the 2021 Index and to highlight the reality of the impact of Covid-19; all these changes were made at the level of desk research to ensure parity across the top-level findings of both editions of the Index. Details on changes to the methodology are cataloged within the Index narrative.

The mission of the Self-Care Readiness Index remains unchanged: it is designed as a global policy 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 as an effective means to improve the long-term sustainability of health care systems and individual health outcomes, reduce out-of-pocket expenses, and enhance productivity. The 2021 and 2022 Self-Care Readiness Indices collectively seek to develop an interesting and actionable picture of today's self-care landscape through the filter of a score-based and narrative approach.

The Index draws a contextualized picture of the self-care ecosystem across a diverse range of countries in a format that facilitates comparison and lesson-sharing. The 2022 Index adds another ten countries to the total number of countries examined to date; the collective work of its two editions now catalogues the self-care readiness of 20 countries around the world.

As the pool of countries grows with each edition, the picture of what a robust and sustainable national self-care environment looks like becomes clear. While the evaluation methodology allows researchers and readers to compare the self-care readiness of different country's ecosystems, assessing the relative performance of each country was not the point of the exercise. Instead, the goal is to provide researchers and advocates with a window into today's self-care landscape and highlight best practice and opportunities for improvement.

The development of a second Self-Care Readiness Index allowed researchers to further validate the insights and findings uncovered by the first edition.

Growing global recognition of self-care and increased public health messaging on the benefits that self-care could bring within the context of the COVID-19 pandemic resulted in higher scores in this iteration of the Index. Germany demonstrates the highest level of stakeholder support and adoption (enabler 1), followed by Mexico, Canada, Australia, Colombia, Singapore, and Indonesia, thanks to higher levels of self-care awareness among policymakers. Australia scores the highest on consumer empowerment, due to the numerous health campaigns conducted at federal and local levels, access to digital resources and robust health literacy conversations. It is followed by Germany, Singapore, Canada, and the UAE. Colombia, Australia, Indonesia, Singapore scores highest for self-care policy, due to the integration of self-care into several policy documents, a greater focus on health promotion and prevention, and government-led health prevention campaigns that integrate self-care concepts. Germany, Australia, Singapore, and Indonesia score well on regulatory environments, thanks to clear application processes for self-care products, established prescription drug to Over the Counter (OTC) switch processes (Rx to OTC), and a system that allows consumers to access self-care products through a variety of channels including general stores and a dynamic pharmacy network. The 2022 Self-Care Readiness Index examined impact of the COVID-19 pandemic more closely than the previous edition.

Overall, the results of the analysis of all four self-care enablers across a new set of countries strengthened and validated the insights and recommendations put forward by the 2021 Self-Care Readiness Index. Countries examined in 2022 showed remarkably similar opportunity areas and challenges to those evaluated previously, pointing to the continued relevance of the recommendations in the first edition.

ACKNOWLEDGEMENTS

The Global Self-Care Federation is grateful to the many people who contributed to the development of this second iteration of the Index. We are particularly indebted to Dr. Zhang Qi and his team at 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 us their support and wisdom. Research was conducted and compiled into the report by High Lantern Group. The research for Singapore was conducted in collaboration with Ms. Wai-Keng Chai, Director, Global Regulatory Intelligence and Policy at Haleon.

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

Dr Kimberly Green, Global Program Director, Primary Health CarePATH

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

OBSERVER

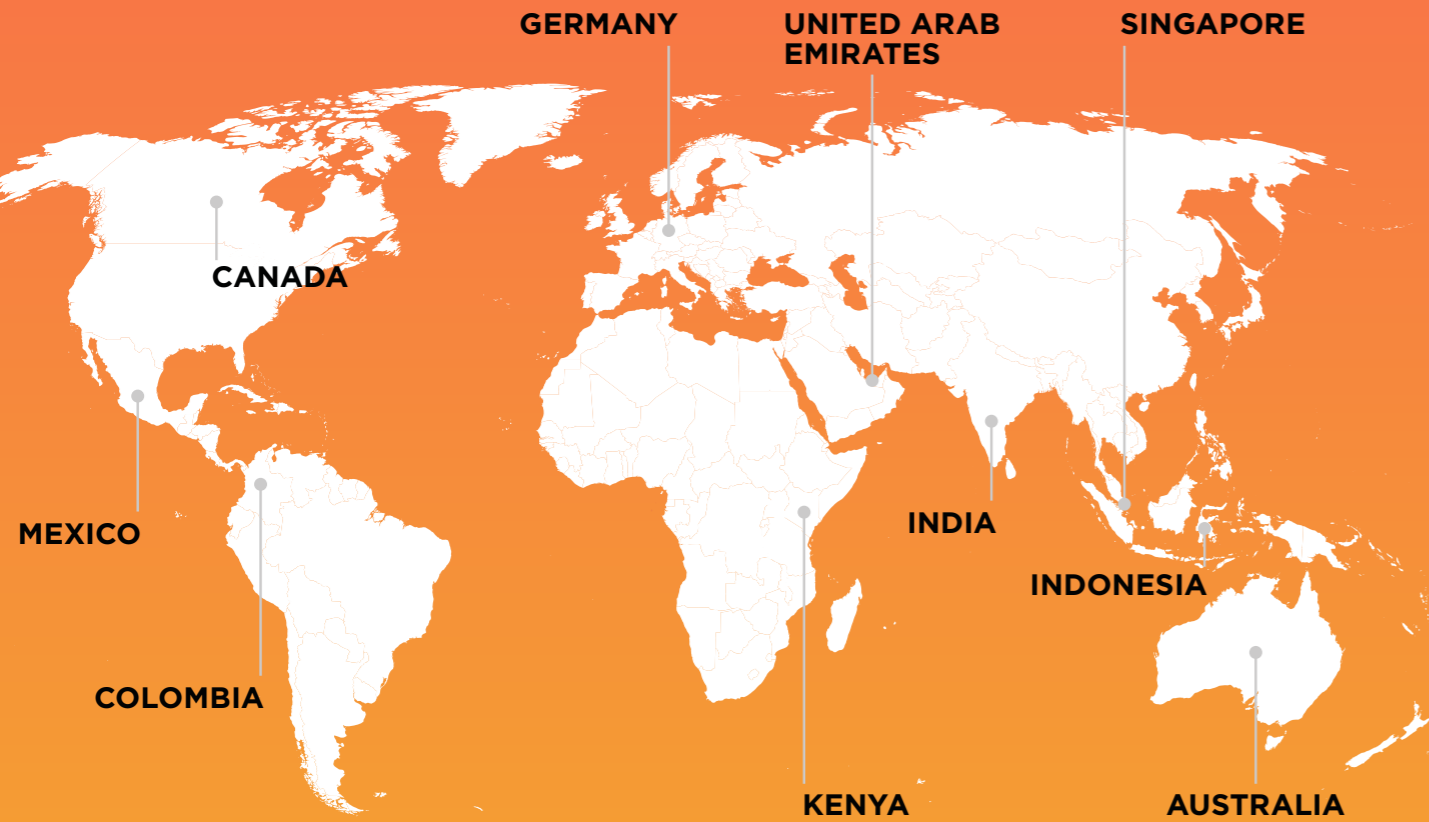
Dr Yanyun WU, World Health Organization's Traditional, Complementary and Integrative Medicines and Integrated Health Services Unit


Methodology

GEOGRAPHIC SCOPE

The ten countries evaluated in the 2022 Self-Care Readiness Index were chosen to reflect the diversity of global health systems and different development levels of self-care markets. As in the 2021 Index, the countries were selected with the aim of 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. All selected countries have well documented self-care policies and practices to best facilitate primary and secondary research efforts.



 Click to see countries

DEFINING SELF-CARE

Using WHO's definition ([see page 8](#)) as a starting 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. Self-care involves making healthy lifestyle choices and avoiding unhealthy habits; making responsible use of 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-managing health conditions. Self-care products may include nonprescription medicines, dietary supplements, vitamins, and simple medical devices or tests designed for home use.

The Self-Care Readiness Index is based on four key enablers – the broad elements needed to realize the full potential of self-care with a given health system:

1. STAKEHOLDER SUPPORT & ADOPTION

Support and trust among all stakeholders – healthcare providers, patients, consumers, regulators, and policymakers – are essential to maximizing adoption of self-care behaviors and products.

2. CONSUMER & PATIENT EMPOWERMENT

Self-care delivers the greatest value when consumers and patients have a high degree of health literacy, understand the value of prevention, and are empowered to make their own health decisions. This is permitted by the accessibility and management of their personal health data and by their access to self-testing for a number of conditions, digital tools that support self-care, and evidence-based health information on trusted, verified platforms.

3. SELF-CARE HEALTH POLICY

The extent to which policymakers recognize and support the economic value of self-care, promote self-care as an affordable health solution, and provide relevant financial incentives all contribute to the adoption of self-care products and practices by consumers, patients, healthcare providers, and health systems.

4. REGULATORY ENVIRONMENT

Regulations and processes governing approval of new health products – including Rx to OTC medicine reclassification guidelines, incentives to reward innovation, access to self-care products, direct-to-consumer advertising, and pricing – all determine the ability of the self-care industry to drive innovation and adoption of self-care solutions.

Although developed before publication of WHO's Conceptual Framework for Self-Care in 2019, these enablers align with the concepts in the framework, as the Index examines the places where self-care is accessed (pharmacies, general stores, online platforms and websites); the health policies and other initiatives that enable the environment for self-care (including the possibility for people to self-test, access trusted health information and receive health education); and what control systems exist, with an emphasis on the regulation of self-care products.⁴

HOW WHO DEFINES SELF-CARE

The World Health Organization defines self-care as

“the ability of individuals, families and communities to promote their own health, prevent disease, maintain health, and to cope with illness and disability with or without the support of a health worker.”⁵

The scope of self-care under WHO’s definition includes, *“health promotion, disease prevention and control, self-medication, giving care to dependent people, seeking hospital, specialist or primary care when needed, and rehabilitation, including palliative care.”*

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 (eg, self-reliance, empowerment, autonomy, personal responsibility, self-efficacy) as well as the greater community (eg, community participation, community involvement, community empowerment).”*

According to WHO, self-care interventions are among the most promising and exciting approaches to improve health and well-being, both from a health systems perspective and for the users of these interventions. They also promise to benefit everyone and to move us closer to realizing universal health. Self-care interventions themselves are defined as tools which support self-care. Self-care interventions include evidence-based, high-quality drugs, devices, diagnostics and/or digital interventions which can be provided fully or partially outside formal health services and can be used with or without the direct supervision of healthcare personnel. Examples of quality, cost-effective self-care interventions include OTCs availability of certain contraceptive products, pregnancy tests, condoms, lubricants, human papillomavirus (HPV), Sexually Transmitted Infections (STI), self-sampling and Human Immunodeficiency Viruses (HIV) self-tests, and self-monitoring of blood pressure and blood glucose.⁶

According to WHO, users of self-care interventions are individuals and caregivers who might choose these interventions for positive reasons, which may include convenience, cost, empowerment, a better fit with values or daily lifestyles, or the intervention may provide the desired options and choice. However, users might also opt for self-care interventions to avoid the health system due to, for example, to lack of quality (eg discrimination from health workers) or lack of access (eg in humanitarian settings). Self-care interventions fulfil a particularly important role in these situations, as the alternative might be that people have no access to healthcare at all.

The 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, by catalysing digital and mobile health approaches;
- Improve access to medicines and interventions through optimal interfacing between health systems and health care delivery sites.”⁷

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. The four enablers focus on self-care practices and self-care products at the individual, social, policy, and regulatory levels. When compiling this new 2022 edition, the research team adjusted two of the sub-indicators either based on feedback received from local experts following the launch of the 2021 Self-Care Readiness Index, or because the evaluation experience from the 2021 Self-Care Readiness Index revealed that some sub-indicators were ultimately not helpful in pointing to a country’s overall self-care readiness. New sub-indicators included the addition of self-testing and digital tools for self-care under enabler 2 (consumer and patient empowerment), and a more comprehensive review of how self-care concepts are embedded in current health policy documents as well as health prevention and promotion campaigns in countries.

For each indicator and sub-indicator, researchers gathered evidence through a combination of extensive desk research, expert interviews, and online surveys of healthcare providers and consumers. Qualitative and quantitative data were collected in parallel, followed by independent analysis of each data set, then finally merging the data in a convergent design. Mixed-method design is considered appropriate to compare data sets obtained through different methods to gain a holistic view of the results. The mixed-method approach also helped validate one set of findings with the other through triangulation of methods, participants, and sources to obtain more corroborated results. It also allows the strengths of one approach to complement the restrictions of another, which provides flexibility and the ability to make the most of small samples.^{8,9,10}

The team interviewed close to 50 people – at least two in each target country and in some places half-dozen or more – including healthcare providers, self-care and public



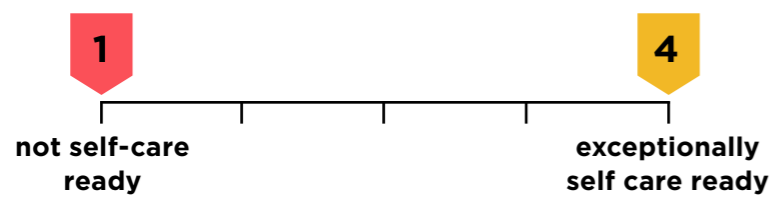
health academic experts/researchers, and policy/regulatory experts from both public and private sectors as well as non-government organizations. The duration of each interview was between 30 to 60 minutes, and most were conducted via videoconferencing platforms; a few interviewees chose to submit their responses in writing.

The consumer survey garnered around 1,000 responses and the healthcare provider survey was completed by more than 900 doctors, pharmacists, nurses, and other skilled healthcare workers. Both surveys were distributed in English, Arabic, Spanish, and German.

The research for the Index was conducted between January and July of 2022.

SCORING OVERVIEW

All research inputs were assessed on a four-point scale, ranging from 1 (not self-care 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.



The weighting was highest for desk research as it was guided by a scoring rubric with defined and measurable indicators (binary or numerical). The weighting of key informant interviews was higher than online surveys since participants are experts and professionals with unique knowledge. In addition, it is possible to clarify any ambiguity in the responses collected during interviews. The weighting of online surveys is the lowest as responses can be from anyone who meets inclusion criteria, and there is no means to clarify responses received. Please see Appendix B for the overall country scores.

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, self-reported data shared by experts via surveys or interviews was used for scoring, and scoring assumes the reliability of these experts. 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 provides a cross-sectional view of the current landscape and would be meaningful to repeat over time to assess progress. This assessment and the indicators upon which it is based may need to evolve over time.

Key Themes and Recommendations

LEARNINGS FROM EXPANDING THE SELF-CARE READINESS INDEX EVIDENCE BASE

Developing a second Self-Care Readiness Index offered researchers an opportunity to validate the insights and findings uncovered by the first Self-Care Readiness Index. The examination of this new 2022 cohort of ten countries strengthens and corroborates the 2021 insights and recommendations. However, we have updated the evidence-base and narrative points that support each insight and recommendation area were updated to reflect new learnings and data from the 2022 Index cohort.

As we continue to grow the self-care readiness evidence base, we gain a clearer picture of what constitutes 'best practice', as well as the major common challenges across geographies.

UNIVERSAL CHALLENGES

Awareness of self-care as a concept seems to have grown, but a lack of clarity on its definition remains.

Differences in how consumers and policymakers describe “self-care” became more apparent as the Index evaluated more countries. Even though in some countries, such as Thailand (2021 Index) and Germany (2022 Index), the term “self-care” is not part of the lexicon it is widely practiced. In others, like Australia, “self-care” is used to describe everything from manicures to massages, in addition to the health-related practices cited in the WHO definition of self-care. This tendency to group wellness and general consumerism into the self-care category was apparent across most of the high-income countries in both editions of the Self-Care Readiness Index.

Disparate health campaigns related to self-care are almost never embedded within a comprehensive self-care strategy, reiterating the opportunity for a WHO resolution on self-care to integrate self-care into national health strategy.

None of the countries examined in 2021 or 2022 has adopted a national self-care strategy or statement. In three countries, the United Kingdom, Canada and Australia, local self-care non-governmental groups have published blueprints for government consideration, with the aim of securing an official national approach to self-care. While the blueprints are a first step, there is still a missed opportunity for harmonizing existing disease strategies, bringing regulatory discussions in line with national ambitions for health system sustainability, and advancing public health goals related to health literacy.

EMERGING BEST PRACTICES

Governments that take an active role in providing health information can boost health literacy and support the uptake of self-care practices.

The 2022 Self-Care Readiness Index measured the availability of government-approved digital tools that support self-care. This provided insights into the types of digital tools governments have adopted across different geographies. Social media is a popular tool for governments to share verified health information: all ten countries provide some sort of official digital channel providing health information. Half the countries evaluated offer an online OTC directory, a service that ought to be available across all geographies. Countries with the strongest self-care ecosystems also provide dedicated resources on managing minor ailments and chronic conditions. Yet only two countries, Australia and Germany, provided this resource for both.

Low- and Middle-Income Countries (LMICs) lead the way in building self-care into their care models.

The 2021 Self-Care Readiness Index revealed that Low- and Middle-Income Countries (LMICs) were more likely to utilize multidisciplinary care teams and empower practitioners such as pharmacists and community health workers to deliver care and educate patients on self-care behaviors. The 2022 Index confirmed those findings and expanded our understanding of the ways that self-care is embedded into the care continuum of many LMICs evaluated. Healthcare providers across nearly all LMICs examined in 2021 and 2022 believe it is possible and (very or somewhat) convenient to be financially compensated for time spent discussing self-care with patients, which was not the case in data obtained in high income countries. However, it is worth noting that time pressure can make it difficult for healthcare providers in all markets to discuss self-care and educate patients.

Diabetes guidelines and healthcare provider education resources represent a model for establishing self-care as a core piece of the care continuum.

The 2022 research confirms that self-care is much more established as a focus area within diabetes management than other disease areas. All countries with a published national strategy or set of guidelines on diabetes – nine countries (UK, France, Poland, Nigeria, South Africa, US, Brazil, China and Thailand) from 2021 and all countries from 2022 – include references to the importance of self-care aspects (eg, self-care as such, and/or self-monitoring, self-assessment, self-management, self-medication, behavior change, patient empowerment). By comparison, national guidelines for cardiovascular disease and primary care across all countries examined in 2021 and 2022 were far less likely to reference self-care directly. Indeed, only Canada includes mention of self-care in its national guidelines for cardiovascular disease. Guidelines and medical congresses are more likely to discuss self-care regarding primary care, as is the case in Australia, Brazil, Canada, India, Kenya, South Africa, the United Kingdom, and the United States.

RECOMMENDATIONS

- 1. Adopt a self-care resolution at the 78th World Health Assembly in 2025, which would define self-care and outline its value to health-systems, governments, and to the people-centered care framework; facilitate Member States’ development and effective implementation of national self-care strategies or plans that address the core enablers of self-care practices; and provide direction to Member States on aligning resources, investments, and new and existing policies of relevance in service of a single, harmonized national strategy on self-care. In early 2022, GSCF launched a global compact bringing together stakeholders from the private sector, non-governmental organizations, academia, and medical and patient associations to shape and bring forward such a resolution.**
- 2. Continue to forge a broader alliance of self-care advocates to make the case that investments in self-care result in healthier populations and lower costs, as demonstrated in GSCF Global Economic and Social Value of Self-Care Report.¹¹**
- 3. Increase the quantity and quality of self-care information available to consumers, including verified digital health information platforms, e-labelling, as well as health prevention and promotion campaigns that embed the concept of self-care.**
- 4. Educate and incentivize healthcare providers on self-care products and practices. This includes elevating the role of pharmacists in providing trusted health advice and a growing number of health services.**
- 5. Encourage governments to adopt standalone self-care strategies that would ‘connect the dots’ and bring more coherence across the current multitude of health policies, plans and programs that touch upon the concepts of self-care.**
- 6. Encourage governments to make health literacy a national health priority.**

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 has different meanings in different countries and different meanings to different stakeholders. A shared understanding is critical to ensure effective evaluation of self-care on health outcomes, as explained in WHO's "Classification of self-care interventions for health: a shared language to describe the uses of self-care interventions". The report, published in December 2021, aims to establish a common language to describe self-care interventions, in order to acknowledge



the contributions of self-care interventions more clearly to date, and offers a framework to integrate self-care interventions into existing health programs.¹² While most countries we studied across both editions of the Index have launched numerous initiatives to promote healthy eating or encourage self-management of specific medical conditions, little is being done to link single-issue campaigns with greater awareness of self-care and its many components. Countries showing the strongest performance across both editions of the Indices have attempted to make that connection explicit in national healthcare strategies, policies, or programs. Australia, Canada, the UK, the US, Germany, but also Mexico, Colombia, Brazil, Indonesia, and Singapore, are leaders in this regard, though each country still shows meaningful opportunities for improvement in other areas.

Self-care is multifaceted and multidimensional. Self-care includes a variety of health-related practices such as good hygiene, behavior change, disease prevention, self-diagnosis, self-treatment, and self-management of different ailments or conditions. But the entire self-care value chain extends well beyond the health sector. Therefore, addressing self-care in a holistic way requires coordination and collaboration with stakeholders from other sectors.

RECOMMENDATIONS

Adopt a self-care resolution at the World Health Assembly in 2025, which would define self-care and outlines its value to health-systems, governments, and to the people-centered care framework; facilitate member States' development and effective implementation of national self-care strategies or plans that address the core enablers of self-care practices; and provide direction to Member States on aligning resources, investments, and new and existing policies of relevance in service of a single, harmonized national strategy on self-care. Interestingly, today's most significant challenge to self-care readiness is one of semantics. Our research shows that most countries have not yet adopted WHO's definition of self-care, and there is no universal understanding of what sorts of practices and products fall within the scope of self-care. This lack of clarity creates unnecessary and stifling complications. In some cases, individuals, governments, and care providers are investing 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 lower spending delivered by self-care behaviors. As a result, they are more likely to underinvest in or inadvertently overlook opportunities for health education, awareness-building, and other tools for promoting self-care, which can ultimately lead to better health at lower costs. WHO's efforts to create a shared self-care language in its classification of self-care interventions will help in this regard.

Continue to forge a broader alliance of self-care advocates to make the case that investments in self-care result in healthier populations and lower costs, as demonstrated in GSCF Global and Economic & Social Value of Self-Care Report. As part of efforts to build a broader alliance of advocates, in early 2022 GSCF launched a global compact bringing together stakeholders from the private sector, non-governmental organizations, academia, and medical and patient associations in order to shape and bring forward such a self-care resolution. The resolution is aimed to (1) clearly define self-care, the products, and practices it represents; and (2) secure commitments for support of self-care behaviors given their potential for improving the physical and mental health of populations and easing the financial burden on health systems.

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 (eg, chronic and non-communicable diseases, nutrition, physical activity, sleep, hygiene, appropriate use of products, mental health, and sexual health). Australia, Canada, and India have the most robust school curricula of all countries covered in the 2022 Index. For example, India's National Health Strategy 2017 reformed the health and hygiene curricula in public schools across the country and introduced the concept of wellness and health ambassadors through renewed Operational Guidelines on School Health Programme under Ayushman Bharat. The guidelines detail age-appropriate health activities to be conducted in schools, including hygiene practices at primary school, mental health and nutrition at middle school, and sexual health, meditation, and yoga at high school.

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 guidance. The ease of searching for answers online to health-related questions is both a blessing and a curse, putting the onus on individuals to determine which sources are reliable. In some settings, consumers and patients grapple with traditional beliefs and harmful misconceptions in navigating the self-care landscape.

Self-care and a person-centered approach go hand in hand. The research reveals progress towards making national healthcare systems more oriented towards wellness, prevention,

and self-monitoring. Overall, health systems across all 20 geographies evaluated in 2021 and 2022 tend to do better on the self-management of long-term chronic conditions than on self-care for minor ailments. Most countries still have much more work to do on implementing electronic health records (EHR) – a fundamental step toward empowering patients to take more control of their own health by giving them access to information and allowing them to develop a more collaborative relationship with their doctor. Our research showed that only Australia, China, France, Germany, and Singapore have implemented universal EHR systems based on standardized data and protocols. Brazil, the UK, the US, and the UAE 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; LMICs have many lessons to share on this approach.

Bright spots include Thailand and Indonesia'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. In many LMICs, pharmacists have a fully-realized role as members of the patient care team, shifting responsibility away from nurses. Healthcare providers and experts from India, Kenya, Canada, and Colombia said that they would support creating a new function within the health system where health educators would have a dedicated focus on health promotion, prevention, and patient education tasks.

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. Interviewees in Australia, Canada, Germany, India, Indonesia, Mexico, Kenya and the UAE noted that their own self-care know-how was a result of their own research and experience rather than medical training or participation

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

DEFINING HEALTHCARE WORKERS

The Self-Care Readiness Index utilizes the World Health Organization'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: cdn.who.int/media/docs/default-source/health-workforce/dek/classifying-health-workers.pdf?sfvrsn=7b7a472d_3

RECOMMENDATIONS

Increase the quantity and quality of self-care information available to consumers, including verified digital health information platforms, e-labeling, as well as health prevention and promotion campaigns that embed the concept of self-care. The COVID-19 pandemic highlighted the importance of making accurate information easily accessible so people can take immediate steps to protect their own health. There is an urgent need to create and support high-quality, trusted online channels to serve this purpose. The pandemic also emphasized the need for an even sharper focus on health literacy, as the more people understand about the links between everyday healthy habits (eg, good nutrition, oral health, physical activity) and disease, the better equipped they will be to avoid health problems and manage both minor ailments and chronic conditions. In some countries, including India, Indonesia, Kenya, Singapore and the UAE, accurate self-care information must not only fill knowledge gaps but also address traditional beliefs and misconceptions. To achieve this, information must be available in national as well as tribal languages or specific local dialects. Moreover, ensuring that electronic health records are widely implemented and accessible is key to empowering patients.

Educate and incentivize healthcare providers on self-care products and practices. This includes elevating the role of pharmacists in providing trusted health advice and increasing the number of health services available. Doctors, nurses, pharmacists, and other health professionals can encourage self-care behaviors when equipped with the right tools. Healthcare providers are often stretched thin and may hesitate to spend time during patient visits on topics that are not included in clinical guidelines or recognized as services deserving of payment. To enhance clinicians' knowledge of self-care practices and their abilities to improve patient well-being, self-care modules should be a standard part of medical school curricula, medical congresses, and other continuous education opportunities – an example is the self-care handbook for pharmacists published by the International Pharmaceutical Federation in early 2022.¹³ This would help embed and reinforce self-care as a critical element of medical practice. Deploying trained health coaches/educators as part of care teams would help patients get essential self-care guidance while freeing up higher-cost resources.

Encourage governments to make health literacy a national health priority. This second iteration of the Index clearly shows that health literacy is slowly emerging as a stand-alone topic in health policy across countries. However, to date, very few countries have explicitly made the link between health literacy and better health outcomes. Moreover, there is confusion among the population about which online resources they have access to, and that they can trust. Governments should seize the opportunity to fully adopt digital health solutions, including e-labeling, and encourage consumers to use them to improve health literacy and self-care behaviors.

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.

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.

When consumers can conveniently access self-care tools to treat minor health matters themselves, it saves a potentially costly trip to the doctor. The time and money can thus be used to focus on cases requiring professional resources. Although savings for health systems here seem obvious, many national governments continue to underappreciate the fiscal value of self-care. Recent research found that a total of 10.9 billion individual hours per annum and 1.8 billion physician hours are saved through current self-care practices.¹⁴ By strategically prioritizing self-care in healthcare policies and improving the collective understanding of the benefits of self-care, healthcare programs will save costs across categories.

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 high-quality care for fast-growing, aging populations. While many of the countries seem to recognize the potential for self-care in NCD prevention or management, we see larger opportunities to build institutional capacity. Initiatives like Fazaa, a social initiative supported by the United Arab Emirates, incentivizes healthy behaviors. Fazaa is included in the National Behavioral Reward Strategy, which mentions that adopting healthy lifestyles can prevent diseases. In Indonesia, the Healthy Living Community Movement (GERMAS) launched in 2016 by the Ministry

of Health and other Ministries, lays out seven pillars for healthy communities, including immunization, healthy eating, and the smart use of medication. Examples like these represent a policy model for developing countries to leverage self-care in improving health outcomes in low-income, rural communities that often face the same access challenges and health-worker shortages as LMICs.

Efforts to promote self-care do not need substantial investment, and often result in cost savings. In Canada and Australia, pharmacists and general practitioners organize walks to encourage their customers and patients to exercise. Some countries, including Kenya and India, are currently reforming their health systems to establish more comprehensive primary care centers, where health promotion and prevention activities can be conducted more efficiently through multi-disciplinary care teams, similar to what has been done in Indonesia. LMICs have successfully deployed relatively low-cost digital health solutions to promote self-care, showing the plausibility of these interventions.

Traditional and complementary medicine (TCM) is gaining increasing attention from healthcare policymakers and regulators, but its contributions need to be validated through evidence-based research. India, Indonesia and Mexico appear to be at the forefront integrating TCM into their health systems. Even in these countries, healthcare providers and policy experts raised concerns about insufficient scientific evidence and the risk of consumer misuse.

Self-care appears periodically in WHO documents, including the draft Global Strategy on Oral Health, the Global Action Plan for the Prevention and Control of NCDs 2013-2020, and the Decade of Healthy Ageing Baseline Report.^{15 16 17}

© Rodnae Productions



RECOMMENDATIONS

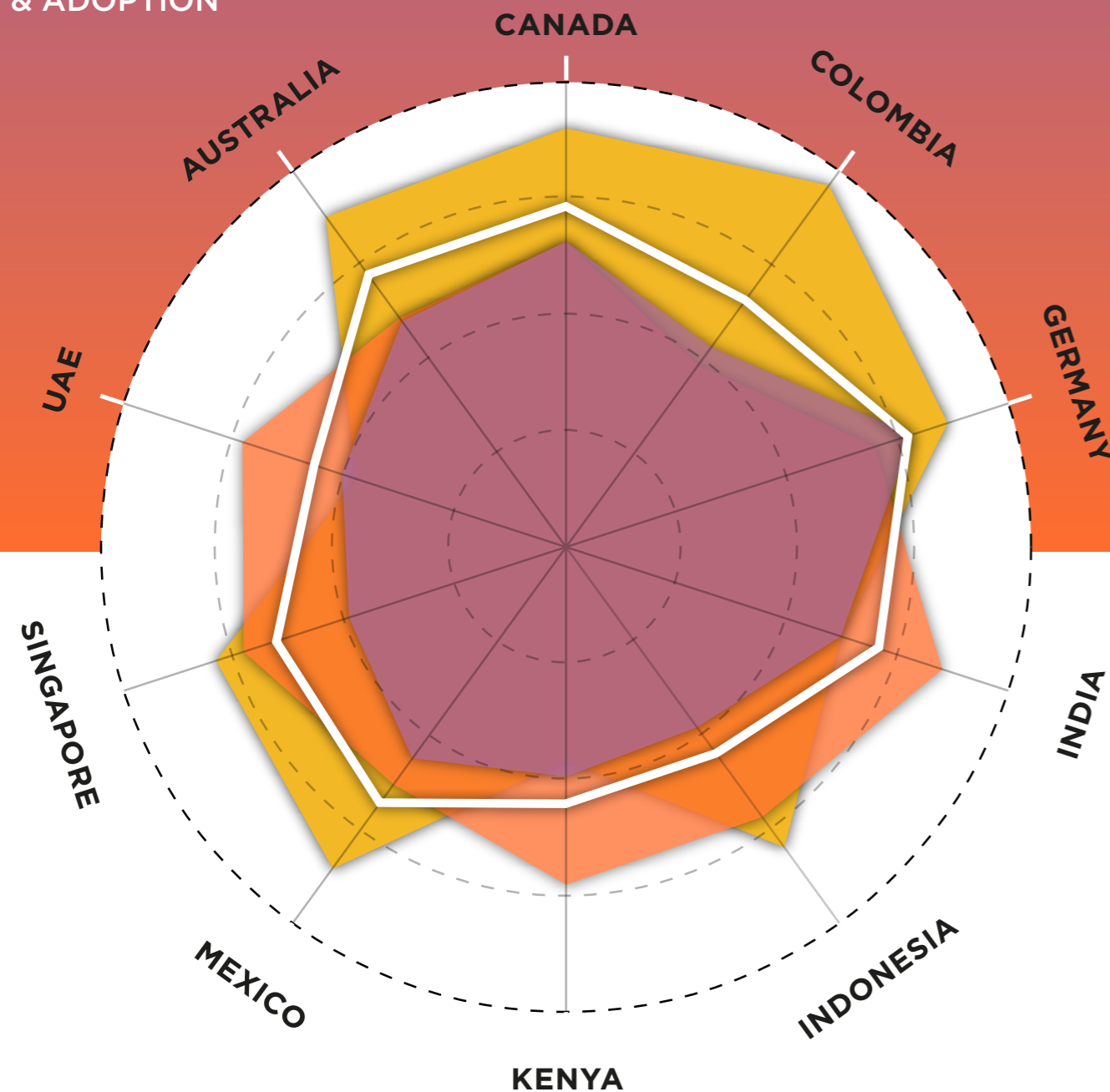
Establish a more formal, robust alliance of self-care advocates in each country to make the case that investments in self-care result in healthier populations and lower costs.

A diverse coalition of self-care stakeholders – including employers, self-care industry members, NGOs, patient, medical associations, healthcare professional associations, and academics – would be invaluable in garnering government buy-in for harnessing self-care as a powerful tool for reducing healthcare costs while improving health outcomes. The goals should be 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, while yielding savings for governments and health systems.

Encourage governments to adopt standalone self-care strategies that would 'connect the dots' and bring more coherence across the current multitude of health policies, plans and programs that touch upon the concepts of self-care. Self-care is holistic and multi-faceted. It encompasses everything from following healthy diet, to using herbal supplements, over-the-counter medicines, and oral care products, to self-monitoring and self-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 promote self-care behaviors. The optimal approach would be the development of a comprehensive self-care strategy spanning multiple government departments (eg, health, public health, education, environment). In addition, policymakers should make self-care related policies stronger by integrating impact measures. This would equip decision-makers and healthcare providers with powerful intel to identify best practices in patient empowerment, behavior change, self-diagnosis, self-monitoring, and even self-treatment.





Enabler 1

STAKEHOLDER SUPPORT & ADOPTION



COMPARATIVE SCALE

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

-  Enabler 1: Stakeholder Support and Adoption
-  1.1 Healthcare providers trust and support self-care
-  1.2 Patients and consumers trust and support self-care
-  1.3 Regulators and policy makers have an understanding of self-care

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 behavior; provide useful, accurate information to patients; and recommend self-care products for prevention and first-line treatment.

The extent to which self-care practices, patient education, and empowerment are embedded in national care guidelines for diabetes¹⁸, cardiovascular disease¹⁹, and primary care offer a good indicator of healthcare provider trust and support. Guidelines in Canada and Germany earned top scores in this regard, followed by Australia, Kenya, Indonesia, Singapore, and Colombia, which scored well, and finally by Mexico and India. High-scoring countries have the most self-care inclusive medical guidelines, are the ones where self-care concepts are most often on the agenda of medical congresses, and where healthcare providers are most supportive of self-care and patient empowerment based on the survey.

Overall, self-care concepts were most prevalent in medical guidelines for diabetes, with mixed results for cardiovascular disease guidelines and general practice guidelines.

To assess whether self-care is part of continuing education for healthcare providers, we examined the official agendas from the most recent congresses of the national associations for cardiology, diabetes, and primary care, specifically looking for sessions on self-care at those events. The UAE and Singapore ranked highest in this measure, with Germany, Australia, and Canada close behind. In countries like Australia, Canada, Indonesia, or Germany, though, self-care is not taught as such in nursing, medical and pharmacy schools, nor during courses about self-management, patient communication and behavior change, as well as the use of available vitamins, minerals and supplements. The research shows that pharmacists, nurses, general practitioners, psychologists, and medical specialists working with people living with diabetes, cardiovascular diseases, and asthma are most open to discussing self-care and integrating it into their practice.

Overall, self-care conversations seemed the most advanced in communities of healthcare providers who work with diabetic patients, confirming findings from the 2021 Index.²⁰

A more qualitative perspective came through the healthcare provider survey, which included questions designed to gauge providers' degree of trust and support for self-care. In Colombia, India, Kenya, Mexico and the UAE, most providers strongly agree that self-care is "a core component" of their approach to support patient management. In the other countries, a majority of providers agreed with this statement.

Likewise, a 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 (Indian providers being the most supportive of this statement); and (2) safely use OTC products as a first-line treatment for appropriate minor ailments (German providers being the most supportive on this statement).

When asked how often they recommend that patients use self-care products and practices as part of a treatment plan for a specific medical condition, most respondents from all countries, except Germany, say they do so at every visit

or often. Providers in Australia, Colombia, India, Kenya, and Mexico recommend that patients use self-care products and practices as part of an ongoing plan for wellness and optimum health at every visit.

Whether or not providers note self-care discussions in their patients' medical records indicates their own level of commitment and the likelihood of follow-up. When asked how often in the past 12 months they noted the recommendation or reported self-care products or practices in a patient's medical records, respondents in Canada, Colombia, India, Kenya, Mexico, and the UAE say they have done so often or at every visit.

Across all countries, governments support a shift toward a person-centered approach to health and a bigger focus on prevention; Australia, Canada, Indonesia, Colombia, Mexico, and the UAE seem most advanced in conducting this shift. However, a lack of time and inability to bill for the time spent talking with a patient rather than prescribing drugs undermine the motivation of healthcare providers to promote self-care:

“The challenge for healthcare providers is carving out time to embed self-care practices and decisions into the day-to-day services that are provided.”

Magaly Rodriguez de Bittner
PharmD, BCPS, CDE, FAPhA, Gyi Endowed Professor in Pharmapreneurship, Associate Dean for Clinical Services and Practice Transformation, Executive Director for the Center for Innovative Pharmacy Solutions at the University of Maryland School of Pharmacy, United States of America

“In my experience, patients first need to be told they are responsible for their own health and that it's a good thing for them to take some control. Older ones, in particular, have heard that 'the doctor is always right'

which sometimes keeps them from taking a further role in their own health, especially if they don't like or are scared by what the doctor tells them. In addition, it is very important that doctors and other health professionals explain clearly and have their patients repeat things back and vice versa for understanding. Healthcare providers should be trained on that.”

Karen Booth
President of Australian Primary Health Care Nurses Association, Australia

Interviewees explained that in Colombia and Mexico, healthcare providers might sometimes fear losing patients if they encourage more self-care, because of the way the healthcare system is structured. Nevertheless, they remain supportive. In Thailand, Indonesia, Kenya, and Latin America, interviewees said that creating a new function for physicians to educate patients on self-care and prevention that mimics the distribution system of prescriptions would be beneficial.

The consumer survey revealed a slightly different perspective based on how frequently the subject of self-care comes up during visits to healthcare providers. Most respondents from Mexico said that their healthcare provider speaks with them about the complementary use of self-care products and practices as part of their ongoing plan for wellness and optimum health, which is aligned with responses from healthcare providers. In all other countries,



most respondents said this happens sometimes, except Australia where respondents said their healthcare provider has never spoken with them about the complementary use of self-care products and practices. Generally speaking, healthcare providers say they talk about self-care to their patients more often than was reported by other stakeholders.

The disconnect suggests that healthcare professionals and consumers have different perceptions about what self-care conversations cover and sound like – a trend we uncovered in the 2021 Index.

This suggests the need for more education – for providers and consumers alike – about self-care and how to talk about it. Some interviewees in Canada and Australia also proposed clarifying the terminology of self-care by explaining when self-care is pharmacist-enabled (ie, self-medication), and proposed the term self-help for health. This would avoid confusion with “self-care” as described by the wellness industry which can mean taking a bubble bath, getting a massage, etc.

During our interviews with healthcare providers, policymakers, and experts, we asked them to define self-care and compared it to WHO definition and the seven pillars described below. Only interviewees who are already working extensively on self-care referred to all seven pillars, with most referring to healthy eating, physical activity, risk avoidance and mitigation, knowledge and health literacy, and good hygiene. Good hygiene came up most often in conversations with healthcare providers in Kenya, India, and Indonesia. Mental well-being was primarily cited by interviewees in Australia. Interviewees in Indonesia, Kenya, Canada, Australia, and the UAE also referred to the importance of being socially connected to one's family and community. Interestingly, our consumer survey found that people across all countries feel more confident about which self-care products and/or OTC drug(s) to use when they have a headache compared to digestive issues.

In Colombia, India, Kenya, Mexico and the UAE, most providers strongly agree that self-care is “a core component” of their approach to support patient management.

Providers in Australia, Colombia, India, Kenya, and Mexico recommend that patients use self-care products and practices as part of an ongoing plan for wellness and optimum health at every visit.

In Thailand, Indonesia, Kenya, and Latin America, interviewees said that creating a new function for physicians to educate patients on self-care and prevention that mimics the distribution system of prescriptions would be beneficial.

SPOTLIGHT ON *the role of pharmacists in self-care*

The role of pharmacists in self-care was discussed extensively in most of our interviews with healthcare providers, experts, and sometimes with policymakers and regulators.

“Interactions between pharmacists and consumers often include the provision of self-care; some pharmacists might be giving extensive self-care advice. In Australia, we are currently working on formalizing the role of community pharmacists in providing patient-centered consultations, which includes a structured approach to management and self-care advice for conditions like minor ailments, or referral to other health providers when required.”

Dr. Sarah Dineen-Griffin, PhD
Lecturer in Pharmacy Practice at the University of Newcastle in Callaghan, Australia

In Australia, the UK (SCRI 2021) and Mexico, pharmacists said that they can now offer extra services in preventive health such as health checks, dietary advice, immunizations, checking blood pressure and weight, support with sleep apnea control, asthma control, diabetes, and cholesterol management. Pharmacists also encourage people to quit smoking and eat healthier each time they see them. However, in many countries, dedicated spaces for advising and prevention activities are still rare, which makes it hard for pharmacists to conduct these tasks.

Earlier in 2022, the International Pharmaceutical Federation (FIP) launched a Handbook for Pharmacists entitled “Empowering self-care”.²¹ The handbook refers to the International Self-Care Foundation’s seven pillars of self-care framework, with each pillar describing a set of activities that individuals may undertake to improve and preserve optimal levels of health and quality of life:²²

- 1. KNOWLEDGE AND HEALTH LITERACY:** The knowledge and health literacy pillar includes individuals’ capacity to obtain, process and understand the necessary health information and services to make appropriate health decisions. Improving health literacy allows patients to adequately interpret information, whether written or verbal.
- 2. MENTAL WELL-BEING, SELF-AWARENESS, AND AGENCY:** Self-awareness and agency represent an important pillar as they are

considered basic starting points for all future self-care activities. Activities include being cognizant of the current state of health indicators (or common health measurements), such as body mass index (BMI), cholesterol levels and blood pressure.

- 3. PHYSICAL ACTIVITY:** Regular moderate intensity physical activity significantly improves cardiorespiratory and mental health. As such, dedicating sufficient time to sports and activities regularly and reducing sedentary behavior are important to consider.
- 4. HEALTHY EATING:** The healthy eating pillar reinforces the maintenance of a nutritional, balanced diet with appropriate calorie intake.
- 5. RISK AVOIDANCE AND MITIGATION:** The risk avoidance and mitigation pillar highlights health prevention actions or practices, such as quitting tobacco, limiting alcohol use, using safe and effective vaccines, practicing safer sex, and using sunscreen.
- 6. GOOD HYGIENE:** The adoption of regular hygiene practices, such as washing hands regularly, brushing teeth and washing food, is an additional pillar that contributes to self-care.
- 7. RATIONAL AND RESPONSIBLE USE OF PRODUCTS, SERVICES, DIAGNOSTICS AND MEDICINES** – includes being aware of dangers and using responsibly when necessary.

In FIP’s report and across literature, pharmacists are increasingly recognized as trusted local sources of information who can support individuals in their self-care journey, educate patients, and provide evidence-based advice on a broad range of topics, including self-care interventions and the use of non-prescription medicines in the treatment of minor ailments.^{23,24} The handbook contains guidance on six areas where self-care is most relevant, including sore throat, gastrointestinal complaints, musculoskeletal pain, children’s fever, sexual health, and disinfection. The handbook highlights both pharmacological and non-pharmacological management, such as the need to stay hydrated, ventilate rooms, rest etc.

During our interviews, we also heard that COVID-19 elevated the role of pharmacists, who are generally supportive of more self-care and patient empowerment, which could act as a catalyst to elevate the topic of self-care with other healthcare providers (ie general practitioners and specialists). Nurses have also been at the forefront of empowering patients and educating them about their general health and specific conditions, though this role has not been formally recognized by policymakers.

FIP ran a series of webinars in 2021-2022 about “Shaping the future of self-care through pharmacy”.²⁵ The webinars explored how pharmacists around the world can support people practicing self-care for a range of conditions, including sexual health, gastrointestinal health, sore throat, disinfection, women’s health, footcare in diabetes management, musculoskeletal pain and chronicity as well as smart self-medication. The series also explored how self-care fits within the Universal Health Coverage framework and how self-care can help relieve pressure on healthcare systems. Additionally, they discussed what pharmacists are already doing to support self-care and how their role could be expanded.

Healthcare providers interviewed all agreed that involving patients more proactively in the management of their health does not only have positive outcomes for patients, but also for healthcare providers who can spend more time on attending to patients with more complex needs. They also agreed that health systems that promote prevention and self-care would

be more sustainable. However, some healthcare providers said that in addition to lacking time and incentives, they also lack the tools that would support them with implementing self-care into their daily practice.

Dr. Peter Schwarz, Professor of Prevention and Care of Diabetes, University of Dresden, Germany and Chair of the Strategic Forum on Self-Care, Technology & Digitalization at European Diabetes Forum, explained that, ***“self-management does not mean only measuring glucose or injecting insulin – it fits into the mixture of self-care which goes beyond the treatment aspect, and touches upon quality of life. Even though there is support for these concepts among practitioners, we still don’t have any tools/guidelines to measure and improve self-management/self-care at the individual level.”***

While some medical associations – such as the International Pharmacist Association and the Mexican Diabetes Association – might be running activities around self-care and deliver guidance, government-supported guidelines for self-care targeted at pharmacists remain inexistant. Nevertheless, some pharmacist-led initiatives exist, in Australia, Canada, Indonesia, and Kenya, for example. As a result, the advice people receive from their pharmacists varies. Healthcare providers in Colombia, Indonesia, India, Kenya, Mexico, and the UAE said that it is possible and somewhat convenient to be financially compensated for time spent discussing self-care products or practices with patients. Further research is needed to understand the mechanisms used in different countries and which medical acts might fit the definition of self-care across different practices.

It is also important to note that 2021 WHO’s report “Classification of self-care interventions for health: a shared language to describe the uses of self-care interventions”, classifies self-care interventions for health systems and provides language to help researchers, policymakers, donors, and health program managers align on what self-care means and how it is implemented. The classification takes a people-centered approach to health and well-being outlined in WHO conceptual framework for self-care interventions and Guideline on Self-Care Interventions for Health and Well-being.^{26,27}

INDICATOR 1.2

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

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

If self-reported use of self-care products is evidence of consumer trust and support, then the public seems to be on board, as evidenced by the research conducted in both editions of the Index.

Self-care products are used most regularly as the first and preferred method to deliver relief from pain, coughs, and colds, but also predominantly for weight loss in the UAE and Australia.

Respondents from Germany, Colombia, Kenya, Canada, Indonesia, India, and Mexico are the keenest to learn about traditional and complementary medicines including vitamins, minerals, and supplements, as they often talked about it with their healthcare providers. Mexico ranked highest for this question, as about half of respondents said they talk about it at every visit.

However, respondents across most countries seemed hesitant about digital health resources, as most people said they do not use hotlines, websites, and applications dedicated to health.

Proxies for healthy behavior in each country, such as consumption of fruit and vegetables and active membership in sports or recreational organizations, to evaluate public awareness about the impact of diet and physical activity on health. Respondents from Canada, Colombia, Indonesia, and Kenya said they do at least 30 minutes of physical exercise between 2-3 days per week. Respondents from Mexico and the UAE said they do so 4-5 days a week, though it doesn't match official data reporting these countries are among the least active.²⁸ Respondents from Germany are the most active, with half of Germans reporting that they practice at least 30 minutes of exercise 6-7 days a week, which tracks with official data.³¹ 41% of respondents from India said the same; however, it doesn't align with official data.³³ **This shows that while people in some countries might say they are active, this is often not enough to meet the recommended amounts of physical activity and reap the benefits of such activities.**



© Ketut Subiyanto

INDICATOR 1.3

POLICYMAKERS HAVE AN UNDERSTANDING OF SELF-CARE

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

For this indicator, research focused on national legislative agendas and discussion records over the past three years to assess whether (and how often) self-care and its different aspects were discussed among policymakers.

SELF-CARE FOR HEALTH: A NATIONAL POLICY BLUEPRINT IN AUSTRALIA

Vision: “Better health for all, through better self-care by all”

Self-Care for Health: A National Policy Blueprint, published October 7, 2020, was developed by The Mitchell Institute at Victoria University and the Australian Self-Care Alliance (ASCA).³⁴ As part of the Institute’s Australian Health Policy Collaboration, researchers at the think tank worked with members of ASCA including consumers, health promotion charities, academics, and industry partners to create a series of policy recommendations regarding self-care. The Blueprint recognizes self-care not only as a common element of everyday life, but also as a tool for public health services that requires support. This document calls upon the government to adopt a self-care-oriented strategy to complement existing preventative health measures and as a means of improving long-term health outcomes.

The framework lists nine priority considerations for policy makers:

- 1. Improve health literacy for all**
- 2. Build self-care into healthcare practice**
- 3. Enable consumers to be active partners in healthcare**
- 4. Assure quality, accessible digital health information**
- 5. Develop measures for individual self-care and self-care support by health services**
- 6. Fund models supporting self-care services**
- 7. Invest in preventative health and self-care**
- 8. Establish a national approach**
- 9. Support health through all public policies**

Policymakers in Australia, Canada, Colombia, Mexico, Indonesia, and Germany are aware of the concept of self-care for different reasons. In Australia, the Self-Care Blueprint puts self-care on the radar of policymakers. In Canada, a self-care framework is currently being developed by the regulator Health Canada, which aims to reform regulation of self-care products ranging from OTCs to sunscreen. Canada also has a self-care blueprint, developed by Food, Health & Consumer Products Of Canada (FHC Canada).³⁵ In Colombia and Mexico, the concept of

self-care has long been present in policy language, and self-care and wellbeing appear prominently in Colombia’s latest Ten-Year Public Health Plan 2021-2030.³⁶ In Germany, self-care appeared in the final policy paper by the Global Business Coalition during Germany’s G20 Presidency, though self-care remains mainly associated with self-medication.³⁷ More recently, the European Health Parliament, a movement connecting and empowering the next generation of European health leaders to rethink EU health policies, issued new preventive and self-care recommendations.

**ENABLER 1
STAKEHOLDER SUPPORT & ADOPTION**

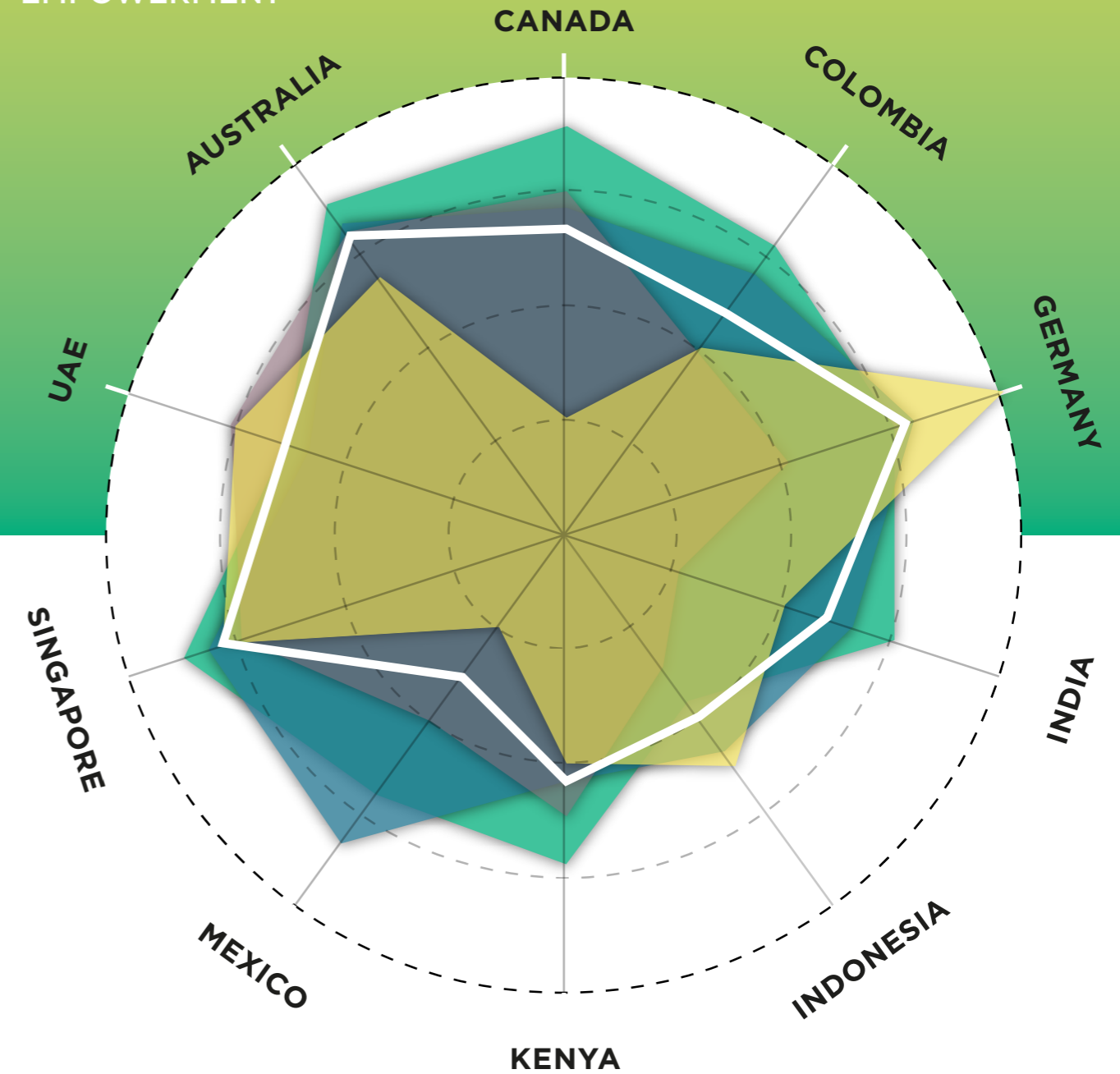
The recommendations emphasize the prevention of non-communicable diseases, creating sustainable health systems by promoting healthier diets at an early age, fighting tobacco, excessive alcohol consumption and sedentary lifestyles, and enhancing the early diagnosis and screening of NCDs. Most importantly, the group recommends “advance[ing] self-care practices and education by 1) introducing health literacy and health-promoting practices into school curricula; and 2) advancing the role of pharmacists in self-care promotion.”³⁸ The group already issued self-care and prevention recommendations back in 2016.³⁹

A 2021 study by AESGP found that \$1 spent on OTC medicines saves national healthcare systems and economies a combined \$6.70.⁴⁰ The Global Economic and Social Value of Self-Care report, launched in June 2022 by the Global Self-Care Federation, found that if 10-25% of current physician visits were substituted by self-care, \$19.4 billion could be saved while freeing up 58,000 physician hours.⁴¹ These hours could then be used for more complex cases, allowing individuals without access to healthcare to reach a physician. This study also suggested the current value of self-care can potentially be increased by approximately 16%-25% by implementing self-care policy measures.⁴² Though our research suggests that policymakers in Australia, Canada, Colombia, Germany, Indonesia, Mexico, and Singapore are aware of the concept of self-care for different reasons, they are not necessarily aware of its potential economic benefits.



**ENABLER 2
CONSUMER & PATIENT EMPOWERMENT**

**Enabler 2
CONSUMER & PATIENT
EMPOWERMENT**



COMPARATIVE SCALE

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



Enabler 2:
Consumer
& Patient
Empowerment



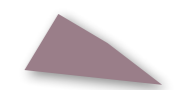
1.1 Access
to personal
health data



1.2 Consumer
health literacy



1.3 Self-testing



1.4 Digital
health tools
are accessible

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.

Germany and Australia scored the highest for this indicator. Since February 2019, all Australians have a My Health Record created for them, unless they have opted out of the system. Individuals can choose to have their record deleted at any time. Healthcare providers we interviewed said that they can note OTCs in patients' medical records, a similar practice exists in Germany. To ensure greater safety in drug therapy, German patients who use at least three prescribed drugs simultaneously receive an individualized medication plan included in the electronic medical record.⁴³ German doctors can also recommend OTC medicines

to their patients by issuing a green prescription (in German, "Grüne Rezept"), separate from the standard prescription sheet.

In countries with a federal model, including Australia, Canada, the United Arab Emirates, (and the United States, covered in the 2021 Index), experts mentioned that patients might struggle to navigate the health system. They also often alternate between private and public healthcare systems, which makes it hard to establish a centralized system for sharing health records. This should also be considered when discussing health literacy in these countries.



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

Definition of health literacy used by the World Health Organization:

*"Health literacy represents the personal knowledge and competencies that accumulate through daily activities, social interactions and across generations. Personal knowledge and competencies are mediated by the organizational structures and availability of resources that enable people to access, understand, appraise and use information and services in ways that promote and maintain good health and well-being for themselves and those around them."*⁴⁴

Health literacy in the context of self-care:

The Global Self-Care Federation published a White Paper on Self-Care Health Literacy earlier in 2022. In this paper, self-care literacy is defined as a sub-domain of health literacy: "Applied in the context of self-care; self-care literacy refers to the knowledge, motivation and competencies of individuals, families, and communities to promote health, prevent disease, and maintain health and to cope with illness and disability with or without the support of a health-care provider. Self-care literacy describes the specific sub-domain of health literacy related to self-care. Other related subtypes of health literacy include medication literacy, both OTCs and prescription medicines, as well as disease-related literacy, such as diabetes literacy which also involves elements of self-care and self-management."⁴⁵

Among countries covered in SCRI 2021 and 2022, only Australia and Germany have established a health literacy plan or framework, though those have not yet been adopted and implemented by policymakers.

According to the Economist Intelligence Unit's Health Literacy report, Australia and the US stand out due to their consistent policy efforts to improve health literacy.

Attention to health literacy is becoming evident in Mexico, India, and South Africa. None of these countries have dedicated policies, but health promotion programs indirectly address health literacy concepts.

A review of the academic literature shows that people with higher levels of health literacy overall tend to enjoy better health and that health literacy plays a crucial role in self-care. As noted by in an OECD working paper, "widespread access to digital technologies offset some of these barriers by democratizing access to health information, providing new ways to improve health knowledge and support self-care."⁴⁶ For example, people with higher health literacy levels make better decisions regarding their own health, including decisions about how to prevent diseases, treat minor illnesses, manage chronic conditions, decide when it is necessary to see a doctor, and have more constructive conversations with their healthcare providers.^{47 48 49} Researchers have also found that people with higher levels of health literacy tend to be more engaged in self-care practices. Health literacy can strengthen individuals' capacities to understand long-term disease, which require continuous management and education on treatment, risks, and self-care.⁵⁰ Health literacy requires combined action from individuals, healthcare providers, and healthcare systems.⁵¹ A study of heart failure patients shows health literacy to be independently associated with self-care behavior.^{52 53} Interestingly, it was found that the concept of self-care is most present in medical guidelines for heart failure, compared to guidelines for other cardiovascular diseases, including stroke and hypertension.

Health literacy is strongly associated with socioeconomic status, and historically marginalized groups tend to have fewer opportunities to improve health literacy.⁵⁴ Nevertheless, many of the interviewees suggested education levels are not necessarily strictly correlated with higher levels of health literacy, meaning people with higher levels of education might not always feel comfortable taking care of their own health or fully comprehend health information. Interviewees in 2021 and 2022 also pointed out that older persons tend to be less health literate and tend to follow their doctor's advice, even when they don't necessarily agree with it. This was also confirmed in GSCF health literacy white paper which found that the less health literate consumers engaging in fewer self-care activities are mostly people aged 65 and over.

Accordingly, WHO is encouraging countries to assess and develop their own health literacy responsiveness defined as, "the way in which services, environments and products make health information and support available and accessible to people with different health literacy strengths and limitations."⁵⁵ So far, several initiatives ranging from general health campaigns to websites and other digital platforms compiling health information have been developed. According to a report by the Economist Intelligence Unit, Australia, Denmark, Norway, Sweden, and the United States are the most advanced on this issue.⁵⁶ Among countries covered in SCRI 2021 and 2022, only Australia and Germany have established a health literacy plan or framework, though those have not yet been adopted and implemented by policymakers. None of France, Poland, and South Africa, covered in the 2021 Index, nor Mexico, from the 2022 Index, currently have health literacy plans or strategies in place. **The United States, covered in the first edition of the Index, launched a National Plan to Improve Health Literacy in late 2021.**⁵⁷ In Australia, health literacy is a key area of work of the National Safety and Quality Health Service Standards.⁵⁸ In Latin America, health literacy has been a key component of the strategy to increase the financial sustainability of healthcare systems, and many governments see the value of improving health literacy and awareness of self-care in solving various healthcare challenges.⁵⁹

The consumer surveys found a high number of people still have problems learning about their health because of difficulty understanding written information. These figures range from 17% in Indonesia, 15% in India, 9% in Canada, 8% in Australia, and 7% in Kenya. In comparison, people in Colombia, Mexico, and Germany feel more confident understanding

written health information, with 78% of respondents in Germany saying they never or rarely have difficulties, compared to 68% in Mexico and 64% in Colombia.

A study from 2012 found that across eight European countries, nearly half of respondents showed inadequate or problematic health literacy.⁶⁰ More recently, the second European Health Literacy Study (HLS19), which measured health literacy in 17 countries, found that on average more than one-third of people have inadequate to problematic health literacy, and in some countries, it was closer to two-thirds.⁶¹

According to the Economist Intelligence Unit's Health Literacy report, Australia and the US stand out due to their consistent policy efforts to improve health literacy. Although there are currently no specific health literacy policies in either country, it is a core tenet of many governmental healthcare programs and resources. Attention to health literacy is becoming evident in Mexico, India, and South Africa. None of these countries have dedicated policies, but health promotion programs indirectly address health literacy concepts.⁶² A report about digital self-care by the Self-Care Trailblazer Group found an increased focus on health literacy training for healthcare professionals in the US, coupled with the creation of many continuing education resources. Similar initiatives are underway in Australia, mainly at the medical school level, and in the UK, where many online resources targeted to healthcare workers have become available. Initiatives focusing on "teach back" and "plain language" aim to improve the understanding between clinicians and patients, such as Drop the Jargon, an Australian campaign targeting healthcare providers.^{63 64}

The Economist's Health Literacy Report also emphasized the importance of developing health literacy early in life, noting that schools could be an ideal arena to build these skills. Indeed, the UK, France, England, and India have all published health and hygiene curricula for public schools. In India, this was done through the National Health Strategy of 2017 and

the Operational Guidelines on School Health Programme, which also introduced the concept of health and wellness ambassadors. Together, the documents discussed a variety of activities to be included in schools, such as hygiene practices, mental health, nutrition, and yoga.

Although early interventions are important, health literacy education should not solely focus on children and adolescents. Unfortunately, although adult health literacy is not a priority for most countries, some adult initiatives have begun in LMICs, such as Mexico. PrevenIMSS, a program by the Mexican Social Security Institute that encompasses various outreach activities across Mexico, includes health promotion and health education.⁶⁵ In India, on the other hand health education programs focusing on traditional practices encompassed by the program AYUSH are supported by community health workers called ASHAs (Accredited Social Health Activist).⁶⁶

Finally, the Economist Intelligence Unit's study examined communication guidelines to improve health communication. **The UK, France, Australia, and the US all have clear guidelines on ways to produce understandable and easily digestible health information in a variety of mediums.** However, South Africa, Mexico, and India have very few to no nationally scaled programs. When it comes to physical activity, many countries including Canada, Australia, France, Germany, UK, India, and the UAE have developed national physical activity recommendations.^{67 68 69}

Telemedicine and digital health tools are slowly emerging as possible ways to empower people and improve self-care, especially in Latin America and in Germany, where the government has started to reimburse digital applications for mental health. Singapore has created government-funded step counters with incentives to walk and increase physical activity.⁷⁰ Healthcare providers and experts we interviewed also believe that telemedicine has the potential to empower more people and encourage more self-care:

“Telemedicine can support self-care in many ways. It allows for a more patient-centric approach, and an easier way to cooperate with and involve the patient in the management of his/her health. For most health conditions, it is fundamental to have a combination of self, especially chronic diseases, with diabetes care being the area where self-care conversation are most advanced so far. Finally, telemedicine allows for other family members to be involved, and therefore to spread health information and self-care advice to more community members as well.”

Dra. Omidres Pérez de Carvelli
President of the International Organization of Telehealth and Telemedicine

Digital platforms that support self-care are also emerging across India, Mexico, and South Africa. As digital health resources become more accessible, health literacy, and more precisely digital self-care literacy, has become a necessity in linking individuals to health care providers, supporting the continuum of care, personalizing health experiences, and in improving the ability to monitor and evaluate outcomes as underlined in the Digital Self-Care Report of the Self-Care Trailblazer Group.⁷¹

Australia, France, the UK, and the US all have clear legal frameworks for regulating health apps. Usually, regulation is only required for apps with a clear medical purpose. Among this group the UK is perhaps the most advanced country, with regulatory frameworks addressing a more extensive group of apps. The NHS, for example, produced a framework to evaluate health apps, including those that serve only information and education purposes. This is a step in the right direction toward promoting trust among both healthcare professionals and

patients as well as encouraging their wider adoption. Regulators should continue to keep up with the rapid pace of innovation in digital health, balancing quality and safety priorities on one hand, with supporting an environment for continued improvement and innovation on the other.

There is a growing body of evidence which shows that limited health literacy is a serious public health concern globally and it must be addressed. Lack of health literacy is associated with poor health across a life course, reduced capacity to engage in self-care to maintain or improve one's health, and increased healthcare costs.⁷²

The GSCF self-care health literacy report highlights potential opportunities to advance health literacy, building on four pillars: policy, information and communication, capacity building, and analytical insights.

Specifically, the report recommends mobilizing self-care literacy advocates and setting comprehensive self-care and literacy policy agendas, ensuring that high-quality information is clear, accessible, and user-friendly, as well as well-marketed. The report argues self-care education and literacy should be targeted towards the right population groups and encourage capacity building through mobilizing resources and organizations geared towards self-care and health literacy. Finally, GSCF recommends building evidence-based support for health literacy and self-care by creating measurable goals and milestones.

Gender is often not included as a consideration when discussing self-care. WHO's handbook on self-care for community workers and volunteers contains the word 'gender' exactly once, while Australia's major report on the state of self-care does not mention it at all.^{73 74} Similar trends are shown in reports from the UK, and several guidelines from organizations like the American Heart Association and the Diabetes Canada Expert Committee.^{75 76 77 78 79} The exclusion of gender is notable, as the sociocultural gender norms for men, detailed in a recent WHO report, often preclude concepts of self-care.

Indeed, some interviewees in Australia and Kenya highlighted the need to target men when

it comes to self-care and health education in general. They agreed that men tend to wait longer than women until they decide they need medical attention, resulting in poorer health results and more costs for the healthcare system. A report by the Global Action on Men's Health was published on the topic in 2019: "Who self-care wins: a global perspective on men and self-care."⁸⁰ The report highlights that a gender perspective should be adopted when implementing self-care programs as part of the effort to improve overall health outcomes. Fortunately, programs aimed at men are becoming more prevalent in certain countries such as the UK and Germany, which have both seen successful communications campaigns aimed at health and self-care literacy for men. This includes the Man Manual in the UK, and various publications from the Stiftung Männergesundheit (Men's Health Foundation) in Germany.^{81 82}

E-labelling was also mentioned as a good way to improve health literacy about specific products. So far, Australia and India do not require sponsors to provide separate paper leaflets. Key consumer information is provided on packaging, and sponsors can choose to provide other information through e-labeling.⁸³

Other countries, including South Africa, China, Germany, Poland, Brazil and Mexico, have a dual system where e-labeling information is offered in addition to the paper format. In Canada, for lower risk OTCs, e-label extensions are the only place to provide certain "point of use" regulatory content and e-labelling is possible for a limited scope of products. In Australia, paper leaflets are not mandatory when information is judged to be unnecessary to be in the pack. In India, paper leaflets are not needed for locally manufactured medications. USA provides its data on packaging, with paper leaflets by exception. In some countries, including Kenya, Nigeria, Indonesia, Thailand, Colombia, and the United Arab Emirates, e-labeling is not allowed at all. This is based on the survey ran by GSCF. In Singapore, e-labels have been allowed for prescription drugs and food supplements since August 2019.⁸⁴

Health programs at the workplace can also be a good way to raise awareness of self-care. Such programs were identified in India and Australia.

INDICATOR 2.3

SELF-TESTING

The extent to which a country provides incentives for patients to self-care by making self-testing products and self-monitoring devices available and potentially reimbursed.

Based on our research findings, self-testing for a range of conditions is most common in Germany, Australia, and Canada. However, recent efforts are underway in Kenya and India, especially when it comes to sexual and reproductive health.⁸⁵

In these and other LMICs, HIV self-tests in particular have emerged as an efficient way to reach at-risk populations and identify missing cases.⁸⁶ However, our consumer survey shows that across all countries, people were often not sure which self-testing products they can access, and whether those are reimbursed or not.



INDICATOR 2.4

DIGITAL TOOLS FOR SELF-CARE

The extent to which a country enables individuals to access apps and other digital tools to prevent or treat self-limiting conditions and access trusted information on self-care products and practices.

Our consumer survey found that most people do not use digital tools for self-care, but rather rely on the Internet to find health information.

Despite the existence of government-supported websites with science-based, verified, and trusted health information available in a number of countries, interviewees suggested that people are often not aware of these sources, a finding confirmed by the consumer survey.

SPOTLIGHT ON *one-stop-shop health information websites*

One-stop-shops for health information that provide science-based, trusted health information are a tool to support the integration of health literacy and self-care. Examples include Health Direct, the government-supported platform Australians can use to find trusted health information on a broad range of topics, a symptom checker, and an OTC and prescription drugs directory; and the NHS platform, which combines information about conditions, symptoms, treatments, and medicines, including OTCs.^{87 88 89 90}

Platforms dedicated to mental health are also emerging, with tips for good mental health and mental wellness more generally. Examples include “Every Mind Matters” in the UK, “Head to Health” in Australia and “Wellness Together Canada” in Canada.^{91 92 93} India’s Ministry of Health and Family Welfare has set up the National Health Portal, to provide healthcare related information to citizens and to serve as a single point of access for consolidated health information. The portal contains a section about healthy living, physical activity, healthy diet, hygiene, nutrition, and more.⁹⁴

Several digital tools aimed at men have also emerged, such as HeadsUpGuys, a Canadian website providing information and guidance for managing depression and the global TrueNTHinitiative, led by the Movember Foundation.^{95 96} This initiative is run in the UK, Australia, New Zealand, the US, and Canada, and aims to support men and their families throughout all stages of prostate cancer.



SPOTLIGHT ON *e-labelling in the food industry in Asia*

A report by the Food Industry Asia recently found that 40% of consumers across 10 key markets in Asia* encounter issues with physical labels.

As a result, 82% of consumers in these countries find digital labeling concept appealing, with the 31 to 40 years old age group being the most willing to use digital labeling, with those in Vietnam, Thailand, and India finding it the most appealing. 82% are willing/extremely willing to use an app to scan the digital labels on food packaging products to obtain product information. According to the same report, strengths of digital labeling include 1) enabling a faster response to readily access information; 2) greater flexibility and cost-efficiency in changing labels; 3) reduced packaging waste; 4) ability to include more information; 5) improved supply chain management with better traceability. Though more and more countries are currently implementing e-labeling for self-care products or exploring the possibility to do so, in particular in Canada, Australia and Singapore, most countries are still to leverage digital labeling (or e-labelling) to empower people to make better, informed choices about their health. For example, the US, India, and Indonesia have introduced digital labeling systems in some of the food regulations – a first step in the right direction that could open the way to e-labelling of self-care products in these countries. The report “Digital Labeling: The Future of Smarter Food Labeling in Asia” by Food Industry Asia identified 10 enabling factors that could drive the implementation of digital labeling systems. Those enabling factors can apply to self-care products, too:

Digital awareness and public demand:

- High level of digital awareness and sophistication by companies, consumers and regulators
- Strong consumer demand for information about food products
- High smartphone adoption rates

Regulations and regulatory capacity:

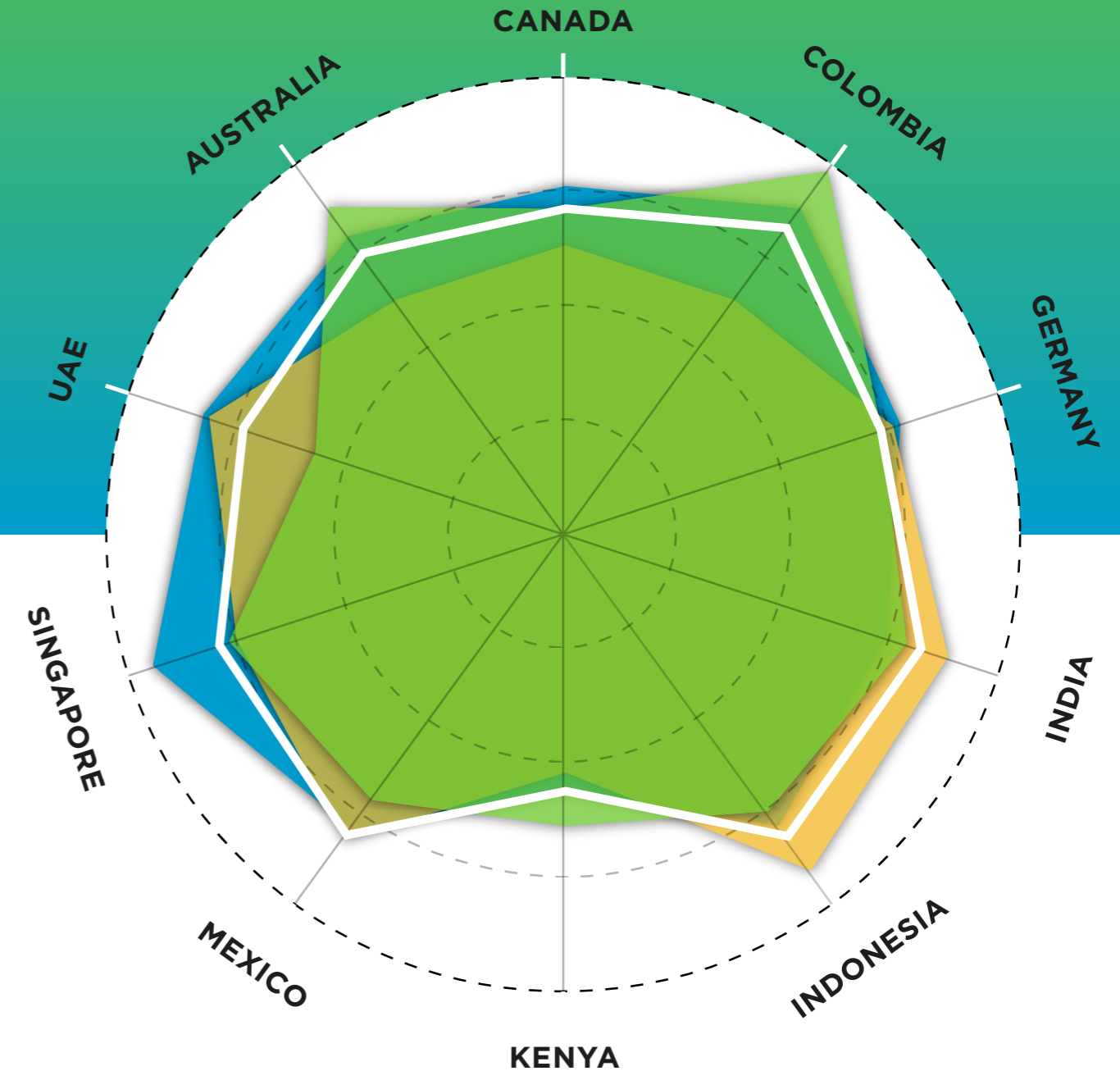
- Presence of enabling regulations on food
- Presence of digital labeling regulations
- Strength of data protection laws and enforcement mechanisms
- Presence of strong supervisory mechanisms

Partnerships and collaboration

- Strong partnership between supply chain partners and regulators
- Strong collaboration across relevant government units
- Participation in international and/or regional forums on harmonization of food labeling standards

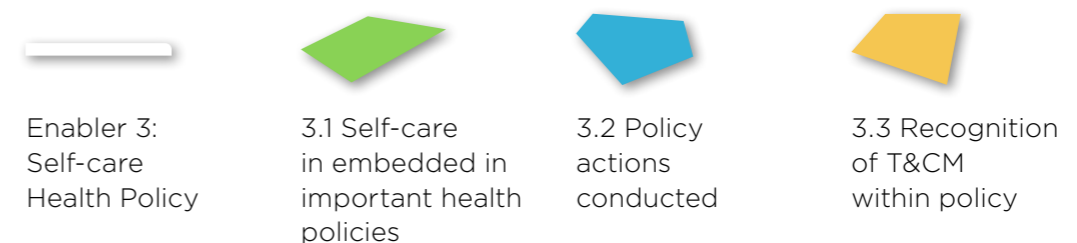
**Countries covered in the study include China, India, Indonesia, Japan, Korea, Malaysia, Philippines, Singapore, Thailand, and Vietnam.*

Enabler 3 SELF-CARE HEALTH POLICY



COMPARATIVE SCALE

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



Major health policies in a number of countries were analyzed to determine whether they embed the concepts of self-care, including self-monitoring, self-management, self-assessment, and self-medication. The research has also looked for indications that policies support people's empowerment for health, behavior change, health promotion and prevention (ie healthy lifestyles including healthy eating and physical activity, as well as wellbeing). Government-led campaigns to promote healthy lifestyles were also examined.

INDICATOR 3.1

SELF-CARE IN HEALTH POLICIES

The extent to which self-care is part of major health policy documents within a country.

According to the research, the concept of self-care appears explicitly in policy documents in Australia, Singapore, and Mexico. Most countries covered in the Index had at least one major health policy strategy or framework that contains a self-care element.

In Canada, however, the concept of self-care is primarily linked to regulatory affairs with the ongoing development of a Self-Care Framework by Health Canada, outside of the current health policies. For those countries where self-care is embedded into health policy strategies, self-management was the concept that appeared most often alongside physical activity and healthy eating. Interestingly, most countries that have a non-communicable disease strategy do not emphasize self-management. In Indonesia, self-care is explicitly mentioned in the National Strategic Action Plan for the Prevention and Control Non-Communicable Diseases.⁹⁷

Many countries have now shifted from a reactive approach towards preventative healthcare strategies. Both Indonesia and Kenya have developed strategies to promote wellness and emphasize preventative care. The Kenyan Primary Health Care Strategic Framework also underscores the need for individuals to take an active role in maintaining their health.⁹⁸ The Indonesian Ministry of Health launched the Healthy Indonesia Program in 2015, while other campaigns have included the Healthy Living Community Movement (GERMAS) and the Smart Use of Medications Movement (GeMa CerMat). Mexico has a similar strategy; the country's Primary Healthcare Methodological and Operational Framework as well as the PrevenIMSS Health Care Guidelines both emphasize prevention and co-responsibility in one's health, along with specific references to self-care concepts.^{99,100} Colombia's new Ten-Year Public Health Plan (2022-2031) is expected to contain many self-care concepts.¹⁰¹ Additionally, Colombia makes explicit reference to self-care through



INDICATOR 3.2

POLICY ACTIONS CONDUCTED TO RAISE AWARENESS ON THE SAFE USE OF OTC MEDICINES AND ENCOURAGE THE ADOPTION OF A HEALTHIER LIFESTYLE

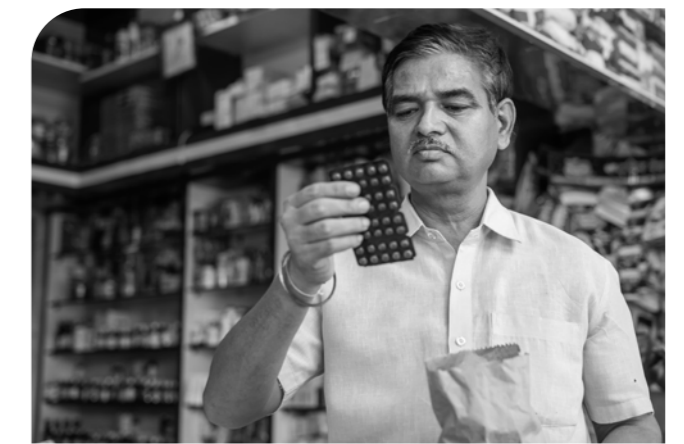
The extent to which policy makers invest time and resources in prevention campaigns targeting the general public and health providers.

the General System of Social Security in Health (SGSSS, or PCSS in Spanish), highlighting the high degree of acceptance of self-care by the population and policymakers alike.¹⁰²

In the United Arab Emirates (UAE), the concepts of happiness and wellness have been the focus of many government-led campaigns, especially with regards to healthy eating and physical activity. The UAE also published a National Strategy for Wellbeing 2031.¹⁰³

The Singapore Ministry of Health released "Healthier Singapore" (HG), a population health strategy in 2022.¹⁰⁴ Self-care is also referenced in the Patient Empowerment for Self-Care Framework (War on Diabetes Initiative) and the Self Care on Health of Older Persons in Singapore (SCOPE).^{105,106} None of the health policy plans analyzed made specific reference to self-care products (OTCs, vitamins, minerals, and supplements).

Kenya, Canada, and the UAE have established distinct healthy diet and/or physical activity policy strategies. In 2017, the Kenyan government issued National Guidelines for Healthy Diets and Physical Activity.¹⁰⁷ Canada also has a Healthy Eating Strategy. In 2018, the Kenyan government launched a Physical Activity Action Plan. Australia's the National Obesity Strategy references self-care explicitly. Australia is also the only country covered in the 2022 Index to have adopted a National Preventive Health Strategy, which explicitly links health literacy and effective self-care.¹⁰⁸ Mexico has embedded health literacy into its policy work around prevention. Germany and Australia are the only countries covered in the reports with established health literacy plans and strategies in place, though not formally adopted by policymakers. As with the first iteration of the Index, no government has adopted a self-care policy strategy.



Australia, Canada, Colombia, Mexico, Singapore, and the United Arab Emirates have been the most active with campaigns to encourage healthy eating and physical activity. Examples include "La Nueva Mesa" (the New Table) in Mexico; the Community Wellbeing Nutrition Program and National Action Plan in Nutrition in the UAE; and Canada's Food Guide. Mexico, Colombia, and the UAE, all recently launched new labeling systems to make it clearer to consumers which products are unhealthy. Mexico's new food labeling system is now considered the best in the world.¹⁰⁹ Physical activity campaigns include the "Move It AUS", a campaign encouraging Australians to find at least 30 minutes of physical activity per day¹¹⁰; the "Move to life" in Colombia; and the "30 Steps Challenge" in Singapore. Promotional campaigns that explicitly mention self-care can be found in Mexico and Colombia, where the concept of self-care (in Spanish, "autocuidado") appears both in government- and industry-led campaigns. In the remaining countries, health promotion and prevention campaigns have yet to adopt a self-care lens.



Similar to the first edition of the Index, a majority of survey respondents said they feel more educated and empowered to seek out self-care products and practices because of supportive campaigns and programs in their community. The highest scores were obtained in India (95% agree or strongly agree), Mexico (80%), and Indonesia (74%). The lowest scores were in Canada (42% disagree or strongly disagree), Germany (49%), Australia (40%) and Kenya (27%), showing that there is still room for improvement.

In Australia, Germany, and Canada, experts said that though some self-care campaigns and initiatives exist, there is major lack of awareness on the topic of self-care. Experts also said that government-led campaigns and initiatives still largely focus on disease areas and/or chronic disease prevention, which might not speak to people who consider themselves healthy.

The International Self-Care Federation (ISF) notes the need to institutionalize self-care into countries' policy frameworks, something currently not a healthy policy priority – an observation confirmed in the research.¹¹¹

INDICATOR 3.3

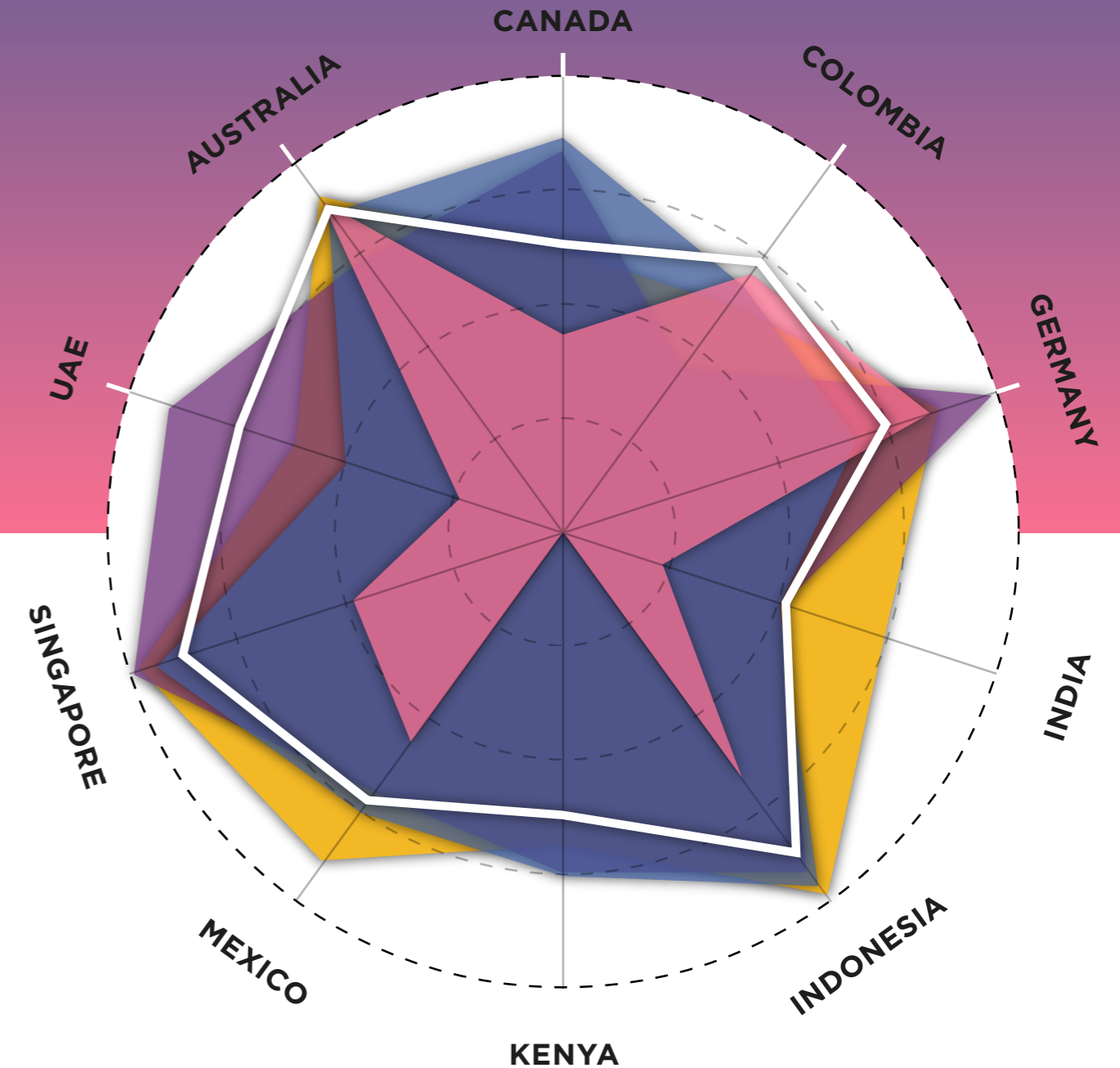
RECOGNITION OF TRADITIONAL AND COMPLEMENTARY MEDICINE (TCM) WITHIN HEALTH POLICY

The extent to which the health system recognizes TCM.

Finally, countries with the most robust policies and regulations on traditional and complementary medicines (TCMs) include India, Indonesia, and Mexico. Each has a national policy on TCM, laws and regulations governing TCM, a national program for TCM, and an expert committee for TCM. According to WHO's 2018 report on traditional and complementary medicines, countries benefitting from a national policy on TCM include the United Arab Emirates, India, Australia, Canada, Germany, Indonesia, and Mexico. All countries covered in the 2022 Index have laws and regulations covering TCM but might not have national policies or programs on TCM, or an expert committee for TCM.¹¹² Kenya scores the weakest on this indicator, with only laws and regulations regulating TCM.

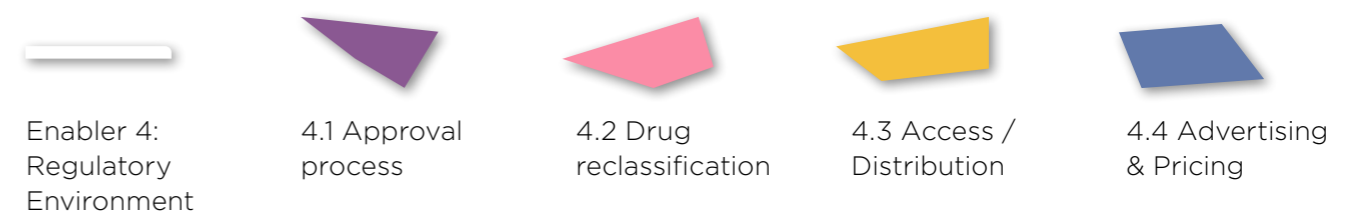


Enabler 4 REGULATORY ENVIRONMENT



COMPARATIVE SCALE

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





INDICATOR 4.1

APPROVAL PROCESS

Globally, there are typically two to three regulatory levels for drug access

This includes prescription-only medications, which must be obtained via prescription from a qualified clinician, and OTC medications, which may be split into two categories. Pharmacy-only OTCs do not require a prescription but are only available in specific outlets, such as registered pharmacies. This is the case in France, where pharmacy-only OTCs must be sold under the supervision of a registered pharmacist. General sales list OTC products are sold at a variety of local outlets, including but not limited to pharmacies, grocery stores, and convenience stores. The public may self-select these products without assistance.

All countries covered in this Index have differentiated regulations for OTCs. Only India does not make an official distinction between prescription drugs and OTCs, as all products not on prescription automatically fall under “OTC”, though regulators are currently working on an OTC framework.

Most countries have differentiated regulations for traditional and complementary medicines, including Australia, India, Canada, Colombia, Germany, Kenya, Mexico, and the UAE. Notably, Canadian regulators are currently working on a self-care initiative to introduce a risk-based approach to regulatory oversight for all self-care products, which would create expedited pathways for lower-risk non-prescription drugs and would align the oversight for non-prescription drugs with other self-care products of comparable risk.¹¹³

INDICATOR 4.2

DRUG RECLASSIFICATION

Among the countries in the 2022 Index, Australia, Colombia, Mexico, Canada, Singapore, Indonesia, and Germany have established Rx-to-OTC switch processes in place. Kenya has a process as well, though it is less robust than other countries.

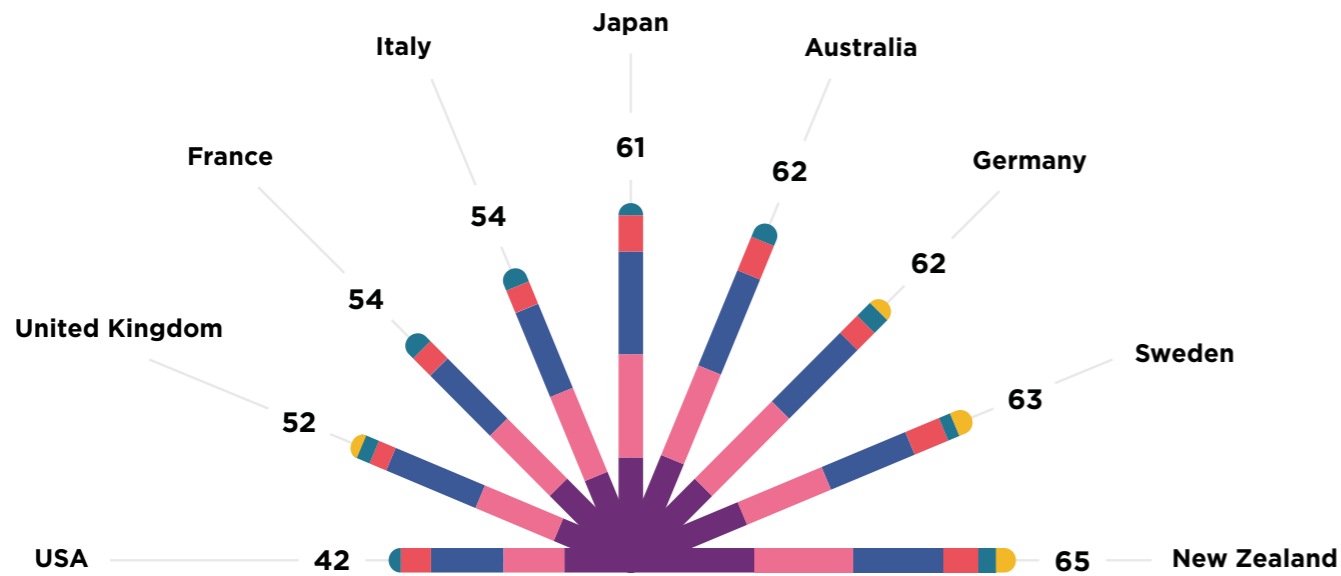
TABLE 1: Comparison of key switch processes and access and distribution channels of OTCs across countries covered in the two iterations of the Index:

Country	Exchange type	Pharmacy / General sale	Approval time by regulators	Requested by the manufacturer
Mexico	By product	Pharmacy and general sale	-1 month	Yes
Brazil	By active ingredient	Sale in pharmacy	Up to 3 months	Yes
United Kingdom	By branded product	Pharmacy and general sale	-3-6 months	Yes
Canada	By active ingredient	Pharmacy and general sale	24-30 months	Yes
Australia	By active ingredient	Pharmacy and general sale	-12 months	Yes
United States	By branded product	Pharmacy and general sale	10 months	Yes
Germany	By active ingredient	Sale in pharmacy	11-13 months	Yes

Source: ILAR Research 2019-2020

Recent Rx to OTC switches took place in Indonesia, where 10 types of drugs were changed from Rx into limited OTCs in June 2021; and, in Germany, Sumatriptan (for the treatment of headaches) was switched to OTC in 2020. In 2022, Dexibuprofen (mild to moderate pain), combinations of Ibuprofen and Paracetamol (mild to moderate pain), Bilastin (hay fever) and Levodropizin (cough) were also switched to OTC in Germany.

Germany and Australia stand out in this second iteration of the Index due to a high number of drugs available as OTCs. A recent report by the German Medicines Manufacturers' Association (in German, *Bundesverband der Arzneimittel-Hersteller*) found that Germany and Australia both have about 62 non-prescription OTC active substances in important indication areas, including migraine, hay fever, pain, digestive issues, fungal infections, and common cold.



In this Index, we looked at the status of a set of selected molecules, including Aciclovir, Nicotine, and Sildenafil, to determine whether those are Rx only, OTC, or can be sold in dual or single modality (Rx and/or OTC). Our research found that Germany and Australia have similar results, as most molecules can be sold in dual or single modality (Rx and/or OTC) depending on dosage, form, and sometimes therapeutic target, followed by Canada, the US (SCRI 2021), Mexico, and Colombia. The UK remains the

leading country in terms of the number of OTCs available. Similar data was not available for other countries.

While most regulatory frameworks in place are well-functioning, among the countries covered in the Index, as seen from indicators 4.1 and 4.3, the lower score suggests an opportunity for higher and bolder reclassification activity in line with global best practices.

“It can go both ways. In the US, products are everywhere with no guidance. In Canada, there is a third class of drugs that requires more guidance and is behind the counter. We must find a balance. Some drugs that are clearly safe can be sought out directly by patients and we should empower them to make the choices on their own, but others should remain behind the counter and require pharmacist intervention.”

Magaly Rodriguez
PharmD, BCPS, CDE, FAPhA, professor and chair of the Department of Pharmacy Practice and Science and professor at the University of Maryland School of Pharmacy

“Ministry’s position and HSA’s position has been – if it doesn’t harm you, then there’s no need to over-regulate, we only have to look out for those where there’s potential for adulteration.”

Regulatory/Policy expert, Singapore

INDICATOR 4.3

ACCESS AND DISTRIBUTION

In most countries covered in the 2022 Index, OTCs, medical devices, and other self-care products are available in pharmacies and in general stores (see Table 1 above). Most restrictive countries can be found in Europe.

A 2021 study on the availability of medicines outside pharmacies found that the sales of medicines is restricted to pharmacies in 13 of the 29 European countries analyzed.¹¹⁴

Despite regulations in place, LMICs including India and Kenya face the ongoing challenge of illegal retail of drugs, both prescription and OTC. Substandard and falsified medicines not only put patients’ lives at risk but undermine trust in healthcare systems and modern medicine, and hamper crucial progress made so far by countries towards universal health coverage. Although this is a global issue, the burden is still disproportionately higher in LMICs where 1 in 10 medicines are thought to be either substandard or falsified.¹¹⁵

In addition, the nascent field of online pharmacy retail particularly enhanced during the COVID-19 pandemic represents both an opportunity in terms of empowering individuals to turn to self-care and particularly e-commerce to manage self-treatable conditions, but also a regulatory challenge across all countries. In light of this changing environment, regulatory authorities need to implement policies that accommodate e-commerce practices that are different than with their bricks-and mortar counterpart.¹¹⁶

INDICATOR 4.4

ADVERTISING AND PRICING

Advertising rules for OTCs are clearly established in most countries examined in the Index, and most countries request pre-review by the regulators.

However, price controls on OTCs and other self-care products still exist in most countries, particularly LMICs including India and Kenya, but also to a certain extent in Colombia, Australia, Germany, and the United Arab Emirates.

In conclusion, healthcare providers in this second iteration of the Self-Care Readiness Index are most supportive of self-care in Colombia, India, Kenya, Mexico and the UAE, with conversation about self-care being the most advanced in the medical communities working with diabetic patients. Nevertheless, and across all countries, care guidelines that encompass self-care are still missing. Similar to the findings of the Self-Care Readiness Index 2021, people across all countries are supportive of self-care, though they might be hesitant to speak about it with their healthcare providers and about which trustable digital resources about health are available to them. Overall, health literacy remains a barrier to the uptake of more self-care in all countries, though some have started to tackle this issue by putting together health literacy strategies and initiatives. All countries examined have been investing in health promotion and prevention campaigns at varying degrees, from educational health campaigns at schools to labelling of foods, though to date few have adopted a dedicated preventative health and/or wellness policy strategy. More details are given in the country narratives on the following pages.



Country Narratives

50	Australia
59	Canada
69	Colombia
76	Germany
83	India
90	Indonesia
98	Kenya
105	Mexico
114	Singapore
120	United Arab Emirates

Australia

COMPARATIVE SCALE

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



STAKEHOLDER SUPPORT & ADOPTION

Consumer uptake of OTC products is strong in Australia; a 2012 study showed that 80% of adults and 40% of children used OTC medicines in a given month.¹¹⁷ Further, OTC sales per capita in 2021 amounted to 56 USD per capita, which is higher than most countries evaluated for the 2022 Index. In our survey, Australians said they most often use self-care products for pain relief (45%), first aid (40%), cough and cold (30%), weight loss (30%), eye care (28%), and oral health (28%). The main reason Australians participate in self-care is to “manage my healthcare myself,” with “saving money” being the second most popular, suggesting opportunities to further engage people in self-care activities.¹¹⁸ There is room to improve other self-care practices. Vegetable consumption in Australia is low, and the majority of survey respondents (57%) do not engage in any traditional or complementary medicine practices. Only 27% of survey respondents report getting 30-minutes of physical exercise just one day or less per week – another area where improvement is needed. UAE and Canada showed similar results, with all other surveyed countries reporting higher levels of consistent physical activity. However, the Australian government reports that in 2021-2022, 27.2% of people aged 15 years and over met the physical activity guidelines, which include 2.5 to 5 hours of moderate intensity physical activity per week, 1.25 to 2.5 hours of vigorous intensity physical activity, or a combination of both.¹¹⁹ Nevertheless, 81.7% of women (over 15 years) and 78.4% of men (over 15 years) participate at least once per week. AusPlay provides national, state and territory data on almost 400 participation

sports and activities in Australia and who is participating in them, which offers up-to-date and complete insights.¹²⁰

Self-care appears to be growing in importance within the Australian medical community. While self-care and related topics were not on the agenda of primary care or diabetes congresses in 2019 or 2020, both associations offered dedicated sessions in 2021. The Australian Medical Association put forward a statement on health literacy in 2021, calling on government to strengthen efforts around public health education with the aim of improving “self-triage” efforts and self-management of chronic conditions.¹²¹ Over half (61%) of healthcare providers surveyed for the 2022 SCRI reported regularly (more than 60% of patient interactions) recommending self-care products or practices to patients as part of an ongoing wellness plan.

“There has been increasing work on health literacy with a focus on prevention and on treatments that people can access through the pharmacy. For example, there has been a number of successful switches these past years in Australia, including for eye care and migraine. Nevertheless, there are some significant products that have not been switched as of today and there is still work to be done to determine whether they are suitable for switch and to build and review the evidence base for this.”

Dr. John Skerritt, PhD
Deputy Secretary of the Department of Health of Australia



Australia’s Parliamentary agenda now includes self-care, with policymakers taking an active interest in policies and programs to prevent disease and boost health literacy. Multiple interviewees from the Australian self-care community mentioned that the University of Victoria’s 2021 Self-Care Policy Blueprint was instrumental in putting self-care on the radar for key policymakers.¹²² More recently,

the Australian Self-Care Alliance submitted a pre-budget proposition for 2022-2023 to the government in advance of federal elections that took place in May 2022. The document points out the health and financial benefits from self-care and recommends establishing a dedicated Self-Care for Health Development Fund, with an initial \$10M commitment over five years for three complementary, grant-based initiatives targeting health literacy, digital health, and self-care training for health professionals.¹²³

However, policymakers are less familiar with the term “self-care” and have shown little appetite for crafting coordinated programs and strategies to support self-care across the healthcare continuum.

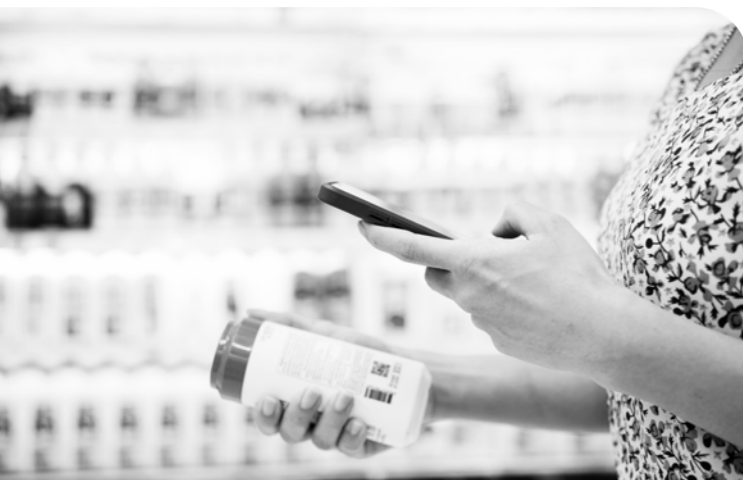
“The term ‘self-care’ really hasn’t entered the policymaking lexicon: even when policymakers are familiar with WHO’s definition, they find it more descriptive than definitional. Policymakers are much more likely to speak about ‘self-management’ or ‘empowerment.’”

Prof. Rosemary Calder
Professor of Health Policy and Head of the Mitchell Institute’s Australian Health Policy Collaboration (AHPC) at Victoria University in Melbourne, Australia

CONSUMER AND PATIENT EMPOWERMENT

Australia is a global leader in consumer and patient empowerment, and the only country in the world that legally allows digital labels and has set guidelines for it.¹²⁴

The government places a heavy emphasis on patient education and health literacy, offering comprehensive health and hygiene education as part of its public-school curricula and government-managed web resources for managing minor illnesses and chronic conditions. Australia recently expanded its telehealth services in the wake of the COVID-19 pandemic to ensure that individuals receive high quality telehealth as part of Medicare services they use.¹²⁵ However, local experts report there is room for improvement in harmonizing health information and tools provided by the federal government and those provided at the state level. Uptake of online health resources in Australia is relatively robust, with 45% of survey respondents stating that they regularly use websites, applications, and/or hotlines to manage chronic conditions, treat minor illnesses, get information on OTCs, and learn more about their health. Kenya, UAE, and Indonesia showed similar results related to the uptake of online resources, while the majority of survey respondents from all of the other countries in the 2022 Index do not use such tools.



Australia was also one of only two countries examined for this Index with a universal electronic health records system that includes information on patients' use of OTC and traditional and complementary medicines. However, pharmacists don't always have access to this information:

"In Australia, pharmacists don't have a comprehensive record of which healthcare providers a person has seen. Only if the pharmacist develops a good relationship with a patient, they can find out and connect patients to services. Good communication skills are essential to find out what a person needs."

Prof. Lynne Emmerton
BPharm(Hons) PhD MPS
Dean of Learning and Teaching,
Faculty of Health Sciences;
Course Coordinator,
Master of Pharmacy;
Curtin University, Perth, Australia

"From my experience, I can see that healthcare providers working in health and mental health services are increasingly aware of self-care, though they might not label it as such. Also, more and more patients are looking for a partnership or a discussion about their health and mental healthcare. People show up prepared with questions and want to understand and be involved in decisions about their care. This is a shift I have observed in my thirty-year career towards a more collaborative approach, and it makes discussions about self-care much easier."

Dr. Stephen Carbone
CEO of Prevention United, Australia

Patients and consumers in Australia can self-test for a number of conditions, in line with the country's 1989 Therapeutic Good Act.¹²⁶ Self-testing is widely available for respiratory diseases, sexually transmitted diseases, diabetes, cardiovascular disease, and pregnancy. In 2017, Australia introduced a new self-collection for its National Cervical Screening Program guidelines, making the test easier and more accessible for women.¹²⁷ Only about half the countries examined for this edition of Index offer HPV self-testing – Australia, Canada, Germany, and Kenya (though only in pilot phase).

Despite Australia's comparatively strong performance in providing health literacy support and allowing broad access to self-testing products, Australian consumer survey respondents take a somewhat bleak view of the country's support for self-care. Australia was the only country where a majority of survey respondents disagreed with the statement, "I feel well-informed and empowered to undertake my own at-home care regimens for managing my chronic and acute condition(s)." Moreover, 26% of Australians said they often have difficulties understanding written health information. Nevertheless, Australia was the only country where the vast majority of survey respondents (>66%) indicated they "knew which self-care products and practices to utilize" in the case of a headache. This points to at least a minimum level of health literacy in managing minor ailments but suggests there is work to be done in providing more structured advice and education on the full spectrum of self-care behaviors. In its latest report entitled "The self-care opportunity: Empowering Australia toward better health" published in July 2022, Consumer Healthcare Products Australia notes that despite the pandemic backdrop there is a relatively low level of engagement in health. The same report found that just one in five Australians (22%) rate their health literacy as high, while nearly one in three (30%) believe their health literacy is low, nevertheless nearly all Australians agree they're responsible for managing their own health (97%).¹²⁸

Expert interviewees said a majority of Australians might not be aware of resources offered by the government in terms of health

information and promotion – for example, efforts like Health Direct, a government-supported platform where people can find trusted information on a broad range of health topics, a symptom checker, or an OTC and prescription drugs directory.¹²⁹ In its report entitled "The self-care opportunity: Empowering Australia toward better health", Consumer Healthcare Products Australia found that more than a quarter of Australians (27%) believe they don't have the information they need to sufficiently manage their health.¹³⁰ Self-care is cited across the platform, and self-care options are recommended for body piercings, cystitis, psoriasis, and more. However, no consumer respondents mentioned the platform when asked about which digital health resources they regularly use, but said they look up on Google for health information for the majority, a finding that corroborates with the findings of the report by Consumer Healthcare Products Australia where it was found that despite 82% of Australians agreeing they'd seek pharmacist advice for common short-term health conditions the findings show they head online (50%) or organize a GP consult (76%) ahead of seeking a pharmacist's advice. The same report found that a significant proportion of Australians – more than two thirds (69%) – are choosing to engage in their own health management using digital health services to seek advice for short term health conditions.¹³¹ Interviewees also said Australia has historically invested in prevention for single diseases rather than general health campaigns, and all interviewees actually had difficulties citing recent general health campaigns that were self-care focused.

"Preventative healthcare remains a challenge for the government to conceptualize and implement. Local governments want to use the resources they already have differently and be smarter with their funds, but policymakers at the federal level struggle to see how exactly this could be done."

Russell McGowan
Co-convenor of PHC Special Interest Group and Expert Advisor to The International Society for Quality in Health Care

SPOTLIGHT BEST PRACTICE

“Drop the Jargon Day”

The Australian government recognizes October as Health Literacy Month. As part of the month-long celebration, the government’s Centre for Culture, Ethnicity and Health sponsors “Drop the Jargon Day” on October 20th.¹³² The initiative aims to *“bring attention to the language used by workers in the health and human services sector, that is often not understood by their clients.”*

As part of Drop the Jargon Day, healthcare professionals are asked to sign a pledge committing to:

- **Use plain language in all communications**
- **Not use acronyms**
- **Explain medical and other technical terminology**
- **Check that information has been understood by patients**
- **Work with a professional interpreter when patients have low English proficiency**
- **Politely point out when colleagues use jargon**

In addition to the pledge, healthcare providers can contribute to a “Jargon Begone!” database – an online catalogue of the “jargon terms that annoy you the most,” along with suggestions for alternate phrasing. The initiative’s website offers comprehensive coaching resources for healthcare providers on improving their communication skills, with an emphasis on better serving refugee and migrant communities.



SELF-CARE HEALTH POLICY

In addition to its Long-Term National Health Plan, Australia has adopted national health strategies for mental health, non-communicable diseases, primary care, respiratory diseases, cardiovascular disease, diabetes, oral health, obesity, women’s health, men’s health and preventative care.^{133 134 135 136 137 138 139 140 141 142 143 144}

The existence of health strategies across these diverse disease areas points to a well-established health policy environment. The importance of self-management is highlighted in all the documents (except for the Oral Health Plan), including the National Strategic Framework for Chronic Conditions, the National Diabetes Strategy, and, more surprisingly, the National Strategic Action Plan for Lung Conditions. The National Strategic Action Plan for Heart Disease and Stroke mentions self-management only once. Health literacy is also mentioned across all the documents. The National Preventive Health Strategy, the National Obesity Strategy, the National Men’s Health Strategy and National Women’s Health Strategy reference self-care. The National Preventive Health Strategy explicitly cites health literacy as crucial to effective self-care. It also recommends that “enhanced referral pathways to community services to improve health and wellbeing are embedded in the health system at a local level with a focus on self-care support (eg social prescribing).” The new Labor government, elected in May 2022, committed to establishing a Centre of Disease Control that includes acute and chronic condition prevention in its remit and has indicated to stakeholders that the government would like to see a greater policy focus on primary prevention in health policy. In 2020, the Public Health Association of Australia reported prevention spending at less than 2% of the health budget.^{145 146}

Moreover, Australia is the only country covered in the Index to develop a preventive health strategy, which aligns well with self-care. However, none of the policy documents examined include self-care products or self-care practices.

Most significantly, the concepts of self-management, self-assessment, and self-efficacy are present in the Australian Commission on Safety and Quality in Health Care’s first paper on health literacy released in 2014, with self-care cited just once. Some states including Tasmania and New South Wales have issued health literacy plans and frameworks, while Canberra offers health literacy resources for health services and providers.^{147 148 149 150}



SPOTLIGHT BEST PRACTICE

“SunSmart” program.¹⁵³

Australia’s Cancer Council SunSmart program aims at reducing rates of skin cancer in Australia. The country has one of the highest rates of skin cancer in the world, and skin cancer is the most common cancer diagnosis for Australians. The Cancer Council launched its “*Slip, Slop, Slap, Seek, Slide*” campaign in 1981 to educate citizens on how to protect themselves from skin cancer. The Council calls it “one of the most successful health campaigns in Australia’s history” and is still running it until today.¹⁵⁴ “Slip, Slop, Slap, Seek, Slide,” outlines the SunSmart program’s five core recommendations:¹⁵⁵

“Slip, Slop, Slap, Seek, Slide,” outlines the SunSmart program’s five core recommendations:

- **Slip on covering clothing**
- **Slop on SPF30 (or higher) broad-spectrum, water-resistant sunscreen**
- **Slap on a hat**
- **Seek shade**
- **Slide on some sunglasses**

The SunSmart program pairs its recommendations with a digital app that provides users with real-time information on UV levels and when sun protection is needed across any location in Australia. The app also has an alert function that reminds users of daily sun protection times, and a sunscreen calculator that users can personalize with the outfit they’re wearing, as well as with their height and weight to determine how many teaspoons of sunscreen they need for adequate sun protection.¹⁵⁶

Australia does not have a separate national policy on TCM. Though it is technically incorporated into the National Medicines Policy (2000, but an update is under-way), TCM is regulated through the Therapeutic Goods Act and TCM practitioners through their respective national professional organizations.¹⁵⁷ Additionally, because Australia’s governmental authority is split between the national and state governments, TCM provider jurisdictions are equally split, leading to inconsistent regulation in different geographies and at differing levels of government.



www.sunsmart.com.au

However, national regulation of TCM products is much more consistent since the Advisory Committee on Complementary Medicines (ACCM) screens and regulates the safety of complementary medicine products.¹⁵⁸ Additionally, the two-tiered system of medicine classification creates structure and pathways for complementary medicine manufacturers to enter the market.¹⁵⁹ Complementary and herbal medicines have their own categorizations and approved terminologies, setting them apart from regular pharmaceutical or OTC products.¹⁶⁰

While none of Australia’s national disease strategies incorporate meaningful information on self-care, the federal government has partnered with advertising agencies to launch a number of high-profile health campaigns focused on prevention and other aspects of self-care. The country also has several discrete policies and programs in place that contribute to strengthening its self-care ecosystem. For example, the “Move It AUS” campaign encourages Australians to find at least 30 minutes of physical activity per day.¹⁵¹ A list of all government-supported campaigns and initiatives for preventive health can be found on the website of the Department of Health and Aged Care, including dietary guidelines, anti-smoking campaigns, and more.¹⁵²

Overall, “self-management” is more common than “self-care” in Australia, with many discrete programs and policies focusing on interventions that address common NCD risk factors, such as poor diet or lack of exercise. While self-management is an important piece of self-care, and these programs deserve recognition, they could be improved by more effectively targeting those communities that would benefit most from the interventions.

“The former Australian national government put really ambitious preventive health goals in place for 2030 with limited concrete commitments. It would be game-changing if the preventative health strategy goals are given policy priority by the recently elected government. That is, that policy attention and investment will be focused on enabling all adults to live in good health for 1-2 more years, on average.”

Prof. Rosemary Calder
Professor of Health Policy and Head of the Mitchell Institute’s Australian Health Policy Collaboration (AHPC) at Victoria University in Melbourne, Australia



REGULATORY ENVIRONMENT

On balance, Australia represents a model of what a supportive and progressive self-care regulatory environment looks like. It outperforms nearly all other countries evaluated across both the 2021 and 2022 reports. The Therapeutic Goods Administration website is exemplary in its level of transparency and detail around the regulatory approvals process, science, and definitions.¹⁶¹ Further, the time from application to regulatory decision for health products in Australia is largely predictable, with the registration process designed to take 11 months on average; the regulatory agency provides a sample timetable of the approval process for prescription drugs, and detailed approval process guidelines for OTC and Complementary medicines.

The process for switching drugs from prescription to OTC status is well-defined; once a product is awarded OTC status, consumers

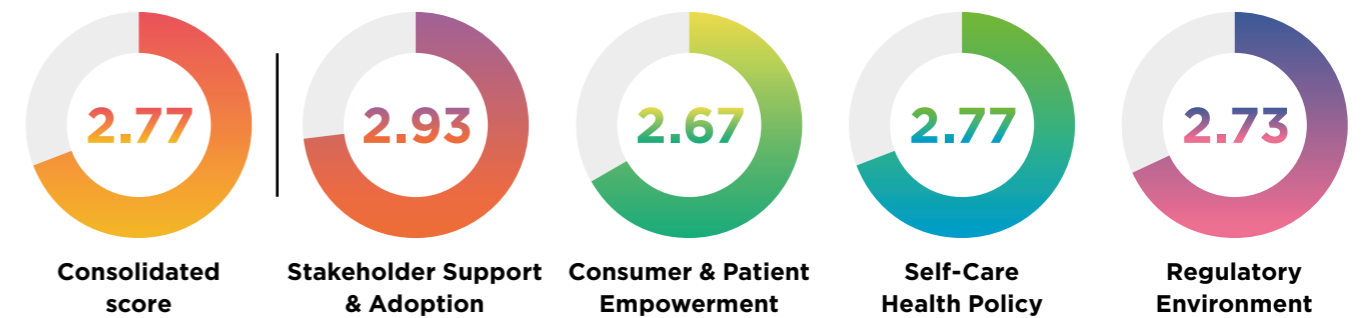
may freely browse and select most products in pharmacies and retail outlets and can select all other OTC products through conversation with a licensed pharmacist. Successful switches from prescription to OTC for topical eye drugs and migraines have taken place in recent years, but expert interviewees report that switch campaigns for erectile dysfunction medications and oral contraceptives have not been successful. While self-care products are readily available to consumers over the counter, there is work to be done in terms of reimbursement and government subsidies: under the current Pharmacy Benefits Advisory Committee Guidelines, OTC and complementary medicines do not qualify for subsidies.¹⁶² Further, one-third of healthcare providers surveyed for the 2022 SCRI indicated they cannot be financially compensated for time spent discussing self-care products and practices with their patients.



Canada

COMPARATIVE SCALE

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



STAKEHOLDER SUPPORT & ADOPTION

Self-care and associated concepts appear extensively in Canadian diabetes and cardiovascular medical guidelines, though not all of them provide tools to employ these concepts. The Guidelines for the Management of Dyslipidemia for the Prevention of Cardiovascular Disease in Adults mentions that “these guidelines are intended to provide a platform for meaningful conversation and shared-decision making between patient and care provider, so that individual decisions can be made for risk screening, assessment, and treatment.” This demonstrates that the guidelines are aimed at patients as well as providers and encourage shared decision making that is beneficial for self-care. However, there appears to be little to no detail regarding how to conduct such conversations and employ shared decision-making.¹⁶³ **The 2017 Comprehensive Update of the Canadian Cardiovascular Society Guidelines for the Management of Heart Failure (HF) highlights self-care in many places:** “HF management includes coaching patients and informal caregivers on self-care skills, through experiential learning, practice, and support. [...] Self-care includes knowledge, skills, and confidence about HF treatments, exercise, dietary measures, symptom-, and weight-monitoring. It also includes an action plan to address exacerbations early and determine if actions were helpful to circumvent further deterioration.” Tips are provided that are designed to help healthcare providers evaluate whether the patient is capable of self-caring at home.¹⁶⁴ The Prevention and Treatment Guidelines for Hypertension highlight health behavior management and

adherence strategies for patients, though do not mention self-care.¹⁶⁵

The Canadian Diabetes Guidelines include a “Self-Management Education and Support” section, which “recognizes that patient-provider collaboration, approaches and the development of problem-solving skills are crucial for sustained self-care”. In fact in 2018, “the title of this chapter was modified to include self-management education (SME) and self-management support (SMS), in recognition of the growing evidence and benefit of SMS for individuals living with diabetes, particularly when combined with SME.”¹⁶⁶ A 2021 update to the guidelines also pointed to the importance of diabetes self-management education when introducing or using newer glucose monitoring technologies, further underscoring the need for shared decision-making in preventative care.



There are dozens of primary care guidelines on a variety of topics, from the national to provincial level.^{167,168} We focused our research on guidelines for the management of asthma, obesity, pain, and prevention of cardiovascular disease, all of which mention elements of self-care. For example, the Chronic Asthma Guidelines for Alberta mention empowering patients with self-management tools; the Canadian Primary Care and Primary Healthcare in Obesity Management Guidelines suggest “primary care interventions should be used to increase health literacy in individuals’ knowledge and skill about weight management as an effective intervention to manage weight.”^{169,170} Overall, Alberta seems to have the most advanced primary care guidelines with self-care embedded, based on desk research and interviews conducted with medical practitioners and researchers. An analysis of congress agendas of the Family Medicine Forum also shows that patient empowerment and the need to teach patients about self-management were discussed among physicians in recent years - eg, empowering patients that suffer from obesity to eat better and exercise; helping patients with low back pain self-manage better, among others.^{171,172,173}



Pharmacists in Canada also understand and support the concept of self-care. In 2018, the Association of Faculties of Pharmacy of Canada (AFPC) formed a Self-Care Therapeutics and Minor Ailments (SCTMA) special interest group (SIG), demonstrating growing recognition of the importance of self-care.¹⁷⁴ However, self-care is not currently embedded in the curricula of pharmacy schools in a standardized manner. As Dr. Nardine Nakhla, Clinical Lecturer at the School of Pharmacy at the University of Waterloo, Canada put it: *“I am the main faculty member responsible for teaching and overseeing self-care education at our institution – as advising patients on self-care strategies, including the rational use of nonprescription and natural health products, is a key responsibility of pharmacists globally – and am often asked to deliver lectures about the concept at other universities and continuing professional*

development programming for pharmacists. This speaks to the variability of education on self-care that exists across the country, as an ideal, standardized, holistic curriculum in pharmacy curricula has yet to be defined.” A study conducted in 2020 and co-authored by Dr. Nakhla found that, *“self-care education varies across Canadian pharmacy curricula, reflecting differences in scopes of practice across provinces, topics of interest and availability of space within curricula by the various faculties. Specifically, there was considerable variability in the number of hours devoted to self-care education, course content and methods for integration and teaching.”*¹⁷⁵ The Canadian Medical Association remains agnostic on self-care, though our survey and interviews suggest that healthcare providers remain focused mainly on the potential risks of self-care, especially risks related to self-medication. Overall, healthcare providers are supportive of self-care, but lack the tools to implement it in a comprehensive way.¹⁷⁶

Federal policy makers have recognized self-care through Health Canada’s commitment to achieve a consistent, risk-based approach to regulating all self-care products through the Self-Care Framework.¹⁷⁷ Moreover, the Government of Canada recognizes International Self-Care Day although public recognition has not been consistent.¹⁷⁸ In 2020, a member of the Parliament petitioned the House of Commons, calling for a Parliamentary study of, *“the impact of uninsured self-care products and wellness services, and of the barriers which exist for those wishing to access it.”* In response, the Minister of Health noted that, *“Natural health products are used and marketed for a number of health reasons, like the prevention or treatment of an illness or condition, the reduction of health risks, or the maintenance of good health. They must be safe to be used as over-the-counter products. [...] The Government of Canada recognizes the importance of helping Canadians lead healthier lives. Healthy eating and active living lead to good health for all.”*¹⁷⁹ To date, there has been no parliamentary study of self-care products and services.

A 2012 study showed that even minor shifts towards practicing self-care can have major impacts. If just the 2% of Canadians with mild to moderate colds, headaches or heartburn who seek professional care practiced self-care instead, Canada could eliminate more than 3 million unnecessary doctor visits per year, freeing up enough physician resources to provide an additional 500,000 Canadians access to a family doctor.¹⁸⁰ Moreover, switching from prescription status to OTC can increase self-care options while generating healthcare system savings and economic benefits. **A study by the Conference Board of Canada found that one billion dollars could be freed up in the Canadian healthcare system and broader economy by switching just three categories of products.** The study estimated switching proton-pump inhibitors, erectile dysfunction drugs, and oral contraceptives could reduce drug costs by \$458 million, save \$290 million through fewer doctor visits, and generate a \$290 million boost to Canada’s labour productivity annually.¹⁸¹

CONSUMER & PATIENT EMPOWERMENT

Consumers are receptive to self-care, as Canadians are increasingly interested in taking more control over their own health. A 2015 survey found 77% of Canadians would rather treat their minor ailments themselves than see a doctor, while 49% were more likely to practice this form of self-care than just five years before.¹⁸² According to a 2016 Health Canada poll, a majority of Canadians (56%) use natural health products (NHPs) like vitamins and minerals at least once a week.

An Food, Health & Consumer Products of Canada poll from 2020 found that almost all Canadians (95%) agree that “Canadians need more tools to care for themselves and a strong, resilient publicly-funded healthcare system there for when they can’t.” Overall, 96% of Canadians agree with the concept of self-care, and 87% believe the federal government should develop a National Self-Care Strategy.¹⁸³

In a May 2020 survey, 2000 Canadians were asked about the management of their health before and during the COVID-19 pandemic. Approximately half missed an in-person doctor’s appointment due to pandemic response measures. Of those, more than half practiced a range of self-care activities—19% took care of the problem themselves, another 19% used virtual care services, and 16% sought a pharmacist’s advice. More than half of those who self-managed their health conditions were satisfied with the results. As a result, more than 50% of Canadians surveyed say they are more comfortable practicing self-care at home.¹⁸⁴

Nevertheless, all interviewees believe much more could be done to increase health literacy in the country, with many adults with lower

socio-economic status falling behind. Experts across all countries agreed that people with higher health literacy tend to enjoy better health. A 2017 survey by Consumer Health Products Canada found the health literacy of Canadians compares well with Europeans in terms of knowledge and disease prevention, though Canadians struggle more with navigating the healthcare system, while finding it easier to judge different treatment options.¹⁸⁵

With no federal-level health literacy initiatives, provincial and territorial governments have introduced strategies over the years, but it is not clear how many are active. Most recently, the Provincial Government of Newfoundland identified the importance of health literacy as part of a 2021 report on the transformation of its healthcare system, but no action have yet been taken.¹⁸⁶ Like Singapore, federal and provincial/territorial level initiatives in Canada have stressed the importance of “mental health literacy”, which could open a pathway to raising awareness of self-care more broadly.¹⁸⁷ A 2018 expert forum recommended that stakeholders collaborate to develop tailored education strategies that build health literacy and empower specific populations (ie. youth, young adults, seniors, new immigrants) by providing them with essential information and skills to make informed and appropriate self-care decisions.^{188 189}

These efforts are certainly needed. As of 2020, 75% of Canadians do not meet national recommendations for consuming 5 or more fruit and vegetable servings per day.^{190 191} Only 16% are getting the recommended amount of physical activity (150 min of moderate to vigorous physical activity per week); 8 in 10 adults are not active enough to reap the health benefits of a physically active lifestyle.¹⁹² At the same time, health education is well embedded in school programs, and Canada has a long history of health and hygiene curricula in its schools.¹⁹³

Canada is lagging when it comes to electronic medical records. A 2021 G7 report noted that **“while citizens have a legal right to access their health information and can request it through their healthcare providers, currently there is no comprehensive right to view**

online, download, print and share their health information.” However, the federal government has been working with provinces and territories through **“Canada Health Infoway”** to provide funding and assistance to set up provincial and regional portals, including the development of an interoperable electronic health record for all Canadians.^{194 195 196} Canada also lags when it comes to access to self-tests. At-home HIV tests have been available only since 2020, compared to 2015 in the UK and 2012 in the US.¹⁹⁷ Self-testing kits are generally available (for other STIs, COVID-19, pregnancy, flu, sugar and blood pressure monitoring devices), but many have not been endorsed by Health Canada, which takes a risk-adverse approach to medical kits for home use.¹⁹⁸ Health Canada has reduced the regulatory burden for companies to develop smoking cessation apps, and pharmacists may specialize and offer specific smoking cessation counseling services. An overview of Pharmacist-led Smoking Cessation Care in Canada is available here.^{199 200 201}

While Health Canada maintains an online directory of OTCs and NHPs, the information available is not consumer-oriented and provides little support for consumer decision-making.^{202 203} Health Canada’s Regulatory Innovation Agenda includes a mobile strategy that provides health information to help Canadians make informed choices.²⁰⁴ Health Canada has emphasized labeling in its Self-Care Framework. **“One good source of information for people is labeling. We have been focusing on this piece as the first phase of the Self-Care Framework, so people can decide what works best for them by looking at the labels,”** explained Natalie Page, Director General, Natural and Non-Prescription Health Products Directorate, Health Canada. At the national level, the Public Health Agency of Canada also provides a web-based resource on diseases, conditions, and treatments.²⁰⁵ **Health Canada has taken tentative early toward leveraging OTC e-labeling so certain lower risk products can make “point of use” information available online instead of on product labels. E-labeling is expanding to natural health products and is voluntarily applied to foods through third party providers like SmartLabel.**²⁰⁶ On July 20, 2022, Health Canada launched two new sets of regulations that will bring improvements to

food labels in Canada. Regulations for front-of-package nutrition labeling will require a simple and easy-to-use symbol on the front of foods high in saturated fat, sugars and/or sodium to help consumers make more informed food choices. Consumers will also be supported when it comes to making choices around supplemented foods such as caffeinated energy drinks, and bars with added vitamins and minerals. The supplemented foods regulations will require a supplemented food facts table to help consumers easily identify supplemented foods and know the amounts of nutrients and supplemental ingredients they contain. In cases where certain supplemental ingredients may pose a risk to vulnerable groups such as children or pregnant people, an identifier will be required on the front of the package as a visual cue for consumers to examine the cautionary statements for warnings and guidance about consuming the product to help them make an informed decision. Consumers will also be supported through public education and awareness efforts to help them understand and use front-of-package nutrition labeling and the new labeling measures for supplemented foods in making informed food choices.^{207 208}

Health Canada reduced the regulatory burden on companies developing certain digital health apps that provide patient decision support, excluding these apps from the scope of the Medical Device Regulations, and harmonizing this approach with international jurisdictions like the US.²⁰⁹ Health Canada is collaborating with seven other nations including the UK to take a consistent approach to regulating digital health software.²¹⁰ Each of the 13 provinces/territories has a government website, application, or hotline on treating minor illnesses and managing chronic conditions.²¹¹

Should these new regulations be implemented, Tracy Boudreau (Senior Policy Analyst at the Bureau of Nutritional Sciences, Health Canada) believes that the impact would be beneficial to consumers:

“Health Canada’s new regulations for front-of package labeling and for supplemented foods [could] improve food labels in Canada and help consumers across varying health literacy levels make healthier and more informed food choices.”

SELF-CARE HEALTH POLICY

The only federal-level recognition of self-care is Health Canada's regulatory Self-Care Framework, but there have been efforts at the provincial level. In 2022, Quebec noted the important role self-care in its proposed healthcare system reforms, while British Columbia offers free self-management health programs for adults living with one or more ongoing health conditions.^{212 213} Canada's tax policy disincentivizes self-care because it provides tax-free status for prescription drugs and allows them to be claimed under a federal tax credit, but does not extend these provisions to self-care products (even though many were prescription before being switched to OTC status). Based on this federal policy, private insurers typically do not provide coverage for self-care products. Though the government has been very active in supporting and leading initiatives and programs for healthier living, there is lack of policy coordination at the country level; to date, there is there is a limited federal plan to tackle NCDs, fight obesity or tackle cardiovascular disease, and the latest Integrated Strategy on Healthy Living and Chronic Disease is outdated.²¹⁴

Assoc. Prof. Lynda G. Balneaves, RN, PhD, Associate Professor at the College of Nursing at the Rady Faculty of Health Sciences, University of Manitoba, Canada also suggested much more needs to be done for screening: ***“The government is now reaching out to people to encourage them to get screened for a number of health conditions, after a drop following the start of the COVID-19 pandemic. In addition, the rates of newly diagnosed advanced cancer are increasing, though less than 5% of cancer budgets currently goes to screening.”*** While federal and provincial governments, along with disease advocacy groups, run awareness campaigns on a range of topics, they lack a self-care lens and remain largely uncoordinated. Inequities in the ability of people to engage in self-care also remains a big issue, including access to healthy foods, engaging in physical activity, etc.

Regulators in Canada understand the concept of self-care. Health Canada's Self-Care Framework has focused on updating regulation of self-care products in Canada, while policymakers are leading on prevention and health awareness campaigns elevating healthy lifestyles, including better nutrition and physical activity.²¹⁵ Health Canada published Canada's new Food Guide in 2017 as a part of its Healthy Eating Strategy to improve food environments and encourage Canadians to view healthy eating as an easier choice.^{216 217} The strategy is specified in the Prime Minister's mandate letter for the Minister of Health.²¹⁸

The Canadian government has run a high number of prevention campaigns, including an ongoing campaign about proper antibiotic use, with posters explaining that a virus (like a sore throat) can't be cured using antibiotics.²¹⁹ Other campaigns cover tobacco cessation, seasonal flu vaccination, and more recently the launch of the Wellness Together Canada App, designed to help Canadians access mental health and substance use support.^{220 221 222 223} Moreover, while the government has general resources available on the safe use of medicines on its website and social media channels, there is no coordinated, multi-stakeholder campaign on the safe use of medicines more broadly.²²⁴

In response to a specific issue, Health Canada successfully addressed a product misuse by leading a Steering Committee of academic, industry, patient, and health professional stakeholders to develop and deliver aligned messages promoting awareness of the safe use of Acetaminophen, without reducing access to the product. This approach leveraged existing company campaigns with patient group messaging and Health Canada information (fact sheet, poster, and web banners).^{225 226 227 228 229 230}

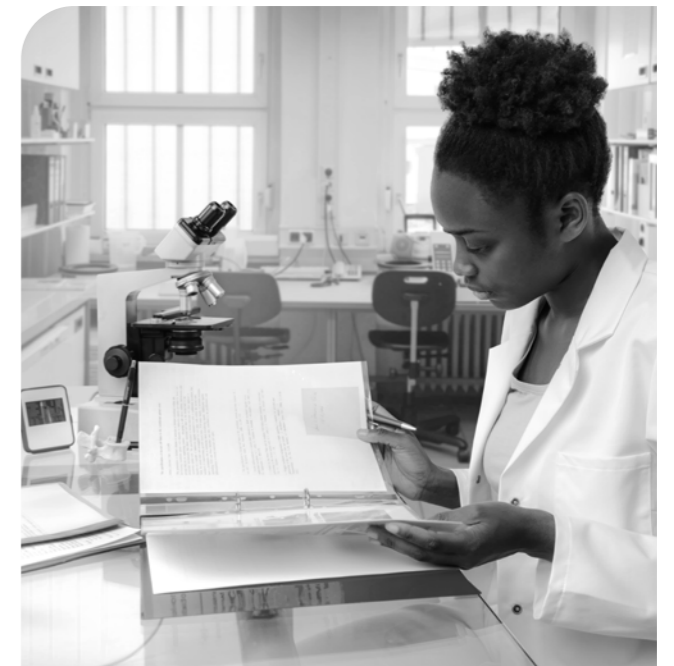
Still, policy makers need to invest time and resources encouraging self-care and healthy lifestyle in a coordinated way. In November 2020, FHCP published a Blueprint for a National Self-Care Strategy, the same year PAGB published its UK Blueprint and one year after a Blueprint for Self-Care in Australia was published.^{231 232 233} In the Blueprint, FHCP states that while most Canadians are already practicing self-care, they lack the appropriate tools and policy framework to maximize these efforts. The Blueprint suggests building a foundational, federal level self-care strategy through increased health literacy and changes to the regulatory and fiscal (eg, tax) environments to optimize use of self-care products and services.²³⁴

Health Canada uses a science-based approach in regulating natural and complementary medicines. These products are termed 'Natural

“Though doctors can be reluctant towards self-care, supporting people's ability to self-medicate in appropriate ways would have many benefits for Canadians. For example, self-medication makes sense to treat minor ailments such as headache and the common cold. Also, having a good experience with an OTC medicine might encourage people to self-medicate for other minor conditions in the future.”

Prof. Jeff Taylor

Director of the EduLab Program and Professor at the College of Pharmacy and Nutrition at the University of Saskatchewan, Canada



Health Products (NHPs) in Canada and regulated as a subset of drugs, including herbal, traditional Chinese medicines, aromatherapy, ayurveda, and homeopathic products as well as vitamins, minerals, and probiotics. When the NHP regulations were established, the House of Commons Standing Committee on Health set out a series of recommendations after consulting a range of stakeholders that formed the basis of the regulatory approach that would ensure Canadians have access to these products.²³⁵ Other recommendations included the ability to make health claims for NHPs, acceptance of a range of supporting evidence for claims, and product labeling that supports safe use and informed choices.

Despite recognition of NHPs at the federal level, these products are not acknowledged throughout the provincial health system. As a result, NHPs, other than Nicotine Replacement Therapy Products, are not covered by provincial or private insurance providers. Health professions focused on NHPs within their practice – such as naturopathic doctors, homeopathic doctors, or TCM practitioners – may be regulated by provincial colleges, but these professions do not have the authority to prescribe products (except in limited cases) and their services are not reimbursed by provincial healthcare systems, though private health plans may provide some coverage.^{236 237}



REGULATORY ENVIRONMENT

All OTCs and NHPs are reviewed in Canada to ensure they meet safety, quality, and efficacy standards in accordance with the Food and Drugs Act and its regulations. Scientific evidence is required for approval of OTC products that meet a defined standard based on public data; second entry products that rely on the safety and efficacy data of an innovator have abbreviated requirements and faster performance standards.

Health Canada's review process for NHPs is clearly defined in the Health Canada Natural Health Products Management of Applications Policy guidance.²³⁸ Health Canada has faced ongoing challenges managing higher review workloads that now exceed approximately 10,000 NHP applications a year.²³⁹ The department has invested significantly to improve efficiency through the NHP Online System, particularly for products that attest to a standard based on public data (a monograph).²⁴⁰ These monograph products are automatically validated using web-based forms to ensure they conform with the standard, speeding the review.²⁴¹ NHPs can be supported by a wider variety of scientific evidence compared to prescription and OTCs in accordance with a clear standard set out in guidance.²⁴² Traditional forms of evidence can support NHPs, and the requirements are outlined in this guidance.²⁴³

Health Canada has proposed regulatory amendments to the Natural Health Products Regulations and Food and Drug Regulations to ensure natural health products are labelled comparably to self-care products, such as non-prescription drugs, and introduce a risk-based approach to regulatory oversight for all self-care products.²⁴⁴ In Phase I, proposed regulatory amendments would improve the labeling of natural health products. The amendments would also ensure rules based on the level of risk for all self-care products (Phase II and III) via a simplified market access for non-prescription drug products (Phase II) and continuous improvement of the natural health product regulatory framework (Phase III). Phase I was completed in July 2022.^{245 246 247}



Amanda Moir, Associate Director General, Natural and Non-prescription Health Products Directorate at Health Canada, explains that, **“the goal of the self-care framework is to regulate lower-risk health products in a more consistent manner, and proportional to the level of risk for consumers.”** Progress against the original goal of grouping self-care products (OTCs and natural health products) into a framework separate from prescription drugs is for now limited.

While Canada is considered one of the top 10 OTC markets in the world, few global multi-national companies launch innovative switch products in the country due to regulatory and process barriers and a lack of incentives that support innovation. Prescription drugs that are switched in Canada have often been available for years in other countries: an average of ten years earlier in the US, seven in the UK, and six in Australia. Compared to Australia, Canada lacks OTC self-care treatments and entire categories for common ailments such as STI, overactive bladder, arthritis, migraine, weight loss and ulcers. For a detailed analysis of switch candidates in Canada vs. the US, UK, and

Australia see here.²⁴⁷ Nevertheless, the federal process for switching drugs from prescription to OTC status is well defined, transparent, consultative, and predictable. Health Canada is now consulting on a clearer process for switching NHPs. Clear regulatory factors determine whether a prescription is required. Data needed to support switch are flexible enough to accommodate tailored requirements relevant to the specific product.²⁴⁸ Switch proposals are subject to a transparent public consultation process.²⁴⁹

However, there are significant barriers to switches in Canada. Switch decisions apply to the drug ingredient, not just the innovator, and take effect through amending the Prescription Drug List.²⁵⁰ This means that the switch applies to all competing products of the same formulation at the same time. Because switching an ingredient is considered a technical regulation per the World Trade Organization Technical Barriers to Trade Agreement, Health Canada must notify the WTO and its member countries and delay the finalization of the switch for at least six months to give competitors time to adapt to the change.²⁵¹ This is not the case in the US and UK, where switches are product-based,



affecting only one manufacturer, and do not require WTO notification. In addition, regulatory data protection is not available in Canada to reward the innovator seeking new claims on existing products. Without data protection, this six-month delay, combined with delays in drug scheduling and the shorter federal approval time for second entry products, means that competing products often hit store shelves before the innovator's product has had time to establish itself.

Another challenge with Canada's switch process is the overlap in federal and provincial processes. After Health Canada approves a product switch from prescription to OTC drug, regulators in provinces determine where and how the product can be sold.²⁵² Overall, the provincial drug scheduling process is not nationally harmonized, transparent, or predictable and lacks accountability – all of which drive conflicting decisions that create inconsistent access to non-prescription products for consumers practicing self-care, particularly in Quebec, which retains a separate system from the rest of Canada.^{253 254} Industry infrequently seeks scheduling decisions in Quebec to increase access to products due to challenges navigating the process. As a result, access to 98 ingredients in categories like allergy, heart burn, yeast infection treatments, and emergency contraception are more restricted in Quebec compared to other provinces.²⁵⁵

Canada's overlapping system of authority leads to sometimes inconsistent outcomes. When Health Canada deemed proton pump inhibitors suitable for OTC use, they had to evaluate them as products that would potentially be available in any retail outlet, since the conditions of sale are set at the provincial level, where the federal regulator has no authority. Though not required by Health Canada, the National Association of Pharmacy Regulatory Authorities (NAPRA) National Drug Scheduling Advisory Committee--which makes these decisions for all provinces except Quebec--required larger pack sizes of all PPIs to remain on prescription. It also limited smaller pack sizes of the PPI omeprazole to sale from behind the pharmacy counter, while allowing the PPI esomeprazole to be sold from the public areas of pharmacies. Quebec

requires both PPIs to be sold from the no public access areas of pharmacies.

In Australia, drug scheduling decisions are made after consultation with provincial jurisdictions, but the decision-making authority, accountability, and enforcement remain with the federal regulator. In contrast, provincial drug scheduling decisions in Canada are not publicly accountable or enforceable outside of pharmacies. Overall, 40% of OTC drug products require pharmacist intervention or availability, with limited ability to sell online. Only OTCs and NHPs that are approved by Health Canada can be sold in Canada, however federal policy allows a three-month supply of OTCs/NHPs to be imported into Canada for personal use.^{256 257 258} This means that Canadians can purchase and import unapproved OTCs and NHPs.



Despite the significant increase in e-commerce during the pandemic, Canada's consumer health product sector did not experience this growth. Before the pandemic, the proportion of sales of OTCs from FHCP members' e-commerce channels "rounds to zero". Growth in e-commerce sales of Canadian OTCs has been limited to certain products and certain retailers, falling short of its full potential. In comparison, the US, Canada's largest trading partner, allows all OTCs to be sold online.

All levels of government in conjunction with provincial colleges of pharmacists have a role

in determining the conditions of sale for self-care products.^{259 260} This overlapping system of authority often leads to inconsistent, conflicting decisions. Additionally, minor ailment schemes that allow prescription drugs to be prescribed by pharmacists for minor ailments vary within provincial pharmacy practice.²⁶¹ Pharmacists in 4 of the 13 provinces and territories do not have these authorities in place.

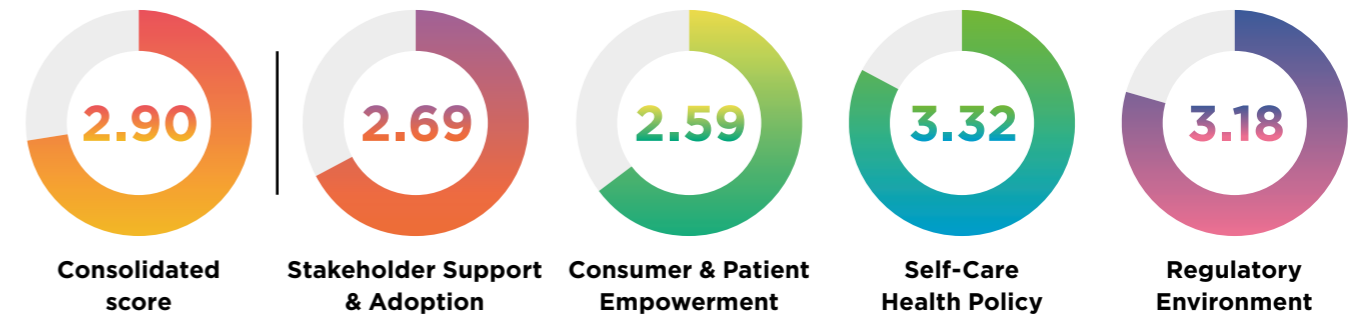
Direct-to-consumer advertising of non-prescription health products is permitted. Few OTCs are patented and captured by the Patented Medicines Act and Regulations, which ensure the prices of patented medicines are not excessive. However, recent regulatory requirements were introduced to reduce the burden for OTCs. Prices are no longer required to be reported, but the Patented Medicines Price Review Board can initiate an investigation on patented OTC prices should they receive a complaint.^{262 263} Only certain lower, risk-topical products like sunscreens, acne products, and oral health products can be sold directly to the consumer.²⁶⁴ Other OTCs and NHPs can only be sampled by health professionals. By contrast, in the US, all OTCs and dietary supplements can be sampled directly to consumers.

There are additional limitations to health product promotions applied at the provincial level through Provincial Pharmacy legislation or codes of practice.²⁶⁵ This means that provinces have differing levels of restrictions with regards to marketing. In terms of most to least restrictive, the provinces are Quebec, Nova Scotia, Alberta, Prince Edward Island, where there are restrictions on Schedule II products (advertising limited to name, price, and quality) among other attributes, Ontario, Saskatchewan, Newfoundland and British Columbia, where restrictions focus on false claims, and finally New Brunswick, Northwest Territories, Yukon, and Nunavut, which make no specific prohibitions on top of those federally stated.²⁶⁶ There is no third-party pre-clearance agency for OTC direct-to-consumer or health professional advertising. Canada's third-party advertising pre-clearance is similar to the system set up in the UK administered by the PAGB.

Colombia

COMPARATIVE SCALE

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



STAKEHOLDER SUPPORT & ADOPTION

Self-care appears sparingly in Colombian medical guidelines for diabetes, cardiovascular disease, and primary care. The national diabetes guidelines emphasize behavior change, especially for people with obesity. This is true for medical congresses as well, though the cardiovascular nursing program at the 2022 Colombian Congress for Cardiology and Cardiac Surgery focused on patient wellbeing, with sessions about living with a cardio-respiratory disease, developing an "inner growth" concept for cardiovascular patient care, and yoga as a tool in caring for cardiovascular patients.²⁶⁷ In 2020, the same Congress had a dedicated session on a "self-care recommendation guide for patients with heart failure"; prevention was also a large part of the agenda.²⁶⁸ Nevertheless, self-care as a concept is rarely discussed among healthcare providers and pharmacists. When comparing the US with Latin America,

Prof. Magaly Rodriguez de Bittner, PharmD, FAPhA, FNAP, Gyi Endowed Professor in Pharmapreneurship, Associate Dean for Clinical Services and Practice Transformation, and Executive Director for the Center for Innovative Pharmacy Solutions at the University of Maryland School of Pharmacy said, **"Courses in self-management and OTC products are mandatory for pharmacy students in the US because pharmacists are considered to have a critical role in self-care education. In Latin America, we are trying to promote the role of pharmacists in self-care, but currently not all universities have this content in the curriculum since most medications still require prescriptions. The Pan American Conference on Pharmacy Education organized by the Pan American Health Organization (PAHO) is seeking to provide guidance on curriculum development to include some of these educational concepts within the pharmacy educational programs."**



A recent study found 80% of the population is familiar with the concept of self-care, but this varies by socioeconomic level, with more affluent citizens expressing greater recognition. Another recent study explains that the concept of self-care is well-embedded in Colombian culture and history.²⁶⁹

Taking self-care products on a regular basis, such as vitamins, is also common, which was confirmed in our consumer survey. However, Colombians have struggled to adopt healthier lifestyles, with most people not eating the recommended intake of fruits and vegetables, and having low levels of physical activity.

The Ministry of Health and Social Protection published a **“Self-care for patient’s safety guide”**, defining self-care as, **“the daily practices and decisions about them that an individual, family or group makes to take care of their health; these practices are ‘skills’ learned throughout life, of continuous use, that are employed by a person, family or group ... use[d] freely, for the purpose of strengthening or restoring health and preventing disease; these practices are embedded in a cultural context.”**²⁷⁰ The only Parliamentary discussion we identified was from the 17 August, 2021, where self-care was mentioned in a broader conversation about obesity: Bill No. 262 of 2020 Chamber: **“through which the general law for the Comprehensive Management of Overweight and Obesity is issued”**. This is a parliamentary initiative aimed at strengthening prevention, care and treatment programs in the General System of Social Security in Health for people who are or are at risk due to overweight and obesity: **“People who are under this condition may not suffer any type of discrimination due to their weight, all entities being obliged to protect and guarantee access to health, information and timely comprehensive treatment with scientific support and by medical specialists. It corresponds to the national and regional governments, to the departmental assemblies and municipal councils, to regulate, through the norms of their competence, the public policies that guarantee the availability of economic resources to establish programs to achieve self-care, aimed at avoiding overweight and obesity and that the population is duly informed about their rights, comprehensive treatment for this condition in the health system.”**²⁷¹

However, self-care has been gaining momentum on the policy agenda. In 2020, the National Association of Industry of Colombia (ANDI) organized an interview with Dr. Andres Duarte,



Director of the Department of Preventive Medicine of the Pontificia Universidad Javeriana in Bogota, self-care expert and industry spokesperson in Colombia, where self-care was discussed, including mental wellbeing and the importance of healthy habits.²⁷² Dr. Duarte explained that, **“some officials are aware of the benefits of self-care, as it has been greatly favored during the last two years due to the pandemic.”**

ANDI collaborated with the government during the COVID-19 pandemic to create a self-care campaign: **“On World Self-Care Day, the companies of the Pharmaceutical Sector of ANDI made a call to reinforce daily behaviors and habits that favor our health and protect those around us. #YoMeCuido is the message that this year, together with the Ministry of Health and the Javeriana University, invites us to be responsible managers of our hygiene, nutrition, physical activity, appropriate rest, information and proper use of medicines and health services.”**²⁷³ At the peak of the pandemic, the government issued a Resolution about the criteria and conditions for the development of economic, social and State activities, in which WHO’s self-care definition is cited and in which self-care is greatly emphasized.²⁷⁴ ANDI is keen on expanding that campaign to include the safe use of OTC medicines, responsible self-medication and self-management beyond COVID-19.²⁷⁵

CONSUMER & PATIENT EMPOWERMENT

Health and hygiene are embedded into school curricula in Colombia.²⁷⁶ However, the consumer survey shows that most adults rely on the Internet to find health information and conduct a general search rather than use a trusted website. Colombian citizens also demonstrate low understanding of OTC product use compared to people in other countries and equate self-medicating to poor self-care.²⁷⁷ Despite this, close to half of Colombians said they rarely have difficulties understanding written health information; only 16% said they always or very often have this problem, similar to Mexico, and lower than the UAE and Kenya also covered in this Index.

Health literacy is a priority area for national action in Colombia, a commitment solidified by several policies. In 2013, a national resolution (in Spanish, **Ministerio de Salud y Protección Social de Colombia MSPS 2013b**)²⁷⁸ was released to support health literacy and improve the governance of health information systems. The Ministry of Health and Social Protection also named access to health data as an objective in its 2012-2021 Decennial Public Health Plan (in Spanish, **Ministerio de Salud y Protección Social de Colombia MSPS 2013a**).^{279 280}

To fulfil the mandates in these public health plans, the Colombian government aimed to transform health data in several ways: first, by improving the sources and reliability of the data, and second, by ensuring the standardization and shareability of data through searchable databases. Mobile apps and interactive data tools were provided to increase access to health information, and national health observatories were established to monitor health outcomes and help individuals access and apply information in self-care. Through these platforms, end users were able to access data to meet their needs in the most convenient way.²⁸¹

There are several databases related to self-care. The National Institute for Drug and Food Surveillance manages a database about OTC medicines, listing all available OTCs in Colombia with their active principle(s), concentration and pharmaceutical form.^{282 283 284} In 2020,

the Ministry of Health and Social Protection created a self-care dataset, which lists activities and behaviors relevant to self-care such as oral health, eye health, sexual and reproductive health, vaccination status, and others.²⁸⁵ The dataset is tagged under “self-care and control” (in Spanish, **“autocuidado y control”**).



Overall, health literacy has been more heavily researched across Latin America than in other regions.

While no study was found for Colombia, a recent paper listed health literacy evaluations for Mexico, Brazil and other countries in the region.^{286 287} A 2021 paper compiles some health literacy initiatives that have been running across Latin American, and offers a summary of policy recommendations pertaining to health literacy.^{288 289} Global organizations, such as PAHO, the International Health Literacy Association, the International Union for Health Promotion and Education, and the United Nations Educational, Scientific, and Cultural Organization, have all called for actions to improve health literacy in Latin America.^{290 291 292} More recently, campaigns like #SelfCareIsHealth run by the Latin American Association of Responsible Self-Care (ILAR) have emphasized health literacy to help both healthcare professionals and patients navigate complex health situations such as the COVID-19 pandemic.

SELF-CARE HEALTH POLICY

The Colombian government recently launched its new Ten-Year Public Health Plan 2022-2031 (in Spanish, Plan Decenal de Salud Pública). Behavior change, health promotion and prevention – which are all major elements of self-care – constitute major elements of the Plan.^{293 294}

The Plan refers to self-care as *“education for the prevention of individual and collective risks in public health”* and defines it as follows:

- Relates to the development of capacities for comprehensive health care, prevention and communication of public health risks and the participation of individuals, families and communities in the actions necessary to prevent, mitigate or overcome life-threatening risks and promote health through educational processes that address population and territorial differentials.
- Involves the development of educational interventions for capacity building for care integral to health and the construction of healthy lifestyles, the prevention of behaviors of risk, and control and adherence to pharmacological and non-pharmacological treatment.
- Teaches skills to identify infectious disease warning signs and symptoms and appropriate management and the promotion of self-care throughout the moments of the life course.

As in the previous Ten-Year Public Health Plan, the new Plan also refers to self-care as an object of rights and duties and mentions the need to foster a culture of self-care through human behavior.²⁹⁵ The previous Ten-Year Public Health Plan included a prevention component, with emphasized

primary prevention, self-recognition of signs and symptoms, the need for clear labels, and the need for additional training within the health system.²⁹⁶

Article 33 of Law 1122 requires the National Health Policy Plan to include activities that promote healthy lifestyles and their integration into different educational levels. Television programs scheduled during the dedicated children’s time slot must include the promotion of healthy habits and behaviors.²⁹⁷ Law 1751 of 2015, which regulates the fundamental right to health, provides in Article 5 that the State is responsible for respecting, protecting and guaranteeing the effective enjoyment of that right, as one of the essential elements of the Social State of Law. Article 10 states as duties of the people those “providing for their self-care, that of their family and that of their community” and of “acting in solidarity in situations that endanger the life and people’s health”.²⁹⁸ The government already promotes a human-centered approach to care through collaboration between healthcare stakeholders and community actors in order to “add value, generate well-being, protect life and improve the quality of life of the population.”²⁹⁹

The reference framework of the General System of Social Security in Health in Colombia (SGSSS) (PCSS in Spanish) explicitly mentions self-care, and both policymakers and the general population consider it a relevant aspect of health.³⁰⁰

In Colombia, according to the Political Constitution, *“every person has the duty to seek comprehensive care for their health and that of their community.”* This statement expresses the value that health care should have for Colombians, an attitude that should be fostered in educational contexts.³⁰¹ Self-care also appears in the National Policy on Sexuality, Sexual Rights and Reproductive Rights (PNDS/SDR), and is embedded in the work conducted by the Adolescent and Youth Friendly Health Services (SSAAJ) of the government.^{302 303}

Colombia’s Ministry of Health and Social Protection contains *“Health Recommendations”* on physical activity, nutrition, tobacco use, healthy weight management, hand washing, oral, visual, and auditory health, and healthy work environments as well as information on non-communicable diseases.^{304 305} The Recommendations promote factual evidence to support healthy behavior and encourage ownership over symptoms.³⁰⁶ The tobacco segment³⁰⁷ empowers individuals to make use of smoke-free spaces created by the government. Self-care is noted in two healthy hearing campaigns: *“Healthy hearing is everyone’s responsibility”* and *“Healthy and safe hearing throughout life.”* These include common sense recommendations like listening to headphones at a safe volume.³⁰⁸ Ongoing physical activity campaigns emphasize the importance of active movement as a healthy habit, such as “Move to life”.³⁰⁹

Experts cited challenges such as the lack of a global self-care framework that promotes the development of specific policies or activities and scant research on self-care in the country. Colombia and most other countries covered in the Indices have not created a specific conceptual framework for self-care. Therefore, in practice, the interpretation and use of self-care continue to be intuitive, as explained by Dr. Duarte.

The Colombian government has also been very active in health awareness campaigns. In 2017, the Colombian Minister of Health, the Colombian Association of Infectious Diseases, MSD Colombia, and the Colombian Hospitals and Clinics Association ran a campaign known as the ‘Twelve Commandments for Avoiding Antimicrobial Resistance’ that reached an audience of approximately 10.5 million people. The campaign included videos, infographics, and a call to action to share information across social media.³¹⁰ Fighting antimicrobial resistance (AMR) is a priority of the government, which launched its National Response Plan to Antimicrobial Resistance in

2018.³¹¹ The Plan mentions the need to develop activities at schools that promote appropriate self-care to prevent infections and proper use of antimicrobials. Self-care campaigns run by the National Association of Entrepreneurs of Colombia (ANDI) and the Latin American Association of Responsible Self-Care (ILAR) have been well-received by both the population and policymakers. This includes the aforementioned #SelfCareIsHealth campaign run by ILAR.

An adequate self-care policy could save \$1 BN pesos per year and free time for doctors to see the patients that need their care the most, which would translate into better care for all and lower future taxes for all Colombians.³¹²

TCMs are frequently used and culturally important in Colombia, however, there is no national policy or program governing their use. Some TCM, including phytotherapeutic products and herbal medicines are overseen through Decree 3553.³¹³ This is separate from the governance of non-TCM pharmaceuticals, including OTC medications, which fall under Decree 677 of 1995.³¹⁴ Like other countries where herbal medicines are common, Colombia has both good manufacturing practices (GMP) and a specialized safety review panel. In parallel, an expert committee *“La Sala Temática “Medicina y Terapias Alternativas y Complementarias” (MTAC)”* advises traditional practitioners and medical systems, while the Ministry of Health and Social Protection focuses on traditional Colombian medicines and is working to integrate traditional indigenous practices into the wider Colombian healthcare system.^{315 316}

REGULATORY ENVIRONMENT



In Colombia, OTCs, vitamins, supplements, complementary medicines, and medical devices can be purchased in easily accessible locations, such as in pharmacies, general stores, and supermarkets.

The criteria to be classified as OTC are established in Resolution 0886/2004. Dietary supplements are always OTC, according to Decree 3249/2006 and Decree 3863/2008. The classification of Rx medicines is applicable for:³¹⁷

- Medicinal product Rx (or medicine)
- Essential Medicine
- Herbal medicine
- Homeopathic medicine
- Master homeopathic preparations

Prescription drugs must remain in the market for at least 5 years to be considered for a switch to OTC. The decision rests with the Advisory Committee (AC) of the National Institute for Food and Drug Surveillance. Resolution 886/0410 lists the criteria a drug must meet to be classified as an over-the-counter drug. Products switched from Rx to OTC are based on 1) active ingredient; 2) product type and 3) compliance with Resolution 886/2004. However, there is no specific process established for Rx to OTC switch to date.

As there is no established specific process, a variation will be initiated to change the classification of the product (art. 18, Decree 677/1995, variation with pharmacological evaluation by the Advisory Committee, to demonstrate compliance with the criteria defined in Resolution 0886/2004 for OTC) as described below:³¹⁸

1. File delivery; pre-filing meetings are not available.
2. Review by the Specialized Chamber for Medicinal Products and by the Biological Products Committee; a face-to-face meeting with the advisory committee may be requested
3. Review Committee Review Begins Technical Review; done once the change is approved and the AC law is published; the resolution must be issued to initiate the variation.
4. Administrative Tasks
5. Approval

Properties / characteristics required of Rx to undergo the change (Resolution 886/0410) are as follows:

1. Proven efficacy profile in the proposed indication, a 5-year history in the prescription market and a wide safety margin, so that the voluntary administration of high doses does not represent a serious danger to health
2. Does not require the intervention of a health professional and is used for the prevention, treatment or relief of symptoms, signs or minor illnesses that are properly recognized and treated by patients
3. It has a wide therapeutic window
4. It has adverse effects that show a low incidence and low intensity
5. It has a wide dosage range that can be adapted to the OTC user according to their age and weight. 6. It has a limited range of indications

6. It is not susceptible to developing dependency or tachyphylaxis
7. It does not hide the symptoms of serious diseases
8. It does not accumulate in the body
9. It is stable under extreme storage conditions
10. It must have different preparations for pediatric use
11. Not suitable for parenteral products
12. Preferably constituted by a single drug and fixed dose with a recognized therapeutic trajectory
13. There are studies to demonstrate safety and efficacy, which will be evaluated by INVIMA

The switch approval process can vary from six to 18 months. Once INVIMA approves the switch, the interested party can apply for the change of the sales condition enclosing the approval issued by the Specialized Chamber for Medicinal Products (in Spanish, **Sala Especializada de Medicamentos**).

In Colombia, umbrella brands are if they are not likely to cause consumer confusion; however, INVIMA is working on a specific directive. The current requirements are as follows:

- Rx and OTC products may have similar brand names
- Umbrella brands are authorized as long as their products are part of the same therapeutic group
- Umbrella brands are authorized on a case-by-case basis



In Colombia, Resolution 004320/2004 regulates the advertising of medicines and phytotherapeutic products sold without prescription or OTC. Article 4Q establishes the specific requirements. For medicines or phytotherapeutic products that have several therapeutic indications, INVIMA, may authorize the advertising and/or promotion for only one indication, as long as: 1) it is not understood as exclusive of the medicine or phytotherapeutic product; 2) it is deduced from what is approved in the sanitary registration; 3) it is presented with scientific moderation, that is, without magnifying it or exaggerating its properties. In Colombia, over-the-counter homeopathic and phytotherapeutic drugs, as well as dietary supplements, require prior authorization by INVIMA to be advertised. Once the application has been filed, INVIMA will carry out the evaluation.

In March 2022, the Ministry of Health updated the health regime for medicines in Colombia, which changes control of the advertising of OTC medicines. INVIMA will start implementing the new regulation in March 2023 (Decree 334 of 2022).³¹⁹ In June 2022, the MoH published Decree 1036, including a reference on advertising through websites and social media.³²⁰

Price controls are determined under the National Commission of Medicines and Medical Devices' scope (CNPMD) according to Law 1438/2011, Decree 1071/2012 and Decree 705/2016. Based on these directives, a reference price will be assigned for all medicinal products in the country.³²¹ Price controls operate through either surveilled freedom, which allows free pricing by sellers with periodic reporting of prices to the government, or a government direct control regime, where the government determines the maximum price. The latter scheme includes most high-cost medicines. Most controlled prices apply only to products paid for using public resources, but controlled price may apply for commercial vendors such as drugstores and supermarkets.³²²

Germany

COMPARATIVE SCALE

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



STAKEHOLDER SUPPORT & ADOPTION

Self-measurements such as blood pressure, blood-glucose-level or blood-coagulation-level are an integral part of the ambulant chronic disease therapies in Germany. They are considered in daily doctors' practice and mentioned in medical scientific guidelines, such as the diabetes management guidelines, stroke care guidelines, primary care guidelines, asthma guidelines, and cardiology guidelines for certain conditions.^{323 324 325 326 327 328} The national diabetes association incorporated advice on diet and exercise into its diabetes guidelines in 2016. Dr. Peter Schwarz, Professor of Prevention and Care of Diabetes, University of Dresden, Germany, said that since diabetes is a chronic condition, self-management is key: **"Self-management does not mean only measuring glucose or injecting insulin - it fits into the mixture of self-care which goes beyond the treatment aspect, and touches upon quality of life. Even though there is support for these concepts among practitioners, we still don't have any tools/guidelines to measure and improve self-management/self-care at the individual level."** He continued that **"sensors have totally changed our understanding of diabetes. For the past four years, I have been giving glucose monitoring sensors to some healthy individuals at risk of diabetes, so they can see with their own eyes what happens in their body if they drink water or soda. After that, they felt more motivated and empowered to change unhealthy lifestyle habits."**

German consumers have a keen appetite for practicing self-care: indeed, German healthcare providers report that more than one-third of their patients have proactively engaged with them on self-care practices, the highest score among European countries covered in the Self-Care Readiness Indices so far. Further, a majority of healthcare providers in Germany agree that "health outcomes improve when patients are empowered with an at-home care plan for managing chronic conditions." They scored highest, alongside India (63%), Kenya (60%) and Colombia (56%).



SPOTLIGHT ON The role of pharmacists regarding self-care in Germany

Pharmacists and local pharmacies have a great importance for the German self-care-market. The quantity and quality of health information provided plus the variety of products available often overwhelms people.

Pharmacists and local pharmacies have a great importance for the German self-care-market. The quantity and quality of health information provided plus the variety of products available often overwhelms people. Pharmacists' advice helps ensure appropriate care and remains essential, also increasingly for verification of the retrieved information. By this, physicians and pharmacists can provide orientation and a feeling of safety.³²⁹ Self-care with medicines and health products, combined with personal professional advice in pharmacies, has already become an important building block in German health care. Nearly half of all packages dispensed in German pharmacies are non-prescription medicines.^{330 331} Of all health products sold in German pharmacies, two out of three packages are non-prescription products.³³² Surveys show that pharmacists enjoy the highest level of confidence among health care providers in Germany, and 74% of people have a strong confidence in pharmacists' advice.³³³ In 2017, a socio-health-economic study explained the value of self-medication in Germany for individuals, but also for the health system and national economy.³³⁴

CONSUMER & PATIENT EMPOWERMENT

Based on our consumer survey and desk research assessment, we found that Germans have healthier lifestyles overall compared to other countries examined in the Index. Germany scored particularly high in measures related to physical activity, with nearly half of all Germans engaging in at least 30-minutes of exercise six-seven days per week.

Alongside active lifestyles, Germans can also readily access self-testing and self-monitoring devices. Germans can self-test for many diseases and conditions, including COVID-19, HPV, and more recently, HIV, similar to what we observe in the US. Since 2018, people can buy HIV self-tests in pharmacies, drugstores or over the internet.³³⁵ Patients can also buy tests for detecting metabolic problems and bladder infections with most of these in-vitro-diagnostics available in pharmacies, as well as through e-commerce. Self-monitoring devices for diabetes (blood glucose monitor) and CVD (blood pressure monitor) are also easily accessible in pharmacies. For patients, self-testing-products are available for individual buyers or by prescription and reimbursed by health insurance, if they are used as therapy for conditions like diabetes, hypertension, or blood coagulation treatment.

As part of the Strategic Forum on Self-care, Technology & Digitalization, the European Diabetes Forum published a Roadmap for apps on the Promise of Digital Tools for Diabetes.³³⁶ A Digital Diabetes Index was also published by the Economist with the support of MedTech Europe and offers best practices in how digital tools and services can improve diabetes care; Germany scores high in this Index, alongside the UK and Italy.³³⁷

Germany is the largest market in Europe for non-prescription medicine. Germans spend on average 60 Euros per year per capita on over-the-counter medicines and 46% of German adults use them on a weekly basis. About 50% of all packages dispensed in pharmacies are OTC medicines.³³⁸

Our healthcare provider survey found that 69% of German healthcare providers think that “health outcomes improve when patients safely use over-the-counter products as a first-line treatment for appropriate minor ailments”, the highest score among all countries alongside the UK (SCRI 2021; 70%).

Germans also have access to numerous digital resources with verified health information. **The Federal Ministry of Health launched “gesund.bund.de” in 2020, an internet portal for quality-assured, neutral, and understandable health information.**^{339 340} An OTC directory, and health platforms such as “Informed Health” and “gesund.bund.de”, are some of the available resources for Germans.^{341 342 343} During our interviews, we heard that patient support comes mostly from family doctors but also *‘Heilpraktiker’*, or “naturopaths” who are defined in Germany as people with a state license to practice medicine without having a medical license.³⁴⁴ Though Heilpraktiker cannot issue prescriptions, they can use the *“Grüne Rezept”* to recommend self-care products to patients, and many private insurance plans cover visits to a Heilpraktiker.

In Germany, education is organized independently by each of the 16 German federal states. Health literacy in schools is an issue of growing importance. For example, the school curricula regarding “health promotion” of North Rhine Westphalia includes campaigns and projects to support health literacy. Many campaigns and projects targeting children’s education are provided by statutory health funds.³⁴⁵ Many prevention and health awareness campaigns are conducted at the regional level, on topics ranging from smoking cessation to healthy eating and screening for non-communicable diseases.

SELF-CARE HEALTH POLICY

SPOTLIGHT ON *Germany’s health literacy plan*

Alongside Australia, Germany is the only country covered in the reports with an established health literacy plan and strategy in place.

In 2018, German healthcare and academic experts published the National Action Plan for Health Literacy, which aims to make the healthcare system more user-friendly and promote citizens’ health literacy.³⁴⁶

This Plan was sponsored by the Federal Minister of Health, which in 2017 initiated the German Alliance for Health Literacy consisting of the Federal Ministry of Health, the Conference of Health Ministers from the federal states, patient representatives and leading organizations of the German health care system.³⁴⁷ The Plan already has become a model for designing new programs in health promotion, prevention, and related health communications. The Plan is well accepted among medical doctors, nurses, therapists, teachers, and social workers. The topic of health literacy has undergone numerous developments; many new research projects and networks emerged after the publication of the Plan.³⁴⁸

At the political level, the National Action Plan has succeeded in giving health literacy a prominent place on the health

policy agenda, driving a willingness to act and a series of health literacy innovations. According to the researchers, the main reason for this success is both the innovative format of the Plan and the chosen implementation.³⁴⁹ However, the Plan has still not been fully implemented to date, with researchers calling for additional efforts to promote even greater health literacy in Germany.³⁵⁰

Germany also has a number of health strategies in place related to self-care. In 2018, Germany launched a National Reduction and Innovation Strategy for Sugar, Fats and Salt in Processed Foods to promote healthier processed foods that still have sufficient nutrients such as vitamins and minerals. The Parliament called on the German Medical Association to ensure that obesity, the need for a healthy diet, and sufficient exercise are given greater consideration in medical training and further education, and to improve diabetes research by creating more endocrinology chairs at universities.³⁵¹

Germany is also positioning itself as a leader in digitization. Its Digital Strategy 2025, led by the Federal Ministry for Economic Affairs and Energy, was adopted in 2016 and involves a range of Ministries, including the Ministry of Health.³⁵² The E-Health Act, adopted in 2016, aimed to encourage doctors and patients to adopt digital technologies more widely by enabling patients to be reimbursed for costs related to digital health apps under their state health insurance, and encouraging entrepreneurs to build apps for the German market. Since October 2020, doctors in **Germany can prescribe digital applications for health, making Germany the first country in the world where the costs for digital helpers are covered by statutory health insurance.**³⁵³ A survey conducted by one of Germany’s biggest insurance companies shows that digital apps for back pain (3,947), tinnitus (3,450) and migraines (2,524) were prescribed most frequently. To date, still less than 30 health apps are certified and reimbursed through statutory health insurance.³⁵⁴ More recently, the German universal health

insurance started to reimburse HelloBetter’s four digital therapeutic programs for treating burnout, depression in diabetes patients, chronic pain, and vaginismus. This represents a huge step forward for digital therapeutics that enable self-care, but also for the recognition of mental health more broadly.^{355 356} Nevertheless, experts have noted that health practitioners are still reluctant to prescribe digital therapeutics.³⁵⁷

The Social Security Code guarantees the reimbursement of non-prescription medicines for children and in special indications specified in the therapy plan. It also gives statutory health insurances (public health insurance system) the option to offer patients benefits if they use self-care-medicines in case of prevention.^{358 359} The statutory health insurances offer supportive measures encouraging patients to practice a healthier lifestyle (eating healthy, playing sports, etc.) The AOK health insurance company offers a variety of online courses on nutrition, how to tackle back pain, and other self-care practices, as well as benefits to people who bike to work.³⁶⁰

Finally, the use of traditional and complementary medicine is widespread and highly integrated into care in Germany.³⁶¹ Registration and regulation of traditional, herbal, and complementary products fall under the German Medicines Act (AMG).³⁶² Although there is no national policy and program for TCM, Germany has three established expert committees for TCM: Commission C for anthroposophic medicinal products, Commission D for homeopathic medicinal products, and Commission E for herbal medicinal products.^{363 364} Many people use homeopathic, anthroposophic, and herbal products. However, since all over-the-counter drugs were delisted in 2004, most herbal remedies are now excluded from reimbursement.^{365 366}

SPOTLIGHT BEST PRACTICE

The Green Prescription (“a”):^{367 368}

Doctors can recommend OTC medicines to patients by issuing a green prescription. **The green prescription** was introduced in 2004 through an initiative of the German Association of Pharmacists (DAV), the National Association of Statutory Health Insurance Physicians (KBV), the German Medicines Manufacturers’ Association (BAH) and the Federal Association of the Pharmaceutical Industry (BPI).

The recommendation on the green prescription signals to the patient that the doctor considers the use of the drug to be necessary from a medical point of view. At the same time, the green prescription serves as a reminder for the patient regarding the name, active ingredient, and dosage form. This also makes it easier for the doctor to keep track of which medicines the patient is taking for future treatments.

In principle, a patient pays for the medications prescribed on a green prescription themselves. However, since 2012 health insurance companies have been able to reimburse OTC preparations as a statutory benefit. About two-thirds of health insurers use this option. With a green prescription and pharmacy receipt, patients can apply for reimbursement for their over-the-counter medicines. The same is also possible for preventative purposes, such as exercise referral practices.

In 2020, doctors issued more than 39 million prescriptions for OTC medicines on green prescriptions – a demonstration of their wide-spread use and success.

The top five indications for green prescriptions are:

1. Cough medicine
2. Cold and flu remedies
3. Drugs for other respiratory diseases
4. Agents against vascular occlusion
5. Eye preparations

REGULATORY ENVIRONMENT

The approval process for OTC medicines is clearly described in the EU Directive, the German Medicinal Products Act, and further regulations and guidelines. The Medicinal Products Act provides a procedure under which certain active ingredients can be transferred from their prescription obligation to the non-prescription obligation (pharmacy obligation).³⁶⁹ Germany has also established a high standard of quality for homeopathic, anthroposophic, and herbal medicines through a special regulatory framework and the pharmacy-only-status. These products have a long tradition and high rate of acceptance in the German market. They are registered or authorized in accordance with the German Medicinal Products Act, where they are defined as “products of special therapeutic area” (*“Besondere Therapierichtungen”*), meaning they must be assessed within their own therapeutic field.³⁷⁰ This recognizes the right of patients to choose therapies of their choice and to ensure those products are safe and high-quality. There is a high demand for these products: 70% of Germans are satisfied with the healing effect of homeopathic medicine, and 61% have already used homeopathic medicines.^{371 372}

Germany has an established process for switching a medicine from prescription to over the counter. There is a longstanding history of switching, with an increase in activity in 2018 after several years of decline.^{373 374} An analysis of important newer active substances found 62 switches to treat a range of conditions such as the triptans for migraine therapy and proton pump inhibitors for treating heartburn and acid reflux. Germany and Sweden rank at the top of Europe for these switches. In the US, only about two-thirds of these modern active substances have been switched for greater access. Worldwide, New Zealand is leading the way, with Germany close behind. Martin Huber from the Federal Institute for Drugs and Medical Devices currently chairs the European Non-Prescription Medicinal Products Task Force of the Coordination Group for Mutual Recognition and

Decentralized Procedures (CMDh). The Task Force was established in 2016 to deal with regulatory questions around OTC products in Europe. The latest version of its Best Practice Guide was published in 2022. Martin Huber explains that, “the Taskforce looks at how OTCs are regulated across European countries, and through its Guidance, informs regulators and companies about how to use the Decentralized and Mutual Recognition Procedure in this regard. The Taskforce provides a forum for discussion of these regulatory aspects.”

While there is support for these OTC switches from German Authorities and the Expert Committee for Prescriptions, the overall number of switches in Germany is declining. By comparison, countries like New Zealand have gained international attention after the switch of the two triptans naratriptan (2006) and almotriptan (2009) for treating migraines. Both drugs were exempt from compulsory prescription in Germany. While applications for switches of Sumatriptan (oral, 2009, and nasal, 2012) and Zolmitriptan (nasal, 2012) were supported by the Expert Committee for Prescription in Germany, the Federal Council rejected an amendment of the Ordinance on the prescription of medicines for reasons of formal compliance. In 2020, Sumatriptan was switched to OTC. In 2022 Dexibuprofen (mild to moderate pain), combinations of Ibuprofen and Paracetamol (mild to moderate pain), Bilastin (hay fever) and Levodropizin (cough) have also been switched to OTC.

A recent report by the German Medicines Manufacturer’s Association (BAH) found that consumers would like to have more OTC products available for bladder infection, fungal diseases and migraine and headache.^{375 376}

In the EU, industry experts suggest that while switches offer growth opportunities for patients and providers alike, the limited one-year data exclusivity available with a switched product can deter marketers from making the investment of cost and time needed to switch their products.³⁷⁷

The experiences in Germany with switched medicines are very positive. From 1978 to 2018, 113 active substances have been released from compulsory prescription in Germany. About 70% of all switch applications were endorsed by the German Ministry of Health. The spectrum of potential switch candidates is broad, ranging from further nasal presentations of anti-inflammatory glucocorticoids to the active substance sildenafil for erection problems and oral contraceptives.

For decades, the discussion surrounding the benefits and risks of switches has been an expert-led discussion. The views of pharmacists, physicians or consumers have not been taken into account, despite health professions being able to assess the usefulness of switches from their personal experiences. From 2017 to 2019, this changed, with three comprehensive studies

creating a new basis for the discussion. German pharmacists were strongly in favor regarding new switches. In addition, consumers showed a positive attitude towards more switches.

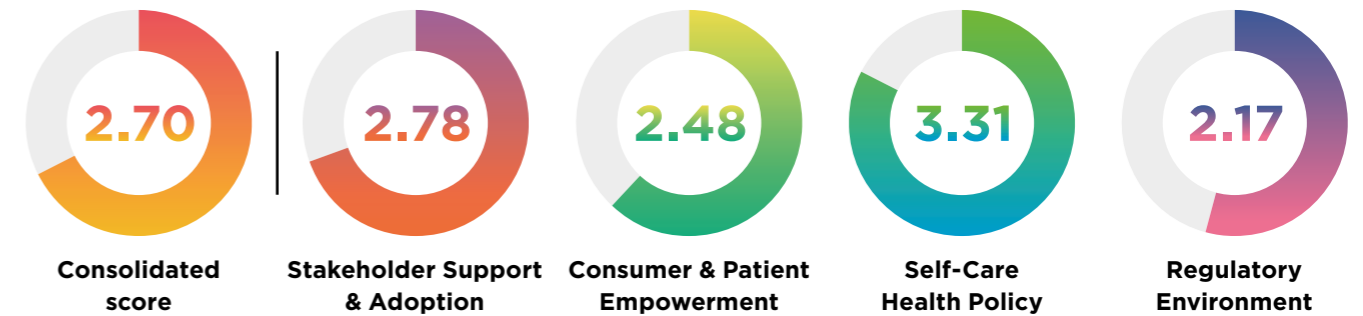
Particularly relevant studies comparing switches internationally come from Dr. Natalie Gauld, one of the world leading switch experts. Dr. Gauld has analyzed and assessed the situation in Germany, with the support of Prof. Dr. Karl Broich, President of the German Federal Institute for Drugs and Medical devices (BfArM) as honorary scientific advisor of her study.³⁷⁸ Furthermore, BAH ordered a legal assessment of the German switch process and its potential to optimize future switch applications. This assessment argues in favor of a product-based switch application procedure in addition to the existing ingredient-based process to better accommodate specific needs. Such a comparable dataset is so far not available anywhere else in the world.³⁷⁹ The results of these and other studies were published and discussed in several switch conferences with representatives from the German government, health authorities, and healthcare professionals and by that widely communicated in the health policy community.^{380 381 382 383 384 385 386 387}



India

COMPARATIVE SCALE

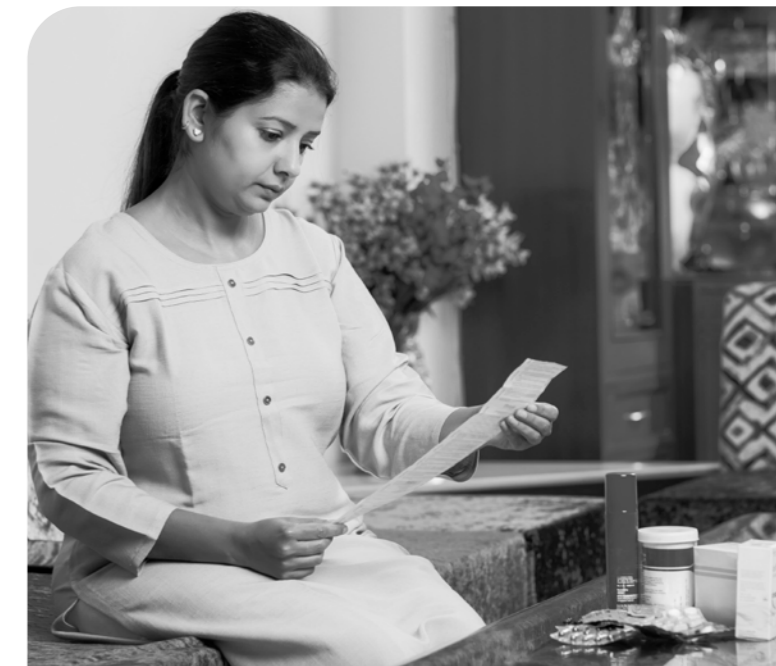
1 = not self-care ready 4 = exceptionally self-care ready



STAKEHOLDER SUPPORT & ADOPTION

Overall, Indian medical guidelines contain many self-care elements. The Indian Council for Medical Research (ICMR), the highest body in India for the formulation, coordination, and promotion of biomedical research, released guidelines for managing type 2 diabetes in 2018.³⁸⁸ These guidelines include a short section about diabetes education in which self-care skills, appropriate resources for self-care, and self-monitoring skills are cited as key concepts for the empowerment of diabetic patients. The guidelines underscore the importance for healthcare providers to motivate patients by explaining the benefits of following self-care activities. In 2022, the ICMR released guidelines for type 1 diabetes for the first time after the disproportionate impact COVID-19 had on people living with the disease.³⁸⁹ The guidelines highlight the importance of self-monitoring blood glucose given that patients will need “lifelong self-care with insulin” and underscore that newly diagnosed people should immediately learn “basic skills,” including self-testing, eating healthy and exercising. Family members and caregivers were also advised to learn self-care tasks, though the guidelines provide no definition of self-care. ICMR also noted that self-care behaviors are harder for people who chronically consume alcohol or use illicit drugs.

The standard treatment guidelines for hypertension, though they do not mention self-care concepts, include a section about how patients can help themselves if they have high blood pressure and recommend that people with hypertension have their blood pressure checked even if they feel well.³⁹⁰ The guidelines



suggest people quit smoking, eat healthy, exercise, avoid excessive alcohol consumption and drink no more than two glasses of coffee per day. They also underscore the importance of educating patients about their condition to improve health outcomes and change behavior. The guidelines for management of heart failure mention the importance of teaching patients to self-manage, in particular the self-use of diuretics.³⁹¹ The Indian guidelines for the management of stroke discuss steps to “identify the need of home modifications to facilitate patient’s participation in self-care and mobility”. Self-care also figures in the section about physiotherapeutic management of stroke patients. We were unable to locate recent primary care medical guidelines.



The need for patient education was highlighted during the last two Diabetes India's Congresses, but there were no specific sessions about self-care or patient empowerment.^{392 393} This was also the case for the 5th National Conference of Family Medicine & Primary Care in April 2022.³⁹⁴ The 2019 Annual Conference of Cardiological Society of India also failed to include self-care or related concepts on its agenda, as did the 2020 72nd Annual Cardiology Conference.^{395 396}

Prof. Prabhakaran Dorairaj, Vice President (Research and Policy), Public Health Foundation of India and Executive Director, Centre for Control of Chronic Diseases, India noted: ***“There are three levels of self-care for cardiovascular diseases. First, you need to be aware of what a healthy lifestyle entails, to be in good health generally. Second, if you are at risk of cardiovascular disease, you should know how to reduce your risk by adopting healthy eating habits, physical activity, [and] check your blood pressure if necessary. Third, if you have a cardiovascular disease, you should be able to self-manage to a certain extent.”***

As in most other countries, Indian medical students are typically not taught about self-care concepts. Based on our survey, we found that 40% of healthcare providers

often recommend their patients use self-care products and practices as part of a treatment plan for a specific medical condition. Close to 90% said that self-care practices are included in care or treatment guidelines in their workplace, about the same as Colombia and Mexico and slightly higher than Kenya. Half of Indian healthcare providers surveyed said it possible and somewhat convenient to be financially compensated for time spent discussing self-care products or practices with patients, similar to Colombia and a bit higher than Kenya, Indonesia, and the UAE.

Indian healthcare providers scored the highest on the statement “health outcomes improve when patients are empowered with an at-home care plan for managing chronic conditions”;

63% of providers strongly agreed with this statement. And 62% strongly agreed that “I consider self-care to be a core component of my approach to support and managing my patients”, while 48% strongly agreed that “policy makers in my country promote self-care products and practices as affordable and beneficial health solutions.”

Our research found that policymakers have not integrated the concept of self-care into policy conversations. In India, self-care is typically associated with mindfulness activities, though a scan of recent self-care news shows that the term “self-care” is being used to describe activities that aligned with WHO’s definition. In May 2020, self-care was the most searched term on Google in India, followed by breathing exercises, virtual meditation, relaxation, and peaceful playlist.³⁹⁷ **The OPPI report also highlighted the economic value that increased focus on self-care concepts, such as self-medication, can deliver. A reported 3.85 million USD are spent on health care providers for minor ailments each year; appropriate use of self-care could result in savings of up to 43%.**

CONSUMER & PATIENT EMPOWERMENT

Indians report being active, averaging 7.9 hours of physical activity per week.³⁹⁸ Still, only 43% of people meet suggested physical activity levels.³⁹⁹ India has made little progress in improving the health and nutritional status among the population. The latest data shows that 7.7% of children are severely wasted, 19.3% are wasted and 35.5% are stunted. Yet at the same time, rates of overweight in children are on the rise.^{400 401} Almost one in four Indians are obese or overweight according to the latest data.⁴⁰²

Our consumer survey found that Indians use self-care products primarily for pain relief, cough and cold treatment, and weight loss. More than half of respondents said they do not use any traditional or complementary medicines, and only sometimes engage in conversations about self-care products and practices with healthcare providers, similar to the United Arab Emirates, Indonesia, Kenya, and Canada. Indians report low levels of fruit and vegetable consumptions, as well as low levels of health literacy; one-third of respondents said they very often have difficulties understanding written information. Alongside Indonesia, Indians scored the highest (56% agreement) with the following statement: “I feel more educated and empowered to seek out self-care products and practices because of supportive campaigns and programs in my community.” A report by the Organisation of Pharmaceutical Producers of India (OPPI) found that “self-medication was reported by 26% of respondents, which included those who only self-medicated and those who also sought the advice of a pharmacist.”⁴⁰³ The same report found that only 13% chose to seek pharmacist advice alone, indicating minimal role of the pharmacist in the treatment journey.⁴⁰⁴

The first Indian standards for electronic health records (EHRs) were published by the Ministry of Health and Family Welfare in 2013, followed by the development of an expert committee to support the adoption and implementation of a nationalized EHR. Unfortunately, the uptake of this system has been slow compared to other

high and middle-income countries, and there is currently no universal patient identifier.⁴⁰⁵

Health and hygiene are important parts of school curricula in India, a priority of the National Health Strategy 2017.^{406 407} The Operational Guidelines on School Health Programme under Ayushman Bharat explain that teachers should be wellness and health ambassadors, and outline health age-appropriate activities to be conducted in schools, including hygiene practices in primary school, mental health and nutrition in middle school, and sexual health, meditation, and yoga in high school.

Health literacy has been a priority of India’s government, which set up the National Health Portal (NHP) to “promote health literacy amongst a wide spectrum of users including general public, students, health care professionals and researchers.”⁴⁰⁸



While policymakers and the public are aware of the importance of health, no studies to directly measure the level of health literacy have been conducted.^{409 410} Literature suggests that health literacy is low, especially in rural areas.⁴¹¹



Aligning with the National Health Portal (NHP), the National Knowledge Commission provides healthcare related information to citizens of India and serves as a single point of access for consolidated health information on a dedicated portal. The portal contains a section about healthy living, physical activity, healthy diet, hygiene, nutrition, and more.⁴¹²

Prof. Prabhakaran Dorairaj, Vice President (Research and Policy), Public Health Foundation of India and Executive Director, Centre for Control of Chronic Diseases, India points to the need to get more healthcare professionals involved in promoting self-care: **“I think that we should create a new function within the health system where health assistants (or others within the system) could take charge of conducting health awareness and self-care related activities, as doctors most often don’t have the time to do that.”**

Self-tests for HIV and HPV are available in India, though literature suggests they are not widely used.^{413 414 415 416}

SELF-CARE HEALTH POLICY

The concept of self-care is largely absent from health policy strategies and plans in India, though health promotion and preventive healthcare have been at the forefront of the health policy agenda since the 2017 launch the National Health Policy.⁴¹⁷ The Preventive and Promotive Health section advises: 1) a balanced diet, healthy eating; 2) adequate physical exercise; 3) reduced tobacco, alcohol, and other drug/substance abuse; 4) counseling for primary and secondary prevention of NCDs; and 5) investment in health promotion and healthy living in schools and workplaces. The policy identifies needed action in seven priority areas for improving the environment for health:

1. The Swachh Bharat Abhiyan, the strategy to achieve universal sanitation coverage
2. Balanced, healthy diets and regular exercises
3. Addressing tobacco, alcohol, and substance abuse
4. Yatri Suraksha, the program for preventing deaths due to rail and road traffic accidents
5. Nirbhaya Nari, the program for action against gender violence
6. Reduced stress and improved safety in the workplace
7. Reducing indoor and outdoor air pollution

Swasth Nagrik Abhiyan was the culmination of how to address these seven areas – a social movement for health. It recommends setting achievable and measurable targets for each area, and places heavy emphasis on preventative and promotive care at multiple levels, including childhood, to combat a variety of communicable and non-communicable diseases.⁴¹⁸ The strategy also seeks to expand AYUSH (Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopathy), which represents the systems of medicine commonly practiced in India. AYUSH is very prevalent across the country and represents a strong source of cultural pride. The strategy highlights the Ministry’s intent to promote healthy living and prevention strategies from AYUSH systems. Yoga at the workplace, in the schools, and in

the community as a means to promote health also has a special appeal in India. Bridging the AYUSH system with the general health system would enable the knowledge systems to be combined.

THE NATIONAL AYUSH MISSION, A HEALTH PROGRAM UNIQUE TO INDIA

1. Strengthen the availability and accessibility of alternative systems of medicine at primary health care level
2. Use of AYUSH doctors and other staff for health promotion activities
3. Emphasis on yoga for physical activity



“People can prevent becoming a patient through practicing AYUSH self-care. They are empowered and educated not only on allopathic medicine but also on a more holistic view of AYUSH. Yoga, for example, has the power to keep people healthy and prevent any disease to infect them. There might be some people who don’t get some significant benefits from yoga or physiotherapy, but there are no known side effects of any yoga therapy and there is no requirement of any prescription to exercise yoga.”

Narender Kumar Ahojja
Retired State Drugs Controller and Ex-Chairman OTC Sub-committee

Indian healthcare policy also supports a certification program for the development of ASHAs or Accredited Social Health Activists. ASHAs are community health workers, primarily literate women between the ages of 25 and 45, employed by the Ministry of Health.⁴¹⁹ Currently, most ASHAs are only compensated for time spent, but under this policy, those who obtain further qualifications could be engaged for work more regularly. The policy also recommends strengthening the cadre of Multipurpose Male Health Workers, who would work at the community level to help manage both emerging infections and non-communicable disease.⁴²⁰

The Indian Ministry of Health and Family Welfare (MoHFW) is reforming the primary healthcare system. This includes transforming existing Sub Health Centers (SHCs), Primary Health Centers (PHCs) and Urban PHCs (UPHCs) across the country into Ayushman Bharat – which can be translated into Health and Wellness Centers (AB-HWCs). Health promotion and preventive healthcare are two major pillars of the strategy.⁴²¹ Relevant interventions include: 1) Increase taxes on tobacco, alcohol, and unhealthy foods such as soda and sugar sweetened beverages; 2) Prepare communication materials for preventive health awareness; and 3) Make nutrition, water, and sanitation part of the core functions of Panchayati Raj institutions and municipalities. The document, entitled “Ayushman Bharat Health and Wellness Centres Transforming India’s Primary Health Care System”, also reiterates the need to expand the primary care health system with increased screening and detection of NCDs.⁴²² The Strategy for New India @75 highlights healthy lifestyles (better nutrition, sleep, exercise, etc.) as NCD prevention. It also details the development of Ayushman Bharat to transform sub-health-centers and primary health centers into health and wellness facilities that provide comprehensive primary health care services.

The National Multisectoral Action Plan for Prevention and Control of Common NCDs (2017-2022) mentions the need to “develop patient self-care guidelines and mechanisms for patient education and support.”⁴²³ Prevention is a central concept of the plan,

which details the goals and components of a number of national programs ranging from oral care to care of the elderly.

Finally, the Indian National Nutrition strategy focuses on under-nutrition, specifically in children, but does not address the overweight, obesity, or healthy eating for the broader population.⁴²⁴ Many government-led campaigns and programs follow this approach, including the Take-Home Ration (THR) program, which distributes take-home rations of nutritious food for children aged 6–36 months and pregnant/lactating women.⁴²⁵ The Eat Right Movement, an initiative of the Government of India and the Food Safety and Standards Authority of India (FSSAI), aims to transform the food system to ensure safe, healthy and sustainable food for all Indians, which bodes well for self-care.⁴²⁶ The Fit India initiative, supported by the government and launched in 2019, promotes behavioral changes that lead to a more physically active lifestyle for all Indians. One component, Ka Dose **Aadha Ghanta Roz**, was widely circulated on social media and calls for 30 minutes of exercise every day.⁴²⁷ And the “Medicines with the Red Line” public awareness campaign educates people about how to identify prescription drugs, curb self-prescription and misuse of antibiotics and, and take the full course of any prescribed antibiotics.⁴²⁸ Since 2016, packaging of all prescription-only drugs comes with a red line, and healthcare providers are discouraged against prescribing unnecessary antibiotics and encouraged to stop over-the-counter sale of antibiotics to address the growing problem of drug resistance in India.⁴²⁹



“The government of India is vigorously engaged in undertaking health awareness campaigns, through its flagship programs like National Health Missions, National AYUSH Mission Eat right campaign, Swachh Bharat Mission and other programs, Pradhan Mantri Surakshit Matritva Abhiyan, Pradhan Mantri Bhartiya Janaushadhi Pariyojana and others for the promotion of health. The Ministry of Health and Family Welfare has set up the National Health Portal in pursuance to the decisions of the National Knowledge Commission, to provide healthcare related information to the citizens of India and to serve as a single point of access for consolidated.”

Dr Muzamil Rehman
Senior Medical Officer, Central Government Health Scheme, Ministry of Health and Family Welfare, Government of India

TCMs fall under the AYUSH umbrella in India. The guidelines and policies on TCM have not been updated regularly; the last update coming in 2002.⁴³⁰ Notably, the National Policy on Indian Systems of Medicine and Homeopathy was written specifically to encourage the use of AYUSH concepts within the wider healthcare system and regulate the use of TCM products. Several expert committees on AYUSH have been established, including the Central Council of Indian Medicine.⁴³¹ India’s government also created an independent Ministry of AYUSH in 2014. Approved AYUSH drugs appear under Schedule T (Approved AYUSH Substances), remain subject to GMP practices, and must follow regulations in Schedule E (Poisonous AYUSH Substances). The high degree to which AYUSH medicinal products are accepted and regulated demonstrate their importance to the Indian healthcare system.^{432 433} The Ministry of Ayush published COVID-19 guidelines for registered practitioners of Ayush Systems, ranging from ayurveda to siddha and naturopathy.⁴³⁴ India has a national policy on TCM, national and state level laws and regulations on TCM, a national program on TCM, and an expert committee for TCM.⁴³⁵

REGULATORY ENVIRONMENT

Regulations governing pharmaceutical products are outlined in several documents. Both the Indian Medicine Central Council Act (1970) and The Drug and Cosmetics Act (1940) detail rules regarding the packaging, labelling, and sale of these products, including TCMs.^{436 437}

All drugs on Schedule H, H1, and X require a prescription. Yet, the term OTC has not been expressly defined under the Drugs & Cosmetics Act, 1940 (D&C Act) or the Drugs and Cosmetics Rules, 1945 (D&C Rules). Therefore, in India, OTC has no legal recognition. Drugs not included on the list of prescription-only drugs are considered to be non-prescription drugs and can be sold as OTC, which is a notable difference compared to other countries.^{438 439} Though the majority of medical products have a prescription-only status, many are still commonly sold over the counter by licensed retailers. **However, the central government is actively looking at regulating the sale and distribution of OTCs.** In 2021, a consultative process was launched to establish an OTC policy framework, following years of deliberations by the Drugs Consultative Committee (DCC). During its 52nd meeting, the DCC recommended creating a separate category of OTCs.⁴⁴⁰ Following this advice, the government proposed an OTC list with 16 medicines in May 2022, a list set to grow in the coming years.⁴⁴¹ However, lawmakers have not yet defined the criteria for drugs to be included on that list. Narender Kumar Ahooja, Retired State Drugs Controller and Ex-Chairman OTC Sub-committee, explains that, **“the vision of the government has always been to empower every last man/woman with their health. The ongoing consultation process, which aims to establish an OTC policy framework, shows the intent of policymakers and lawmakers to solidify the self-care system by increasing the availability of drugs, medical devices, and fortified food to the population, with the caution that the patients involved in the self-care system must have the knowledge to diagnose their own disease, know their symptoms, and choose the dosage and duration.”**

There is no established process for switching a prescription drug to OTC. Rx-to-OTC switches have historically been rare and can be described as “promotional switches”, meaning products start being marketed directly towards consumers.⁴⁴² Examples include Buscogast (Sanofi) in 2016 and Abzorb antifungal (Sun Pharma) in 2018. In India, government imposes price controls on essential medicines, including some that fall under the “OTC” umbrella.



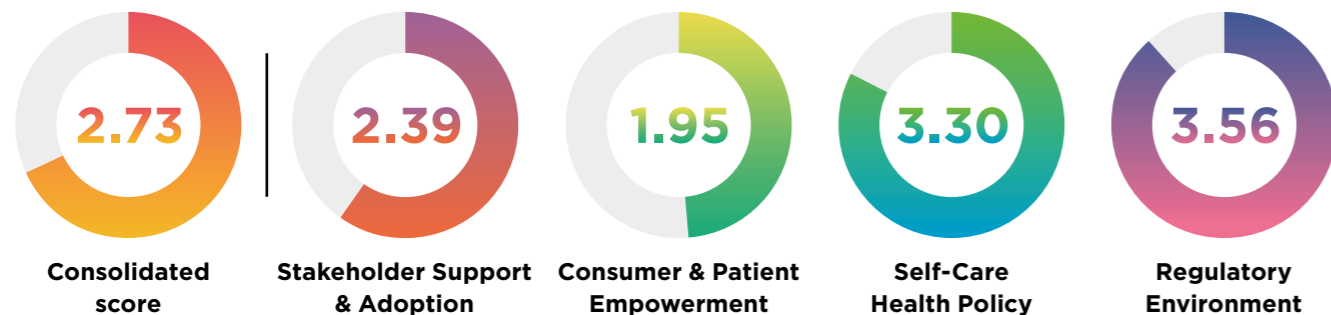
“The Ministry of Health and Family Welfare has recently published the draft New Drugs, Medical Devices, and Cosmetics Act 2022, where the definition of OTC AYUSH drugs has been incorporated as well, which may give way for the concept of self-care in the coming times. In my opinion, having a workable OTC ecosystem in India through effective regulations and consumer awareness will empower individuals to proactively and responsibly manage their self-care as a first line of treatment for certain minor ailments. This may further reduce the out-of-pocket burden as well as time taken to seek consultation for minor ailments.”

Dr Muzamil Rehman
Senior Medical Officer, Central Government Health Scheme, Ministry of Health and Family Welfare, Government of India

Indonesia

COMPARATIVE SCALE

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



STAKEHOLDER SUPPORT & ADOPTION

The Indonesian diabetes care guidelines are Guidelines on the Management and Prevention of Prediabetes and Indonesian Clinical Practice Guidelines for Diabetes in Pregnancy.^{443 444} Those addressing the management and prevention of prediabetes highlight self-assessment, self-management, and behavior change. Guidelines on diabetes in pregnancy highlight the need for physical activity and a healthy diet, but do not mention self-management or self-care. In the “Heart Failure Management Guidelines”, self-care is clearly stated: “Self-care management can be defined as actions aimed at maintaining physical stability, avoiding behaviors that can worsen the condition and detecting early symptoms of worsening heart failure. Self-care management has an important role in the successful treatment of heart failure and can have a significant impact on improving heart failure symptoms, functional capacity, quality of life, morbidity, and prognosis.”⁴⁴⁵ Self-monitoring is also emphasized in the guidelines, along with behavioral change: “A number of adherence interventions have been developed and tested, some specifically for patients with heart failure. Interventions to improve adherence in heart failure patients include medication training, disease training, increased integration of care, self-management teaching, self-monitoring, and other strategic combinations.” The Adult CHD Management Guidelines highlight self-assessment, self-management, and the need to educate patients to adopt healthy lifestyle behaviors (hygiene, risk reduction, avoid pregnancy).⁴⁴⁶ The Guidelines for the Management of Hypertension in Cardiovascular Disease include measures to promote behavior

change and patient education measures.⁴⁴⁷ The Clinical Practice Guide for Doctors in Primary Health Care Facilities focuses on how doctors manage their practice, but no mention is made about self-care, patient education, or self-management.⁴⁴⁸

According to our survey, 59% of healthcare providers in Indonesia think, “health outcomes improve when patients safely use over-the-counter products as a first-line treatment for appropriate minor ailments,” just behind Germany (69%).

Indonesian healthcare providers scored highest when asked whether they agree that “I consider self-care to be a core component of my approach to support and managing my patients” at 65%, followed by India (62%) and Mexico (60%).



CONSUMER & PATIENT EMPOWERMENT



Indonesia has been implementing hygiene and health curricula at school through different programs, including the WISE program, which aims to improve the water, sanitation, and hygiene status (WASH) of children by increasing access to clean water and sanitation facilities. Since 1984, all Indonesian schools have followed the Usaha Kesehatan Sekolah (UKS) health curriculum, which prioritizes education, health services and the promotion of a healthy school environment to improve health outcomes among children. Currently, UNICEF, CARE, and Save the Children are collaborating with the Government of Indonesia on the WISE program.⁴⁵³ The Fit for School (FIT) program, in collaboration with UNICEF and RECFON, promotes clean and healthy lifestyles.^{454 455} The backbone of health literacy and health education for the public is done at the grassroots level through *posyandu* and health movements in schools (*Usaha Kesehatan Sekolah/UKS*). Health literacy has not been defined as a policy priority, and the term of health literacy is relatively new in Indonesia. In late 2021, the government launched its new Digital Transformation Strategy, which aims to integrate electronic health records into the national ID.⁴⁵⁶

Based on our survey, almost 60% of people in Indonesia often to always “have problems learning about their health because of difficulty understanding written information,” a score comparable to India (62%). However, a majority (56%) of Indonesians agree they, “feel more educated and empowered to seek out self-care products and practices because of supportive campaigns and programs in their community,” comparable to India (56%) and Colombia (54%). **Interviewees said they see health literacy increasing due to the many campaigns conducted at the community-level by the government, patient organizations, and sometimes medical associations and healthcare providers.**

Fake news and misinformation about health have increased in conversations among healthcare providers as a result of the pandemic.⁴⁴⁹

Pharmacy and medical students touch upon self-medication during their education, including topics like patient communication and education, self-management for people with non-communicable disease (NCD)s, how to stay healthy, and the differences between acute and chronic disease. Training in nutrition remains optional.^{450 451}

Mr. Satibi PhD Pharm, explained that pharmacists play a key role in communities: **“Pharmacists work with people with chronic conditions to increase their quality of life; they act as counselors on monitoring, nutrition, diet, vitamins and supplements.”** Pharmacy students spend two months in rural areas after graduation to fulfill mandatory community service requirement needed to receive their diplomas.

Labeling and e-labelling remains a challenge. According to Dr. Purwastyastuti, while labeling can help educated people make more informed choices, it remains challenging for less educated portions of the population. The country uses a green/blue/red dots system, where green dots indicate drugs that can be sold to all retail outlets; blue dots drugs that can be sold only at drug stores and pharmacies; and red dots drugs that are on prescription only.⁴⁵² As in the US and the UK, drug stores employees where OTCs are sold often do not have the training required to provide quality health advice, and pharmacists do not systematically counsel patients unless explicitly asked. Overall, Indonesians are supportive of self-care, since it means spending less time and money on visiting a doctor, something healthcare providers appreciate too.

“There are a lot of patient organizations, but also medical organizations including nurses and doctors that help educating people on health. For example, my association on pharmacovigilance has online videos, organizes seminars about how to use drugs safely. Community organizations really have health as a priority topic.”

Dr. Jarir Atthobari
Associate Professor at Gajah Mada University Medical School.



Mr. Satibi PhD, Pharm, also said that while people get information about health from their pharmacists and community nurses, they also rely on friends, TV, and social media. Dr. Zullies Ikawati, Professor at Gajah Mada University Pharmaceutical School, said the Pharmacist Association of Indonesia takes part in campaigns to encourage the safe use of OTCs, but most people living with NCDs still don't know how to manage and self-care for their condition: **“As researchers and sometimes with the Association of Pharmacists, we conduct targeted campaigns to educate people on how to self-medicate properly, how to get to know their chronic disease better using social media and posters. We noticed that most also don't know how to self-assess and decide when they need to consult a doctor.”**

All interviewees highlighted disparities in levels of education and socio-economic status that make mass campaigns more difficult. Many told us targeted initiatives have been more efficient. Some apps exist to support self-management of diabetes and asthma, and there is confidence their use will expand as the Internet reaches more communities. Many health campaigns run in the media, usually relating to hygiene and sanitation, reproductive health, illicit drugs, and tobacco. Private companies sometimes use paid advertisements to promote preventive behavior as part of their corporate social responsibility activities.

The government has been very active on social channels in disseminating health information, especially at the peak of the COVID-19 pandemic, and health prevention and promotion have been at the core of Indonesia's policy: **“I believe that health will become more precise and more personalized. We observe that more and more, people want to take care of themselves, and I strongly believe that we are moving in the right direction. Health promotion and prevention are absolutely central now,”** explained Mr. Budi Gunadi Sadikin, Minister of Health of Indonesia.

SELF-CARE HEALTH POLICY

The Minister of Health (MoH) has the primary responsibility to organize and develop public health services in Indonesia, with particular focus on disease surveillance and preventive activities. Delivery responsibilities are shared with provincial and district health authorities and provided through specialized programs and individual health facilities, including **puskesmas** and their networks.

In 2015, the MoH launched the Healthy Indonesia Program, which aimed to develop an Indonesian community living with healthy behavior in a healthy environment, and able to access quality health services – all to achieve the highest possible health status.⁴⁵⁷

The Program was a core component of Indonesia's Health Policy Plan 2015-2019, which explained the goals, “to improve the health outcomes and nutrition status of all Indonesians through efforts in healthcare provision and community empowerment that are supported by both financial protection and healthcare equalization.” **Self-care is mentioned in the National Strategic Action Plan for the Prevention and Control Non-Communicable Diseases: “Ideally, patients with chronic NCD will have the capacity to implement self-care.”⁴⁵⁸**

Preventative health initiatives are largely conducted by volunteers or non-governmental organizations, with the support and coordination of the Minister of Health. For example, the **posyandu** is a community initiative to engage in health promotion and preventive activities. The backbone of **posyandu** are known as health cadres – community volunteers who are trained by village midwives and/or other **puskesmas** staff to provide assistance in promoting healthy living behavior, maternal and child health (MCH), and nutrition. **Biaya**

Operasional Kesehatan/BOK were first introduced by the MoH in 2010, to support health center operations, including preventive and promotive programs at district level. BOK were run by DHOs with funding from the MoH through a Special Allocation Fund (Dana **Alokasi Khusus**/DAK). Overall, investment in public health and prevention remains relatively low compared to spending on curative services. The **puskesmas** provide both curative and public health services, with a focus on six essential service areas: health promotion, communicable disease control, ambulatory care, MCH and family planning, community nutrition, and environmental health, including water and sanitation. Preventive efforts also focus on NCDs through health promotion to raise public awareness, early screening, and early detection. The **Posbindu** is a community engagement program that addresses almost all NCD risk factors and is integrated within other community settings, such as schools, workplaces, and residences.

A number of self-care focused programs have been initiated by the Directorate of Health Promotion and Community Empowerment under the Ministry of Health (MOH), including:

1. The Healthy Living Community Movement (GERMAS)
2. Smart Use of Medications Movement (GeMa CerMat)
3. Implementing a Clean and Healthy Lifestyle (PHBS)
4. National Campaign for consuming healthy foods such as fruits and vegetables
5. National Movement for Nutrition Awareness

The GeMa CerMat was launched in 2015 to promote responsible self-medication.⁴⁵⁹ The effort centers on the development and delivery of five training modules for cadres at community healthcare centers, including modules on general drugs, common cold drugs, analgesic drugs module, anti-diarrheal drugs, and indigestion drugs.⁴⁶⁰

PHBS is a community outreach program to educate children about clean and healthy living behaviors, such as washing hands and brushing teeth. The program has been implemented in a variety of settings to varying degrees of public acceptance.^{461 462 463}

Indonesia also conducted a national campaign for the consumption of healthy foods in collaboration with the UN World Food Programme. The campaign was digital, and included the hashtag #KerenDimaken, which translates as “Cool to Eat.” It was inspired by a report showing the majority of Indonesian adolescents eat only one-half to one serving of fruit and one serving of vegetables per day, well under the recommended five servings.⁴⁶⁴

In 2011, Indonesia joined the Scaling Up Nutrition movement with its National Movement for Nutrition Awareness. Included in the 2017 Presidential Instruction No. 1, this movement aims to address strategic objectives in nutrition, including aligning nutrition programs around a common results framework.⁴⁶⁵ Indonesia also released a technical brief for healthcare administrators entitled “Indonesia Minimum Service Standards for Nutrition” in May 2017.⁴⁶⁶

Indonesia’s Healthy Living Community Movement (GERMAS) was launched in 2016 and continues today. This sustained commitment shows health promotion and prevention remain high on the political agenda.^{467 468 469}

The flagship program, originally spearheaded by the Ministry of Health, now also operates under the Ministry of Education: **“There is a misconception among people that GERMAS only belongs to the Ministry of Health, but actually the Ministry of Education has also been integrating the program in curricula. Now the Ministry of Religious Affairs is exploring how GERMAS could be expanded to Islamic schools, mosques, and churches,”** explained Dr. Satibi. The community obligation to live a healthy lifestyle is embedded in



the Presidential Instruction No.1 of 2017 and involves cross ministries and institutions.⁴⁷⁰ As in Thailand, community empowerment is a core component of Indonesia’s health policy plan. For example, the Program Nasional Pemberdayaan Masyarakat (PNPM), the largest Community Driven Development (CDD) program in the world, covers all urban wards (PNPM-Urban) and rural villages (PNPM-Rural) in Indonesia.⁴⁷¹ Promoting health and community empowerment remains a core objective for the Ministry of Health: **“I am the Minister of Health, not the Minister of Sickness. We should really spend our time and money on how we can ensure people stay healthy, that diseases are prevented at all stages of life. The Community Healthy Life Movement is key to empower people, so they can make decisions at the individual level.”** The Directorate of Health Promotion and Community Empowerment of the Ministry of Health established five pillars within GERMAS, which was recently expanded to seven:⁴⁷²

- Healthy balanced nutrition
- Physical exercise
- No smoking
- Immunization
- Hygiene and sanitation
- Smart use of medication (including taking antibiotics only when needed and following treatment regimen correctly)
- Regular medical check-ups

Reinforcing primary healthcare remains a core priority in Indonesia, which bodes well for self-care. Dr. Imran Agus Nurali, Sports Medicine Specialist, Director of Health Promotion and Community Empowerment, Ministry of Health of Indonesia, explains: **“The Ministry of Health communicates programs to communities, where healthcare providers are trained to be trainers. From there, the aim is to cascade the knowledge and the habits of self-care. [...] Primary care clinics are also a core component of this. In the old days, community-based health facilities were only offering services for pregnant mothers and babies, but now the Ministry of Health is working on integrating all facets of life - from pregnant mothers to babies to teenagers, working people, and older adults; depending on which group you belong to, you might visit 2-3 times a month for health prevention and check-ups.”** In Indonesia, each sub-district or village will have at least one community-based service with a doctor, nurses and midwives.

Community-based programs led by healthcare providers promote good nutrition, highlighting the need to eat a variety of nutritious foods in the poorest communities and the need to eat healthier and avoid processed foods in more urban communities.⁴⁷³

In addition to utilizing community-based programs, Indonesia has a robust and established series of traditional and complementary medicine (TCM)-related national policies and programs. TCM is a key part of Indonesian culture and is widely utilized

by the Indonesian population. The Indonesian government recognizes the importance of safe distribution of TCM knowledge, services, and products and has worked to integrate TCM into national healthcare.⁴⁷⁴ Law #35 and #59 of the health law in 2009 encouraged safe, accountable, and integrated traditional healthcare provision.⁴⁷⁵ Additionally, Indonesia’s national policy on TCM (in Indonesian, **Kebijakan Obat Tradisional Nasional**), stipulates national objectives, priorities, and strategies for developing TCM – a step welcomed by academic community members we interviewed.⁴⁷⁶ In 2019, the Ministry of Health established the Traditional Health Care Center (**Balai Kesehatan Tradisional Masyarakat** (BKTM)) offering integrated traditional and modern care.

“All stakeholders should hand in hand light up the self-care health path.”

Dr. Freddy Wilmana
Independent Consultant on
Pharmaceuticals and European
Anti-Aging Education Board Member

Overall, self-care is well-embedded in Indonesia’s main health policy plan, which takes a holistic approach to health, putting **“clean and healthy lifestyles”** and **“community empowerment”** at the center.



REGULATORY ENVIRONMENT

Drug regulation is carried out by the Indonesian Ministry of Health (MOH) and National Agency for Drug and Food Control (NADFC). The Ministry of Health conducts government affairs in the health sector with the responsibility to conceptualize, stipulate, and implement policies, rules and regulation of public health, disease prevention and control, health services, pharmacy, medical devices, and health workers.⁴⁷⁷ The National Agency for Drug and Food Control (NADFC) carries out government affairs in drug and food control, including drafting and ratifying norms, standards, procedures, and criteria to supervise and control Pre- and Post-Market - Authorization.⁴⁷⁸ There are two classifications of OTC in Indonesia, OTC and limited-OTC, with different rules and regulations in formulation and labeling.⁴⁷⁹ Herbal product regulation falls under *Kriteria dan Tata Laksana Pendaftaran Obat Tradisional, Obat Herbal Terstandar dan Fitofarmaka*, or Criteria and Procedure on Registration of Traditional Medicines, Standardized Herbal Medicines and Phytopharmaca (revised 2005).⁴⁸⁰ GMP is followed for manufacturing, and there is a legally binding national pharmacopeia. TCM providers register with the Provincial and District Health office for licensing.

The drug reclassification in Indonesia is described in the Minister of Health Regulation No. 3 of 2021.⁴⁸¹ **In June 2021, 10 types of drugs were changed from Rx into limited over the counter (OTC) drugs: Terbinafine, Famotidine, Diclofenac diethylamine, Selenium sulfide, Piroxicam, N Acetylcysteine, Bifonazole, Cetirizine, Loratadine, and Fexofenadine HCl.**⁴⁸² **These were the first switches in 20 years.**

Access and distribution of drugs is regulated by the Minister of Health Regulation 14 of 2021 on Standards for Business License and Products in the Implementation of Risk-Based Approach Licensing in the Health Sector (Pharmacies, Distribution, Hospital, Drug Stores, Clinics, Health Centers). However, the supply chain of drugs is complex because every sector has different rules and regulations, including OTC and limited-OTC.⁴⁸³ Drugs that can be sold without prescription must meet the following criteria:⁴⁸⁴

1. Not contraindicated for use in pregnant women, children under the age of two and the elderly over 65 years
2. Self-medication does not have risk to the continuation of the disease
3. Its use does not require special methods and or tools that must be carried out by health workers
4. Its use is necessary for diseases that have high prevalence in Indonesia
5. Drugs for self-medication have reasonable and accountable safety and efficacy ratio



@ Mufid Majnun

The actual accessibility and availability of OTCs varies by region and other factors. According to interviews, access to OTCs often depends on the frame of mind of physicians and pharmacists in prescribing and filling a prescription. Regulation on access at this level is low: GP Farmasi found that 63% of people purchase their OTC in small, nearby retailers with no oversight. Having pharmacists at all retailers to regulate the dispensing of OTCs is one common suggestion, but this is not always logistically practical, especially for small stores.

Drug distribution online can only be carried out for drugs that are included in the class of over-the-counter drugs, limited-over the counter drugs and prescription drugs.⁴⁸⁵ The development of information technology and the public's need for drugs and food in a fast, well-targeted manner has impacted the drug and food distribution activities of online drug and food distributors.

Indonesia has extensive guidelines on drug advertisement and promotion, from the content to the technical execution of the advertisement.⁴⁸⁶ Over-the-counter drugs and limited-over the counter may be advertised to the general public. Advertisement and promotion materials for the public require NADFC approval.⁴⁸⁷ Retail price ceilings for drugs are proposed by the brand owner and are required information on drug labels.⁴⁸⁸

Overall, interviewees said they are satisfied with the regulations in place, though the number of regulations can sometimes be challenging to navigate for companies.

Kenya

COMPARATIVE SCALE

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



STAKEHOLDER SUPPORT & ADOPTION

Our research suggests high levels of support and awareness for self-care among healthcare providers in Kenya, but lower levels among the general public and policymakers.

Self-care and its concepts appear a handful of times through Kenya’s cardiovascular care guidelines. The guidelines detail some tools that healthcare providers can use to encourage behavior change and support “self-help”, including weight management and smoking cessation. They highlight the importance of self-management of blood pressure at home for patients with hypertension, and self-care is mentioned as a core concept under a multidisciplinary care team for heart failure:

“Patient education with the intent to promote self-care is related to the maintenance of the appropriate level of physical and psychological well-being, decrease in morbidity and mortality and in the use and cost of healthcare, increase in patient’s satisfaction, improvement of control sense and life quality.” For heart failure management, the guidelines recommend self-care and symptom recognition once patients are discharged from the hospital.⁴⁸⁹ Primary care guidelines mention “self-reliance and self-determination”: **“Primary Health Care: This is essential health care based on practical, scientifically sound and socially acceptable methods and technology, made universally accessible to individuals and families in the community through their full participation and at cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination.”**

The concepts of self-care, self-management and self-monitoring also appear in the National Clinical Guidelines Diabetes for Management of Diabetes Mellitus 2010: Diabetes education is the provision of knowledge and skill to people with diabetes that will empower them to render self-care in the management of their diabetes and associated disorders. This is one of the cornerstones of management together with diet, physical activity, and pharmacotherapy, and is critical in improving the outcome. Self-care and the empowerment of people living with diabetes are explicitly linked and appear in the introduction of the document.⁴⁹⁰ The Kenya National Diabetes Educators Manual also highlight self-care and associated concepts.⁴⁹¹ Self-care and its concepts also appear extensively in the program of the Kenya Cardiac Society’s Congress 2021 with sessions about self-care and heart failure, self-care and health education, and behavior change.⁴⁹² We were unable to locate the programs for the congresses of the Diabetes Kenya Association and of the Kenya Association of Physicians.

Pharmacists in Kenya support self-care and represent an important point of access to care (“first-stop shop”). Nevertheless, barriers remain since most pharmacies are unregistered and operated by unqualified staff, plus the general lack of health literacy among the population.⁴⁹³

“In Kenya, only 3% of pharmacies are actually owned by pharmacists. As a result, customers most of the time do not receive the guidance that they should get, and it makes it harder to educate people overall”

Dr. Sylvia Opanga, PhD
Senior Lecturer, Clinical Pharmacist, and Researcher at University of Nairobi

As with other countries covered in this Index, healthcare providers also underlined a lack of tools and guidance about how to practice self-care, and pharmacists do not usually provide patient with advice unless explicitly asked or refer the patient to their doctor. In addition, pharmacists in Kenya are not remunerated for providing self-care related advice.

Moreover, healthcare providers in Kenya (most importantly pharmacists) are not taught about patient communication, though one pharmacist said curricula now are more comprehensive than in previous years. Some pharmacists mentioned sources of information such as informal training, based on conversations with other healthcare providers; resources they read on an individual basis; or ad-hoc conferences and workshops they attended – for example on the importance of good nutrition, patient communication and patient education.

Dr. Odhiambo David, a Pharmacist in Kenya, is currently working to establish a self-care program to help improve access to care for patients who rely on pharmacists for their healthcare needs: **“Pharmacists**



are not taught about self-care or patient communication during their studies, and there isn’t an education program that covers these yet. I believe pharmaceutical societies can play a role here in promoting self-care and positioning pharmacists to drive this transformation in care.”

A majority of healthcare providers surveyed said they often or very often recommend their patients use complementary self-care products and practices as part of an ongoing plan for wellness and optimum health, or with a treatment plan for a specific medical condition. Healthcare providers we interviewed said self-care advice might be given to parents and especially mothers for their babies and children, for how to recognize signs of malaria, diarrhea, and other common communicable diseases. Children with NCDs might receive advice from their family doctor about asthma management, for example. Mental health is increasingly a topic of conversation among healthcare providers.

More than 86% of respondents to our healthcare providers’ survey said self-care practices are included in care or treatment guidelines in their place of work.

“Guidelines that relate to self-care might not be included in government guidelines, but are included in some of the hospital guidelines and protocols”

Dr. Munini Kioko
General Practitioner

Interviews with experts suggest that people and policymakers associate self-care with the management of chronic conditions and self-medication, but rarely with prevention and health awareness. Our surveys indicate that healthcare providers and patients only sometimes raise the topic of self-care with each other.

CONSUMER & PATIENT EMPOWERMENT

Health education takes place at school for some children, with instruction on healthy eating and physical activity.⁴⁹⁴ However, this represents only a minority of children in the country. About half the respondents to our consumer survey said they engage in at least 30 minutes of exercise two to three days per week. The Ministries of Health (MOH), the Ministry of Medical Services and the Ministry of Public Health and Sanitation have been promoting the standard implementation of EMR systems with the aim of improving health care delivery, health systems management and patient health outcomes.^{495 496}

According to our consumer survey, many people rely on information found on social media and what they hear from family and friends. Literature suggests low levels of health literacy.⁴⁹⁷ A recent study noted that, “women struggle with health literacy demands and few claim adequate skills for communicating with their physicians and following up with self-care instructions due to limited background of health knowledge. Most health workers in Kenya are not aware of the magnitude of the problem.”⁴⁹⁸ Nevertheless, the majority of consumer respondents said they rarely have difficulties understanding health information, suggesting that people might think they are more health literate than they really are, and/or that healthcare providers and patients have divergent definitions of what health literacy entails.

“Self-medication remains common on Kenya due to the costs associated with seeing a doctor or going to the hospital. Many people also share prescription medicines with other people in their household, which is wrong.”

Dr. Sylvia Opanga, PhD
Senior Lecturer, Clinical Pharmacist,
and Researcher at University of Nairobi

“We have to deal with a lot of misinformation; especially at the start of the COVID-19 pandemic people were scared and came to us with a lot of questions. However, we also observe that not everyone is receptive to the advice we might give them, and there is still a lot to be done to educate people in general.”

Dr. Nadia Rizvi
Pharmacist in Kenya

“Non-compliance is a big problem with patients, because patients are not involved in their care. The concept of self-care it's hard to sell to the public as they perceive success in getting care at the clinic. Most people also do not know that pharmacies sell over-the-counter medicines as well as vitamins, supplements, and minerals.”

Dr. David Odhiambo
Pharmacist in Kenya

In 2017, Kenya adopted HIV testing guidelines, including self-testing to help reach the approximately 20% of people who are HIV-positive without knowing it.^{499 500}



SELF-CARE HEALTH POLICY

Dr. Salim Hussein, Head of the Department of Primary Health Care, Ministry of Health, Kenya, said self-care appears by proxy in most of health policies, often through concepts such as people's empowerment: **“In communities, there are volunteers and assistants going to households every month. They help people maintain their health, including good hygiene, sanitation, the management of non-communicable diseases when relevant, and determine when people need to see a doctor.”**

Primary healthcare networks play a key role. The government has launched many programs at the community-level to empower and educate people about their health. The Kenya Primary Health Care Strategic Framework launched in 2019 emphasizes multidisciplinary care teams that work closely with patients to empower them, and places a greater focus on prevention and health promotion than previously.⁵⁰¹ The Kenya Primary Health Care Strategic Framework established Primary Health Care teams (PHC teams or Multidisciplinary Team (MDTs)) to ensure a more horizontal and holistic approach to patient care. The same framework suggests Primary Health Care teams can “promote wellness, provide services, respond to health needs of the population and work with other sectors and are the principal entry route health services from the community to other levels of care.” The document also states that “through digital and other technologies, the individuals and communities will be enabled to identify their health needs, participate in the planning and delivery of services and play an active role in maintaining their own health and wellbeing.”

The Kenya Community Health Strategy (2020-2025) states that primary care is “is essential health care based on practical, scientifically sound and socially acceptable methods and technology, made universally accessible to individuals and families in the community through their full participation and at cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination.”⁵⁰² The goal of the Strategy is empowering individuals, families,

and communities to attain the highest possible standard of health with the strengthening of community health service delivery across all health domains towards the attainment of strong, equitable, holistic and sustainable community health structures. The National Community Health Digitization Strategy (2020-2025) primarily focuses on using digital tools to support data collection and strengthen community health service delivery and data management, rather than how individuals can use them to support their own health management.^{503 504}

“In communities, there are volunteers and assistants going to households every month. They help people maintain their health, including good hygiene, sanitation, the management of non-communicable diseases when relevant, and determine when people need to see a doctor.”

Dr. Salim
Head of the Ministry of Health
Department of Primary Health in Kenya

Kenya's Health Policy (2014-2030) calls on “the sector [to] ensure that households are empowered to take responsibility for their own health and well-being, and are facilitated and capacitated to participate actively in the management of their local healthcare systems.” It also “recognizes the role an individual plays through adoption of appropriate health practices and healthcare-seeking behaviors as key in the realization of the country's health goals.” The document suggests improving literacy among women should be a priority, given the impact this can have on their children's survival and health. The National Strategic Plan for the Prevention and Control of NCDs 2021-2026 does not mention any self-care concepts but recommends strengthening health promotion and prevention campaigns to support behavioral change. However, the strategy targets changes toward the healthcare system

level, rather than the family and individual level, while self-management and self-monitoring are completely absent.⁵⁰⁵ In 2017, the government issued National Guidelines for Healthy Diets and Physical Activity.⁵⁰⁶ The Kenya National Violence and Injury Prevention and Control Action Plan 2018–2022 includes recommendations about the prevention of domestic incidents, including cooking burns and drowning.⁵⁰⁷ In 2018, the government launched a Physical Activity Action Plan, which aims to raise awareness of the importance of physical activity to maintain good health, and recommends strengthening physical education programs in schools, and “review[ing] existing urban design, transport and sports sector policies and identify those that can be utilized to increase population physical activity and identify new policies and or legislation that need to be developed.”⁵⁰⁸ Physical activity is recognized as an efficient way to prevent chronic diseases and improve the lives of people living with those diseases. The Menstrual Hygiene Management Strategy 2019–2024, which targets schools and other institutions, also outlines self-management concepts and the importance of menstrual hygiene education for everyone to improve health and wellbeing of women and girls and combat stigma.⁵⁰⁹ The National Policy on Older Persons and Ageing aims to develop programs that support self-reliance in older people.⁵¹⁰ Among the health policy documents examined in this Index for Kenya, we found that prevention, health education and other self-care concepts are not core components of current health strategies, as the overarching goal remains improving access to care in clinics and hospitals.

Our research suggests most health prevention and promotion programs are conducted by civil society, international bodies, and companies. One example is Population Services Kenya (PS Kenya), the leading social and behavior change, social marketing & franchising organization in Kenya. The group has 31 years of experience measurably improving the health of Kenyans by supporting the Ministry of Health (MoH) in addressing public health priorities in HIV& TB, Malaria, Reproductive Health, Maternal Health, Child Health, Water and Sanitation, Nutrition and Non-Communicable Diseases. PS Kenya uses private sector techniques to

make health markets work for consumers and encourages healthy behavior through human behavioral dynamics. The organization has extensive experience promoting the adoption and maintenance of healthy behaviors in the country.⁵¹¹ Historically, many health prevention campaigns have focused on communicable diseases such as HIV and malaria, maternal and child health, or sexual and reproductive health. Fighting antimicrobial resistance and the use of antibiotics by people without a prescription is also a core priority for the Ministry of Health.⁵¹² ^{513 514} As a result, several campaigns have been launched to educate the public about the risks of self-prescribing for antibiotics and consuming drugs that can lead to addiction, such as Codeine.

According to experts, resources and digital tools that could support self-care are still rare. In a Digital Self-Care report published by the Self-Care Trailblazer Group, self-care is associated with sexual and reproductive health and provides the example of Jojo, a WhatsApp-based contraceptive advice and product delivery service connecting young women in Nairobi, Kenya with experienced clinicians through live chat.⁵¹⁵



In 2022, Kenya’s Pharmacy and Poisons Board released a registry for herbal products. The document defines such products and provides technical guidance for registering them with the Pharmacy and Poisons Board.⁵¹⁶ TCM use is most prevalent in rural areas of Kenya, but there is little or no scientific or medical credence, nor any integration into the national healthcare system. As such, there is little regulation of these products, but there are currently efforts to change this through national policy and programs.

The National Policy on Traditional Medicine and Medicinal Plants, for example, was drafted in 2005, but has yet to be passed as legislation. The Kenyan government previously took a conservative approach, with efforts to preserve traditional and indigenous practices, including TCM, solidified by the National Policy on Traditional Knowledge, Genetic Resources, and Traditional Cultural Expressions (2009).⁵¹⁷ However, there has been a shift towards proper regulation regarding the use and sale of TCM. This is exemplified through the recent Health Act 2017; Section X detailed plans for creating such a framework and regulatory body. It also



included plans to integrate TCMs into the wider healthcare system.⁵¹⁸

Today, herbal medicines are unregulated and can be acquired OTC, with no national pharmacopeia. The Kenya Medical Research Institute (KEMRI) recently established the Center for Traditional Medicine Research to help ensure the quality and standardization of herbal medicine products. A registration system for herbal medicine practitioners has also been established by the Kenyan Office of Sports, Culture, and Heritage.⁵¹⁹ The Health Bill 2015 proposed an amendment regarding the regulation of herbal medicine that, if adopted, would further help in this regard.⁵²⁰

An opportunity exists to develop an expert review committee in Kenya, bolstered by the recent collaboration between WHO and Africa CDC on traditional therapies for COVID-19.⁵²¹

REGULATORY ENVIRONMENT

In Kenya, the Pharmacy and Poisons Board (PPB)⁵²² regulates the practice of pharmacy as well as the manufacture and trade of drugs and poisons. Regulators follow the same process to register both prescription and OTCs.^{523 524} Advertising rules vary for both categories, and advertising for OTCs is subject to pre-review by the PPB.⁵²⁵ Registration takes between 18-24 months. Food supplements and medical devices such as thermometers and condoms follow different schedules.⁵²⁶ The registration of traditional and complementary medicine is separate, requiring less than 24 months according to industry experts.⁵²⁷

OTCs are only available in pharmacies in Kenya,⁵²⁸ though many unregistered stores sell drugs including antibiotics and a growing number of people buy drugs over the Internet. Advertising is restricted to OTC products on TV, radio, Internet banners, newspapers, magazines, and billboards. Pharmacists in Kenya are authorized to vaccinate people and conduct other drug administration activities, though interviewees said this remains a gray area. Nevertheless, experts said regulations have improved in recent years.

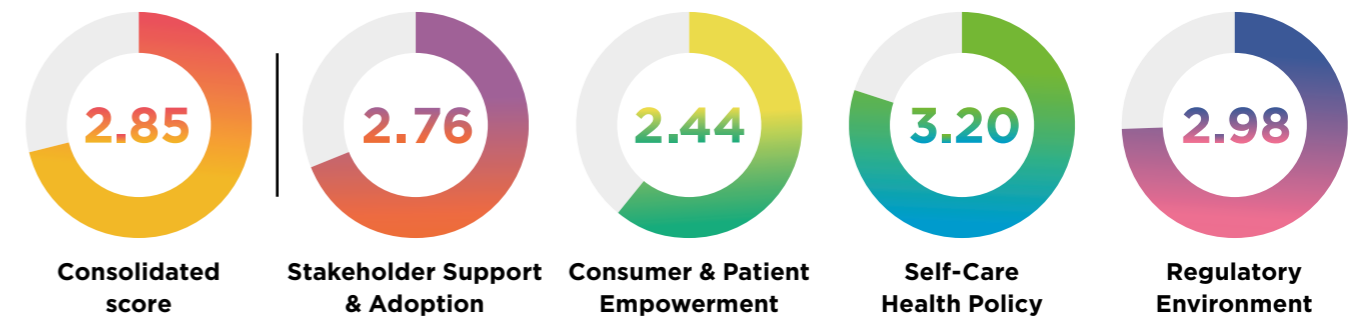
In 2018, the Kenyan Pharmacy and Poisons Board (PPB) issued a regulation to restrict the sale of medicines containing codeine to curb abuse and addiction.⁵²⁹ Cough syrups containing codeine had become a favorite due to restrictions on pure codeine.^{530 531} To reduce antimicrobial resistance and addiction to codeine, the government has enacted more restrictions and “reverse switches” than other countries covered in this Index. The process for switching from “prescription” to “non-prescription” status is detailed in the Guidelines on Medicines Evaluation and Registration.⁵³² Many drugs already benefit from OTC status in Kenya, and price controls are in place for essential medicines, including a number of OTC products.⁵³³

Interviewees said that despite good regulations in place for products, pharmacy practice is not well-regulated. This contributes to self-prescription of antibiotics, the buying of traditional and complementary medicines that are not controlled, and overall lack of guidance for patients.

Mexico

COMPARATIVE SCALE

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



STAKEHOLDER SUPPORT & ADOPTION

The guidelines for the *“Diagnosis and Treatment of Arterial Hypertension in the First Level of Attention”* highlight the need to help patients change their lifestyle habits to be healthier. Eating healthy, practising physical activity regularly, and other non-pharmaceutical treatments are emphasized.^{534 535}

These habits are also mentioned in guidelines for cardiovascular risk and the Detection and Stratification of Cardiovascular risk factors guidelines.^{536 537 538} The medical guidelines for the diagnosis and treatment of diabetes mellitus type 2 also highlight the need for behavior change. However, these guidelines do not mention self-care and other concepts such as self-management. In 2011, the Mexican government published a guide for patients with diabetes, “aimed at people who have risk factors for various conditions related to obesity, diabetes and cardiovascular diseases.” The guide highlights the importance of taking emotional support and social connectivity into account in preventing and treating these diseases.⁵³⁹ The Mexican Diabetes Association publishes about self-care and diabetes regularly.⁵⁴⁰ The National Congress of Diabetes of 2022 included dedicated sessions and workshops designed for patients and their families covering self-monitoring, self-management, behavior change and other self-care ‘tips’.⁵⁴¹ In the same Congress, sessions aimed at healthcare professionals included topics on patient empowerment, the prescription of physical activity for behavior change, and diabetes education for patients.⁵⁴² Previous Congresses also included sessions about self-management for patients and

behavior change, including calorie counting, tips for healthy cooking, foot care, and more.⁵⁴³

Mexico has extensive guidelines for primary care, specialized by condition and age group – for example, the prevention manual and self-care for older adults, the guide for the Prevention and Care of Falls in the Elderly Person, and the Manual of Operation for Interventions against Overweight and Obesity within the framework of the National Agreement on Food Health.^{544 545 546} The Pan American Health Organization (PAHO) has published multiple guidelines for cardiovascular diseases, emphasizing the importance of self-management and patient counseling for behavior change.⁵⁴⁷ However, self-care and its aspects remain absent from Mexican cardiology congresses.⁵⁴⁸

Our survey found more than 90% of healthcare providers said that self-care is included in their place of work, showing they may practice self-care despite the lack of official guidelines. Additionally, 97% said self-care is a core component of their practice.

Overall, more than half of healthcare providers agree health outcomes improve when patients are empowered with at-home care plans for managing chronic conditions.



“Diabetic patients are not told that medications are supplements to the necessary changes in a good diet and a significant increase in physical activity. From my experience as a practitioner, very often, people only assimilate the importance of medications.”

Prof. Sergio Galán Cuevas
Research Professor in the Faculty of Psychology at the Autonomous University of San Luis Potosí in Mexico

Self-care appears in a number of government documents, in particular the National Institute for Older Adults has published many blog pieces about self-care for older persons and their caregivers over the years.^{549 550 551 552} In 2019, for World Health Day, the Institute of Security and Social Services for State Workers ran a campaign about self-care



specifically. Specialists from the Institute at the time affirmed that more than 60% of the success to increase well-being lies in self-care and prevention.⁵⁵³ The same Institute more recently recommended emphasizing self-care measures to prevent respiratory diseases in low temperatures.⁵⁵⁴ On average, 57% of Mexicans go to check-ups and preventative visits to physicians, compared to 70% in other LATAM countries – something that policymakers would like to change. More than 15 million Mexicans go to the health system for common illnesses such as flu, diarrhea, muscle pain and headache; and 7.5 million Mexicans seek treatment in the public sector for the common flu, which implies a cost of one thousand 25 pesos for the institutions, against the OTC treatment of only 32 pesos.^{555 556}

A study from 2018 by AFAMELA found that every 1\$ MXP spent among the four categories of OTC medicines for acute non-serious clinical conditions allows the optimization of approximately \$5 MXP by the public health sector.⁵⁵⁷

Though not government-supported, policymakers are aware of AFAMELA’s self-care campaign entitled “Ve Más Por Ti” (in English, “Look for Yourself”), which launched on International Self-Care Day, on 25 July 2021. Nevertheless, policymakers take a risk-adverse approach to self-medication. In 2010, the Mexican government ran a campaign against self-medication, which according to experts created confusion because the campaign mixed together drugs that should not be taken without a prescription (ie, prescription drugs such as antibiotics) and OTCs that can be accessed without a prescription.⁵⁵⁸ To date, public health messages still don’t really distinguish between antibiotics and other drugs that shouldn’t be taken without a prescription, and OTC products that can be accessed without a prescription.



“It’s anchored in the Mexican culture that it’s better to prevent than to regret. The government has been investing heavily in health promotion and prevention – including good labeling, programs targeted at children to eat healthy, brush their teeth etc. However, we notice that most people still rely heavily on the Internet for health information, and tend to wait until their health deteriorates to visit a doctor.”

Senadora Margarita Valdez Martínez
President of the Health Commission, Senate Chamber of the Government of Mexico

respondents also speak with healthcare providers about the use of traditional or complementary medicines, including vitamins, minerals, and supplements at every visit, similar to the findings in our healthcare provider survey. A large majority of Mexicans said they feel well-informed, supported, safe and empowered to undertake at-home care regimens for preventing illness, a higher proportion than all other countries surveyed except Germany. A large majority (80%) feel educated and empowered to seek out self-care products and practices because of supportive campaigns and programs in their communities, and also feel well-informed and empowered to undertake their own at-home care regimens for managing chronic and acute conditions.

A survey conducted by ILAR found that majority of participants agreed that self-care was very relevant (52%) or relevant (32%) during the Covid-19 pandemic. However, less than half of the respondents feel that they have sufficient knowledge and tools at their disposal to practice self-care properly.⁵⁵⁹

Our consumer survey shows Mexicans are keen on engaging in more self-care activities, with about half of respondents saying their healthcare providers speak with them at every visit about using self-care products and practices as part of an ongoing plan for wellness and optimum health. Half of

“In Mexico, [we should] not assume that everybody already has access to healthcare services. For these people, self-care might sound like we are leaving them take care of themselves all by their own, or like we are assuming that everyone already has access to care and that self-care comes as nice addition.”

Jorge Espinosa
Public Policy Expert, Author and Former Legal Director at the Ministry of Health, Mexico

CONSUMER & PATIENT EMPOWERMENT

In expert interviews, we heard that physical exercise and healthy nutrition are not automatically associated in people's minds with self-care, which still tends to be associated with other self-care activities such as getting a massage or taking a bubble bath. Mexicans have low consumption of fruits and vegetables, and low levels of physical activity compared to other countries.^{560 561} As a result, Mexico has one of the highest obesity rates in the world; 45% of the male population is overweight, compared to an average of 36% in Latin America and 41% for the OECD.⁵⁶² Mexican women have an obesity rate of 43%, 11% higher than the regional average, and 17% higher than the OECD average.⁵⁶³

Health literacy is a policy priority in the country. The PrevenIMSS, the Mexican Institute of Social Security (IMSS) for Integrated Health Programs, takes the lead on this important topic. Mexico school curricula are being updated to teach self-care, including healthy lifestyle habits, hygiene, healthy food, and physical activity. The "Vida Saludable" campaign educates schoolchildren about nutrition and child obesity rates, while integrating social and emotional learning (SEL) concepts into the classroom.^{564 565} There are also ongoing conversations within the Mexican Secretariat of Health about the launch of a new initiative with the Education Secretariat and Sportive Federations which should support health literacy efforts all over the country.



"Overall, we do not carry out sufficient self-care activities in a timely and appropriate manner. The greatest responsibility for self-care falls on the personal level, however we should not rule out the responsibility of the health and education sectors. It is necessary to implement initiatives that target different age groups to support more self-care."

Prof. Sergio Galán Cuevas
Research Professor in the Faculty of Psychology at the Autonomous University of San Luis Potosí in Mexico

In 2018, the Mexican government included self-testing for HIV as part of its strategy to reduce HIV/AIDS and increase access to screening services, indicating a willingness to adopt a proactive self-care model. However, actual access to self-testing kits for HIV in Mexico remains unavailable.⁵⁶⁶

Other self-care opportunities include private sector-led initiatives with organizations like COPARMEX, one of the largest trade associations in Mexico.⁵⁶⁷ Self-care is high on COPARMEX's agenda, and it has been working with companies across a range of sectors employing more than three million people to promote healthy behaviors at the workplace and encourage employees to check-in with their doctors and ensure they are up-to-date with their medical appointments as a preventative measure.

"What we see is that there is not yet a common understanding of what self-care means across stakeholders, but there is willingness to talk about it across the board. So far, self-medication hasn't been part of the conversation though."

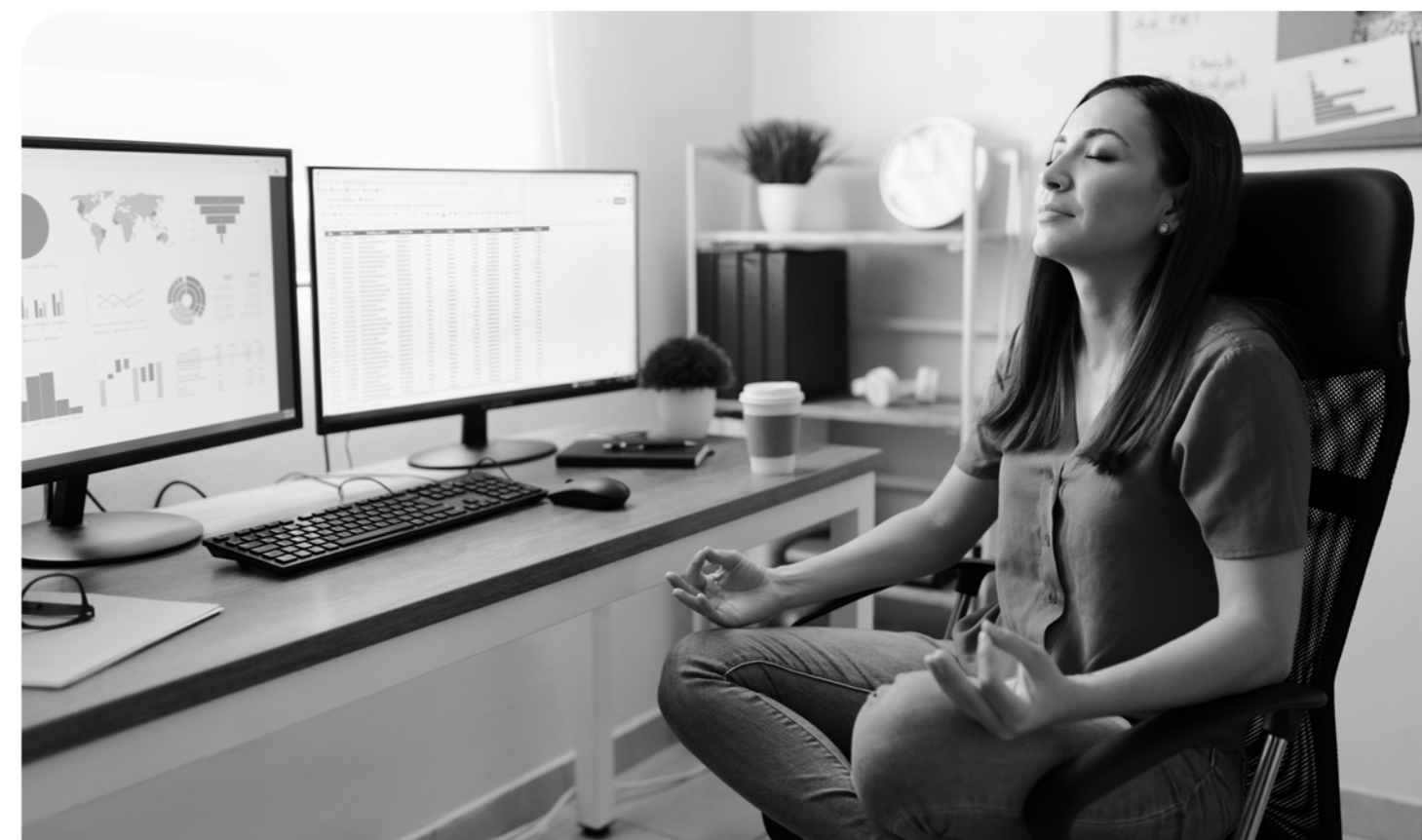
Rodrigo Oria y Anaya
President of the Health Committee at COPARMEX, Mexico (Association of entrepreneurs in Mexico)

SELF-CARE HEALTH POLICY

Self-care appears in the Primary Healthcare methodological and operational framework (**Atención Primaria de Salud Integral e Integrado México (APS-I Mx)**) which was launched in 2020. The framework emphasizes multi-disciplinary care teams and the role of communities: "Community participation and organization seeks to create formal links with the communities so that they are taking advantage of available resources and achieving healthy environments for individuals, families and include participation in decision making. [...] This includes supporting people in making decisions based on evidence for strengthening self-care."⁵⁶⁸ However, these concepts are absent from the Health Sector Program 2019 - 2024, an ambitious plan to integrate all health services and expand free health services to all Mexicans.⁵⁶⁹ Overall, while the concept of self-care is not a central concept in current health policies, prevention is core to health policies in Mexico.

In 2014, Mexico launched a comprehensive National Strategy for the Prevention and

Control of Overweight, Obesity and Diabetes targeting health promotion, educational communication, better access to diabetes and obesity drugs, and stricter labeling and advertising rules for unhealthy food and beverages.⁵⁷⁰ In 2020, the government launched a new front-of-package labeling system to show whether a product includes excessive sugar, sodium, saturated fats, trans-fats and/or calories - the most advanced and comprehensive regulation worldwide.⁵⁷¹ Overall, policymakers have been investing heavily in prevention for the past two decades. In 2018, the federal government ran a campaign entitled "Adopt healthy lifestyles and take care of your health" (In Spanish, **Autocuidado de la Salud**).⁵⁷² In 2015, the government ran a "self-care during the summer holidays" campaign within the framework of Operative Summer.⁵⁷³ A specific self-care campaign was run in indigenous communities in Oaxaca, in 2014.⁵⁷⁴



Recently, the most important government efforts related to self-care include:

1. The launch of the specific guidelines for family health in 2021, which include a major prevention component⁵⁷⁵
2. The launch of the national campaign “Have you anticipated?” (in Spanish “¿Ya PrevISSSTE?”) in July 2022 by the Institute of Security and Social Services for State Workers (Issste)⁵⁷⁶
3. The Safe and Healthy Work Environments initiative (ELSSA)⁵⁷⁷, and the National Agreement for the Health, Safety and Well-being of Working People, which will be signed with the State Governments and the IMSS^{578 579}
4. The Anti-COVID-19 self-care campaign to prevent new cases, including federal state campaigns. A specific study about the impact of these campaigns was published by the National Institute of Public Health⁵⁸⁰
5. The government strategy for COVID-19 community prevention⁵⁸¹

More recently, the government took part in a self-care campaign through its PrevenIMSS Strategy, run by the Mexican Institute of Social Security (IMSS) for Integrated Health Programs.⁵⁸² PrevenIMSS aims to promote co-responsibility in health, embedding many self-care concepts. This includes recommendations on healthy eating, health education, physical activity, and vaccination outlined in the PrevenIMSS Health Care Guidelines.⁵⁸³ One of IMSS’s goals is to promote health and self-care of people before birth, with preventative health actions prior to and during pregnancy. In 2013, the Institute led a campaign aimed at curtailing the obesity epidemic called “Check, Measure and Move” (in Spanish, “*Chécate, Mídete, Muévete*”).⁵⁸⁴ Reducing obesity has remained a priority. Further measures include the development of an online portal to improve health literacy with modules on cancer, hypertension, heart health, addiction, diabetes, and influenza.⁵⁸⁵



Mexico has the second-highest rate of obesity in the Latin America after the Bahamas.⁵⁸⁶ Several initiatives are combatting obesity by encouraging Mexicans to eat healthier food and perform more physical activity. For example, Mexico issued “Dietary and physical activity guidelines in the context of overweight and obesity in the Mexican population” in 2015, which includes recommendations for the general population. **In 2020, the Mexican government launched a new, massive health and nutrition campaign entitled “La Nueva Mesa” (the New Table), with the goal of improving the nutrition of Mexicans.** The campaign encourages healthier eating habits by targeting processed and imported foods and calls on Mexicans to be more physically active. The campaign, a collaboration between the Secretariats of Agriculture, Economy, Education, Health, and Wellness, and the Secretariat of Consumer Protection, runs on radio, television, and social media outlets.^{587 588} Reducing overweight and complications linked to obesity have been high on the political agenda until today.

“Ve Más Por Ti”, AFAMELA’s flagship campaign, aims to raise awareness among Mexicans about the importance of self-care to improve health care. The campaign offers tools for people to create their own self-care strategy, including tips to improve health literacy, self-awareness, physical activity, healthy nutrition, and good hygiene, while avoiding risks and quitting unhealthy habits. Resources about smart self-medication are available, including how to read labels, information about adverse drug reactions, and guidance about how to store medicines at home.⁵⁸⁹ The organization hopes to include more about self-care for chronic conditions in the future. AFAMELA also collaborates with a group of physicians to raise awareness about self-care among healthcare providers. When the COVID-19 pandemic started in 2020, the government issued self-care advice and emphasized the benefits of healthy foods in boosting the immune system.^{590 591 592} The government also ran an aggressive campaign to encourage people who are obese and overweight to get vaccinated against the virus.⁵⁹³



In Mexico, complementary and traditional indigenous medicine are recognized as strengthening the national health system. Currently, the General Law of Health includes provisions for traditional and complementary medicine (TCM), but reform is underway to push TCM policy forward to ensure safety and efficacy.⁵⁹⁴ Specifically, a 2021 conference to revise Article 13, A, section IV called for establishing the recognition of traditional indigenous and complementary medicine.⁵⁹⁵ Federal responsibilities include increased surveillance and regulation of complementary medical practices as well as expanded registration and accreditation programs for traditional and indigenous practitioners.

Herbal medicine can be prescription, non-prescription, and supplements, as dictated by Mexico’s pharmaceutical law.⁵⁹⁶ Three national pharmacopeias exist, one of which focuses on medicinal plants and another on homeopathy. Manufacturing regulations, including GMP, for herbal medicines fall under regular pharmaceutical products to ensure standardized quality.

REGULATORY ENVIRONMENT

COFEPRIS is primarily responsible for the regulation and evaluation of all health products in Mexico.⁵⁹⁷ Prescription products are divided into four groups. OTCs are classified as Group 5 (pharmacy only) or Group 6 (general sale). Only group 6 can be sold in non-pharmaceutical outlets, such as convenience stores.

The Rx to OTC switch process is formalized by regulation. Article 17 bis of the General Health Law (LGS) indicates that COFEPRIS must regulate and evaluate health products.⁵⁹⁸ The Federal Commission for the Protection against Sanitary Risks (COFEPRIS) controls

the switch process from Rx to OTC. COFEPRIS is a decentralized, autonomous body run by a commissioner appointed by the Mexican President.⁵⁹⁹ COFEPRIS has a 4-stage process when evaluating the switch from Rx to OTC:

1. Registration and notification
2. Evaluation and questions
3. Risks evaluation
4. Regulatory development



In practice, the average time for COFEPRIS review and approval varies from 12 to 18 months. Several criteria must be met. Key qualification criteria include: 1) the product has been approved and marketed in Mexico for at least 5 years; 2) it must have low risk of harm when used without a doctor's guidance; 3) it is indicated for the treatment of signs and symptoms that are readily detectable by the patient or caregivers without the need to be monitored by laboratory examination or by a physician; 4) it has a low potential risk of off-label use or overdose. Most importantly, initial change can only take place for prescription drugs under Group 4 to OTC Group 5, which are sold only in pharmacies.

Mexico has seen no recent switch activity. Unlike many other countries in LATAM, Mexican OTC sales benefit from the availability of many brands in the mass market. The last public update about switches included 10 different products during the last administration 2012-

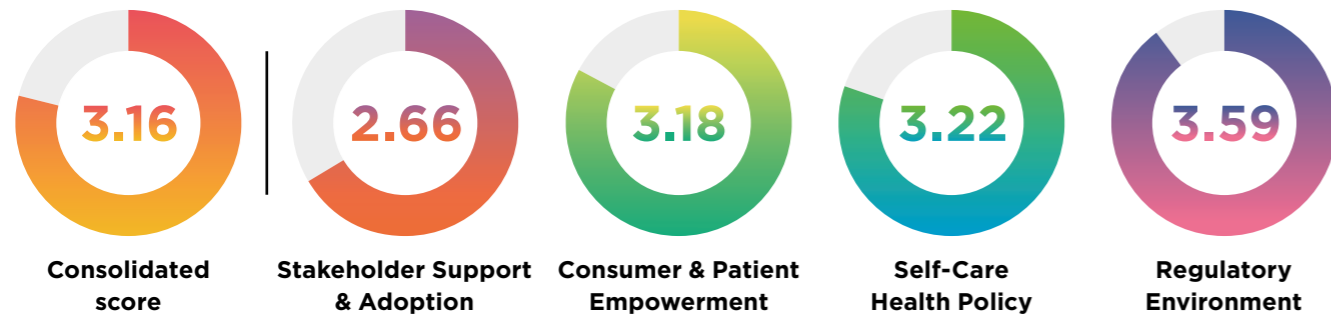
2018. COFPERIS stopped the publication about these submissions in 2019. OTC association AFAMELA is campaigning for medicines that treat conditions such as high blood pressure and cholesterol to be switched, owing to the aging Mexican population. Moreover, increasing numbers of retailers are offering online sales. Mexico has also adopted a dual system for labeling drugs, with both e-labeling and paper labeling.⁶⁰⁰

Drug advertising in Mexico is subject to the Regulation of the General Health Law on Advertising. The main restrictions pertain to making false claims about a drug's effects or ingredients. Direct-to-consumer advertising of prescription drugs in Mexico is not permitted, as COFEPRIS felt this could lead to too much self-prescribing. Advertising of herbal or OTC medicines is permitted with permission from COFEPRIS, subject to certain parameters. COFEPRIS must respond to a request within five days.

Singapore

COMPARATIVE SCALE

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



STAKEHOLDER SUPPORT & ADOPTION

Singapore’s health system aims to provide good health outcomes that are affordable and accessible.⁶⁰¹ Its foundational ethos emphasizes personal responsibility to attain optimal cost and quality in care delivery.⁶⁰² Due to the country’s rapidly greying population, increased chronic illness load, and rising healthcare expenses, the Ministry of Health (MOH) in 2016 introduced the “Three Beyond” strategy – namely, beyond healthcare to health, beyond hospital to community and beyond quality to value.^{603 604 605 606} The “beyond healthcare to health” strategy aims to address long-term healthcare demands sustainably by promoting healthy lifestyle choices and early interventions to prevent diseases and sustain individuals in good health, all of which underpins the importance of self-care. The government recognizes that healthcare delivery guided by individuals, families, and communities is often the most effective and inexpensive, while fostering a greater sense of wellbeing.⁶⁰⁷

Stakeholders are generally aware of the importance of self-care in the care continuum, and they use it to varying degrees. The MOH and Health Promotion Board (HPB) are the main bodies driving key healthy living policies and initiatives such as the Healthier SG, War on Diabetes and the National Steps Challenge. Since 2015, HPB’s National Steps Challenge has offered free step counters and rewards to entice people to walk more.⁶⁰⁸ HPB also collaborated with major technology firms like Fitbit and Apple to better promote and sustain healthy lifestyles through digital technologies, data analytics, and behavioral cues.^{609 610} To enable diabetic patients to take control of their treatment

journey, MOH created a Patient Empowerment for Self-Care Framework as part of the War on Diabetes initiative in 2019.⁶¹¹ In 2020, the Office of Healthcare Transformation (MOHT) of the Ministry of Health and HPB developed Mindline.sg as a one-stop web-based platform to empower people to improve their mental health through online self-assessment and self-help resources and to avoid stigma associated with help-seeking when COVID-19 escalated mental health challenges.^{612 613}



Healthcare providers have a high level of support and adoption of self-care products and behaviors. Although the word “self-care” is not directly referenced in local clinical care guidelines and local congress agendas, self-care elements are described in the non-pharmacological segment of healthcare professionals (HCP) practice guidelines, which suggest counseling tips on lifestyle modification and emphasize adherence to medications, as well as role of HCP.

At the patient and consumer levels, support and adoption of self-care practices and products could be improved. To assess the effectiveness of self-care in maintaining health and coping with illness and impairment among older persons, the Tsao Foundation carried out (with government financing) the community development project Self Care on Health of Older Persons in Singapore (SCOPE).⁶¹⁴ Singapore adults consume only 67% of the recommended intake of fruits⁶¹⁵ and 51% of recommended intake of vegetables.⁶¹⁶ Active membership in sport or recreational organizations is at 8.3% per World Values Survey.⁶¹⁷ According to the National Population Health Survey 2020, just one in three residents regularly exercise in their free time, even though 8 out of 10 people get enough overall physical activity.⁶¹⁸

CONSUMER & PATIENT EMPOWERMENT

In 2009, Singapore embarked on the “One Patient, One Health Record” effort to implement the National Electronic Health Record (NEHR) system. This ambition subsequently grew to “One Patient, One Care Plan” in 2020 with the roll out of Next Generation Electronic Medical Record (NGEMR), which covers the entire patient journey from point of admission to discharge and includes both medical and administrative data across different healthcare provider systems (not OTCs and TCMs).^{619 620} As of 2022, more than 1,700 health care institutions participate in NEHR.⁶²¹

Health Promotion Board designed health-promoting school programs across pre-schools, primary schools, secondary and junior colleges, and tertiary institutions.^{622 623 624 625} A variety of programs help students learn about nutrition, physical activity, substance abuse, mental health, sexuality, tobacco control, HIV/STI prevention, integrated health (annual health screening, immunization, and dental services), and targeted intervention (weight management or addictions). The programs are differentiated for students, educators, and parents.

In the Ministry of Education’s (MOE) Holistic Health Framework, schools provide opportunities for every student to develop the skills and attitudes to live healthily and build motivation to sustain a healthy lifestyle even after they leave school.⁶²⁶ Schools are guided by three principles: total well-being, inclusion, and quality delivery. MOE is also enhancing the professional development of teachers in mental health literacy. This includes helping teachers understand and recognize symptoms related to common mental health issues and suicide, equipping them with strategies to de-escalate strong emotions and impulsive behavior and facilitating classroom conversations on mental health with sensitivity.⁶²⁷

Self-testing kits for human papillomavirus (HPV) and sexually-transmitted infection (STI) have been advertised by some private health care groups, but are not widely available due to high prices; one HPV kit costs about SGD\$200 while an STI panel costs about SGD\$70.^{628 629}



The general public can access therapeutic product information from the health authority's website.⁶³⁰ In addition, the government has set up a dedicated one-stop health portal called HealthHub to provide information on how to treat minor illnesses and manage chronic diseases.^{631 632}

Residents can access some parts of their health record by logging onto HealthHub. However, the data tends to be hospital-centered, and less tech-savvy people may not be able to access their digital health information. Local health authority is progressively implementing e-labelling on health products. Since April 2021, e-labelling has been allowed for prescription products, and since March 2022, e-labelling has been expanded to complementary health products such as health supplements and traditional medicines on voluntary basis.^{633 634}

Telehealth services are provided in both public and private sectors. In the national telemedicine guidelines, domains of telemedicine include tele-collaboration, tele-treatment, tele-monitoring, and tele-support.⁶³⁵

SELF-CARE HEALTH POLICY

Several policies and programs have been established to encourage self-care. In 2012, the Healthcare 2020 Master Plan⁶³⁶ was released with the goal of enhancing Singapore's healthcare system's accessibility, quality, and affordability. In 2014, the Health Living Masterplan was introduced to promote healthy living as a natural, easy, and accessible option for all Singaporeans.⁶³⁷ The program aims to bring healthy living options to the "doorstep" of every home, business, and school in Singapore, encouraging Singaporeans to embrace healthy habits.

In 2016, the War on Diabetes was declared to mobilize a national effort to combat the disease.^{638 639 640} The National Diabetes Prevention and Care Taskforce was established to spearhead efforts in three priority areas: (1) healthy living and prevention; (2) screening and follow-up; and (3) disease management. This effort is supported by public education, data analytics, and research, as well as stakeholder mobilization. In the same year, the MOH Action Plan on Successful Ageing was launched as the nation's blueprint to grow old with confidence.⁶⁴¹ The Action plan seeks to ensure opportunities for all ages, inter-generational harmony and understanding, and communities designed for seniors to age gracefully among family, friends, and neighbors. The plan includes a prevention education program to reduce the risk of seniors falling and hurting themselves.

In 2020, the Healthcare Manpower Plan was rolled out to help enable employers, unions, and individuals to develop the healthcare workforce of the future, provide exciting career opportunities in healthcare, and deliver Better Health, Better Care and Better Life for all Singaporeans.⁶⁴²

In 2022, MOH released the national population health strategy known as "Healthier SG". Its goal is to encourage Singaporeans to adopt healthy lifestyles by utilizing the infrastructure, technology, and community power to create One Family Physician and One Health Plan for everyone.⁶⁴³

At the same time, the Ministerial Committee of Ageing (MCA) announced plans to refresh the Action Plan for Successful Ageing to ensure it continues to meet the needs of seniors. The refresh should launch by the end of 2022 and will focus on the three "C"s of Care, Contribution and Connectedness.⁶⁴⁴

Local pharmacists' associations organize annual campaigns during September's Pharmacy Week to communicate key messages to public such as: Own your health, Know Your Medicines, Just Ask Your Pharmacist.^{645 646}

The Health Promotion Board designed My Healthy Plate⁶⁴⁷ as an easy-to-understand visual guide to help people adopt healthier eating habits. This can enable individuals to better manage their weight and prevent chronic diseases. The program encourages people to prepare plates with a 25% portion of wholegrains, a 25% portion of protein, and a 50% portion of fruits and vegetables. In HPB's Eat-Drink-Shop Healthy Challenge,⁶⁴⁸ participants earn health points on a digital app and sure-win rewards when they purchase healthier choice items from participating retailers. Programs like the Healthier Choice Symbol Programme and the Healthier Dining Programme⁶⁴⁹ enable Singaporeans to make healthier dining choices easily, regardless of whether they choose to dine in or out.

The National Steps Challenge, the world's first population level tracker-based physical activity initiative, encourages Singaporeans to move more. By leveraging behavioral insights

and technology, the Challenge encourages Singaporeans to take more steps and clock Moderate to Vigorous Physical Activity daily, rewarding them for reaching different physical activity milestones. HPB also runs a variety of programs under "MOVE IT" that make staying active fun for Singapore residents of all ages, in schools, workplaces and community venues.⁶⁵⁰

HPB operates School Dental Centre to provide children with basic dental treatment. Free oral health screening is provided for preschoolers aged 3 to 4 through childcare centers.⁶⁵¹ In the community, dental screenings for the elderly under Project Silver Screen are conducted by MOH in collaboration with Temasek Foundation Cares, National Dental Centre Singapore (NDCS) and Neighborhood Health Service.^{652 653}



HPB's "I-Quit Programme" encourages people who are trying to quit smoking.⁶⁵⁴ It breaks down the quit journey into small actionable steps, empowering participants with knowledge, motivation, and support to remain smoke-free through the crucial first 28-day period. Counseling by quit advisors and pharmacists is provided for a period of 6 months to motivate participants to remain smoke-free and prevent relapse. HPB also runs smoking cessation talks at workplaces to encourage individuals to quit smoking and equip them with tools to do so.⁶⁵⁶

HPB promotes diabetes prevention through Let's BEAT Diabetes program.^{657 658} Through the catchy acronym, BEAT (which stands for 'be aware', 'eat right', 'adopt an active lifestyle' and 'take control') HPB seek to create a quick mental reminder on the necessary steps to a healthier lifestyle. In 'Screen For Life', a national screening program for cardiovascular disease (diabetes, blood cholesterol, blood pressure), cervical cancer, colorectal cancer and breast cancer, citizens are offered subsidies to encourage regular health screenings and follow-up.⁶⁵⁹



HPB recommends immunization for vaccine-preventable diseases like influenza and pneumococcal disease. The 'Stay One Step Ahead With Vaccinations' campaign aims to raise public awareness on why people should vaccinate and what vaccines do.^{660 661} Information about government subsidies and national immunization schedule are also provided. HPB also ran a campaign to raise public awareness on how infectious diseases (eg, influenza, hand-foot-mouth disease, tuberculosis, pneumococcal disease) spreads. The F.I.G.H.T campaign encouraged good hygiene habits such as frequent hand washing, use of tissues and masks, and staying home when ill.⁶⁶² As part of the Singapore's National Strategic Action Plan (NSAP) to address antimicrobial resistance, HPB's AMR campaign aims to increase public awareness on the correct use of antibiotics.^{663 664}

Chinese proprietary medicines, health supplements, and traditional medicines are regulated as 'Complementary Health Products' by HSA. Only Traditional Chinese Medicine (TCM) practitioners are currently regulated among TCM practices. The TCM Practitioners Act was passed in 2000; the TCM (Registration of Acupuncturists) Regulations in 2001; and the TCM Practitioners (Registration of TCM Physicians) Regulations in 2002. Professional associations encourage practitioners of various TCM - such as traditional Malay medicine, traditional Indian medicine, and chiropractic - to practice self-regulation. Three approved training schools provide a five-year (full time) or seven-year (part time) bachelor's degree in traditional Chinese medicine.⁶⁶⁵ The TCM Practitioners Board (TCMPB), a statutory board under the MOH, was established in 2001 to oversee practitioners' practices, the ethical code, and behavior, among other responsibilities.^{666 667 668 669}

REGULATORY ENVIRONMENT

Complete, clear information about the regulatory approval process and evaluation criteria is published on a government website.⁶⁷⁰ Guidelines on registration requirements and process for therapeutic products (including non-prescription products) and complementary health products are publicly available on HSA's website.

In 2021, HSA became the first National Regulatory Authority (NRA) and Singapore the first WHO member state to achieve Maturity Level (ML) 4 for its advanced medicines regulatory system.

This achievement came after a rigorous, comprehensive assessment by a team of 15 international assessors and 4 WHO officials using WHO's Global Benchmarking Tool. Timelines are defined, and the regulatory agency tracks its performance vs. these timelines.⁶⁷¹ The regulatory agency provides easily accessible contact information and multiple communication opportunities eg, pre-submission meetings, digital tools, follow-ups, ability to ask for scientific advice.

Complete, clear information about the drug reclassification process and decision criteria is published on a government website, though there is no data exclusivity for Rx-to-OTC switches.^{627 673 674} OTCs (under General Sales List), home monitoring devices (BP and glucometers), vitamins/ supplements/ TCMs are available in pharmacies and other retail outlets (including online), without pharmacist supervision.⁶⁷⁵ Pharmacy-only medicines require interaction with a qualified pharmacist. HSA regulates TCMs using a risk-based methodology. Traditional medicines and health supplements are complementary health products (CHP) that are governed by HSA and do not currently require pre-market approval.

Health supplements are not subject to approvals and licensing by HSA for their importation, manufacture, and sale. HSA prohibits the addition of medicinal ingredients such as steroids in health supplements. HSA also sets strict limits on toxic heavy metals in these products. Dealers (importers, manufacturers, wholesale dealers and sellers)

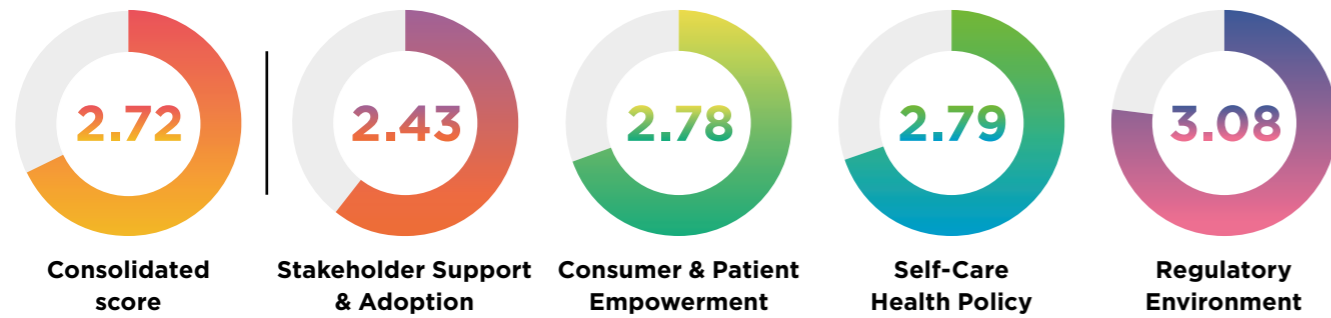
have the obligation to ensure their products are not harmful or unsafe, and that they conform with certain guidelines. HSA conducts regular post-market surveillance to ensure compliance. Advertisements and promotions of health supplements are not subject to permit approval. However, companies must ensure the advertisements comply with the principles and requirements stated in the Health Products Act (HPA) and the Regulations.⁶⁷⁶ There are no price controls on self-care products.



United Arab Emirates

COMPARATIVE SCALE

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



STAKEHOLDER SUPPORT & ADOPTION

Emirati medical societies and medical guidelines have included self-care in their discussions and sometimes treatment guidelines quite extensively. Patient education, behavior change and self-monitoring and self-management were included in the recent congresses of the Emirates Diabetes and Endocrine Society.^{677 678} The Congresses of the Emirates Family Medicine Society included a number of sessions in recent years about lifestyle changes for patients living with diabetes and obesity; the role of patients and their family in improving wellbeing; mindful eating for patients with obesity; and at-home care tips to reduce the risk of ulcers. Sessions were also held about the social and cultural barriers physicians may encounter with patients on topics such as vaccination.^{679 680 681} Cardiology congresses, on the other hand, have not featured any self-care or self-management-related sessions, though a 2021 session featured a prominent track on prevention.^{682 683 684}

New federal hypertension treatment guidelines were launched in 2019 by the Ministry of Health and Prevention.⁶⁸⁵ However, the guidelines do not cover any concepts around self-care, and only mention behavior change. We analyzed medical guidelines from the Department of Health of the Emirate of Abu Dhabi, including the latest “Scope of practice guidelines for licensed healthcare professionals (cardiologists).” For patients with heart failure, it encourages cardiologists to “educate patients and their relatives about self-care management, and the importance of adherence to therapy” and to “deliver lifestyle advice and a home-based treatment strategy to patients.”⁶⁸⁶ Another general

medical guideline for the Emirate of Abu Dhabi recommends that physiotherapists train patients in self-care and at-home management strategies, including meal preparation, safety procedures, and instructions in using assistive technology devices/adaptive equipment.⁶⁸⁷ The same Emirate issued a standard for primary healthcare services, which stipulates that physicians must provide “support required for self-management of chronic diseases by the patients or their families.”⁶⁸⁸ The Emirate of Abu Dhabi also issued guidelines for asthma management in adults, which mention self-management extensively.⁶⁸⁹ The national diabetes guidelines for the management of type diabetes mellitus, issued by the Emirates Diabetes Society in 2020, recommend that “structured education for diabetes self-management should be an integral part of diabetes care and offered to all individuals diagnosed with T2DM and/or their family members or caregivers (as appropriate).” Self-care is also cited as a key concept of comprehensive diabetes medical evaluation by history, where self-care is defined as including glucose monitoring, independency, accessibility to healthcare, support at home, and personal hygiene and oral health.⁶⁹⁰ Interestingly, Emirati guidelines stress the role of caregivers and family members in helping patients manage chronic conditions, something not mentioned in guidelines of other countries covered in this Index.

About one-third of HCPs in the UAE said they recommend patients use complementary self-care products and practices as part of treatment plans for specific medical conditions. The same trend was observed in Australia,

though HCPs in Mexico and Colombia scored the highest for this question. Based on our survey, healthcare providers are supportive of self-care. UAE is the only country where healthcare providers said they strongly agree with all the following statements: “health outcomes improve when patients are empowered with an at-home care plan for managing chronic conditions”; “health outcomes improve when patients safely use over-the-counter products as a first-line treatment for appropriate minor ailments”; “I consider self-care to be a core component of my approach to support and managing my patients.”; and “policy makers in my country promote self-care products and practices as affordable and beneficial health solutions.” Self-care as a concept is not discussed by policymakers in the country, and we were unable to locate any recent conversations on the topic.

“As nurses, we treat the patient but also provide resources that will help them to treat themselves the correct way when they are at home. We are also here to support patients psychologically and spend time with them to explain their condition to them, see in which environment the patient lives, and provide self-care advice. Nobody can self-care all the time, but we can provide them and their caregivers with resources.”

Ma’athir Salah Elshafie
Nurse in the United Arab Emirates

In our survey, 42% of respondents said they sometimes talk with their healthcare providers about the use of traditional or complementary medicines, including vitamins, minerals and supplements – comparable to Australia, but lower than Germany, (62%), Colombia (60%), Kenya (56%), Canada (52%), Indonesia (52%), India (50%), and Mexico where about half of respondents talk about it at every visit. Our consumer survey found people use self-care products on a regular basis for pain relief (39%), weight loss (34%), sleep aid (31%) and cough and cold (31%).



Experts said the extended role of community pharmacists are still not fully implemented, and there is an urgent need to develop such roles. Pharmacists support expanding their role to involve health promotion, reporting adverse drug reactions, counseling, and recommending OTC products to help customers manage their own health issues. Yet the lack of private counseling areas, service reimbursement, and the perceived resistance of physicians remain barriers to more self-care in the country. Prof Abdulmula R Abdulkarem said that **“community pharmacists are usually the first and main source of information for minor ailments and self-treated conditions, and the public in UAE trusts pharmacists to provide them with reliable and accurate information. Cost savings, convenience, and avoiding long waiting hours at the physician’s clinic are reasonable justifications why consumers and patients in UAE shift consultations of minor ailments to community pharmacists rather than emergency or general practice settings. Despite this, pharmacists are still often perceived as being solely business-oriented.”**

The concept of self-care is mentioned in some policy documents, though the concept of happiness and wellbeing have been the most prominent.

CONSUMER & PATIENT EMPOWERMENT

Studies report low levels of physical activity among Emiratis, with more and more younger people leading sedentary lifestyles.^{691 692} With this in mind, in 2017, the federal government launched a formal physical and health education curriculum in government-led schools, in collaboration with the federal Ministry of Education.⁶⁹³ The main goal is to “empower young Emirati students to take ownership of their physical education, health and wellbeing to ensure a future generation of healthy, motivated, highly educated Emiratis.”

“Physicians, and pharmacists are often convinced of the lack of basic health knowledge in UAE and often discourage self-care practices among the public.”

Prof Abdulmula R Abdulkarem



Digitalization and digital health are priorities in the country. In 2016, the Ministry of Health and Prevention (MOHaP) launched the Health Heroes App, which aims to raise awareness among children on the importance of adopting a healthy lifestyle.⁶⁹⁴ The App is part of a federal strategy to reduce childhood obesity and promote preventive health behavior in the UAE.⁶⁹⁵

The federal and local governments have invested heavily in screening campaigns for chronic diseases. The federal Ministry of Health and Prevention hosts an awareness center that is front and center on its website homepage. This tool allows people to calculate their ideal body weight and calculate calories and provides tips on healthy eating.⁶⁹⁶ To promote self-care practices and develop an effective health information system, Abu Dhabi health launched a new digital application called Malaffi in 2021.⁶⁹⁷ The app offers patients easy and convenient access to their medical records, laboratory results and medication history. Similarly, Dubai Health Authority launched an online portal called Salama that is accessible to patients and physicians.⁶⁹⁸ Salama enhances patient safety by automatically cross-referencing medication and allergy interaction to avoid medication errors. The UAE’s MOHaP developed the eEtmnan app to assist in the prevention of non-communicable diseases.⁶⁹⁹ This launch aligns with the Ministry’s efforts to develop a national strategy to combat non-communicable diseases over five years (2017 - 2021) to promote a healthier lifestyle and curb related diseases.⁷⁰⁰ To reduce the cost of health services, increase public access to health information and advice, and promote wellness and prevention, the UAE has embraced telemedicine and is developing a regulatory framework to enable telemedicine activities. UAE regulators also are developing artificial intelligence policies that can advance the wellness and prevention agenda. The UAE and India are both heavily investing in digital health solutions, as found in a recent report.⁷⁰¹ Both countries report more than 80% of their responding organizations offer patient and service user portals to access



healthcare services, and a similar level of online assessments are available. The UAE also showed high levels of adoption (>70%) for digital chronic disease management tools, digital self-help tools, and patient engagement tools, among others. Other countries included in the report like the US and the UK reported numbers that were typically half those from India and the UAE. The report also found that tools giving users direct access to self-help or care information will continue to proliferate, as will remote monitoring tools that complement and support remote care.

For now, healthcare providers’ reluctance remains the main barrier to adopting digital health tools, including online self-assessment tools, digital tools for self-help, patient engagement tools, and mobile apps to self-report problems. Greater provider and user familiarity with these solutions may increase their use in the future. User support tools, from online self-assessment to disease management tools and patient portals have increased dramatically. Other tools, including mobile sensors or wearables, have also seen rapid increases, but are still not commonplace among healthcare providers. However, our consumer survey shows hesitancy about digital health tools, with more than one-third of Emiratis saying they don’t know if they are using any currently. Moreover, our survey found about one-third of Emiratis often have problems understanding written health information, which can be a barrier to adopting the tools and resources governments have been developing. So far, there has been no study about health literacy in the United Arab Emirates.

SELF-CARE HEALTH POLICY

The government and local health authorities are running many health promotion and prevention campaigns, with a focus on physical activity and healthy eating. Considering the high prevalence of chronic diseases, especially diabetes, cardiac diseases, and overweight/obesity, encouraging Emiratis to eat better, exercise and be more self-aware have been priorities.^{702 703 704} The concept of wellbeing has become a core component of many policy documents, which bodes well for self-care.

In 2019, the UAE government launched the National Strategy for Wellbeing 2031 under the Ministry of Community Development.⁷⁰⁵ This plan encompasses interventions at three levels: government, community, and individual. Several individual interventions have links to self-care concepts, including the promotion of an active and healthy lifestyle, an emphasis on positive thoughts and happiness, and equipping individuals with life skills for good mental health.

In 2018, the government launched three national initiatives during the Wellbeing Working Group meeting.⁷⁰⁶ The initiatives include the establishment of the UAE Community Design Platform for Wellbeing, in line with the government directives to promote wellbeing in the society. The National Program for Happiness and Wellbeing was launched under this platform, and many initiatives that measure and support happiness and wellbeing were launched under the

Program, including the National Happiness and Wellbeing Policy Bundle, the Happiness Meter, the National Survey for Happiness and Wellbeing, the Business for Wellbeing Council and the new Nutrition Labeling Policy.^{707 707 709 710 711} The working group also recommended implementing the Community Wellbeing Nutrition Program - which promotes wellbeing by establishing standards for consumers, manufacturers and suppliers and includes a set of motivational and educational community programs and on nutrition- and the Community Program for Active Lifestyle, which encourages community members to exercise. The Ministry of Possibilities also hosts the National Behavioral Reward Program Strategy, which encourages people to adopt “positive” behaviors and includes incentives for healthy behaviors, such as healthy diet, physical activity etc.^{712 713 714 715}

Over the last decade, UAE’s federal government and local health authorities have progressively oriented the healthcare system toward greater prevention. **The UAE Vision 2021 National Agenda, the primary national health strategy and plan, details many concepts associated with self-care.** This includes emphasizing preventative medicine as an important means to reduce the incidence of non-communicable diseases such as cancer, diabetes, and cardiovascular disease. Other priority health areas in the agenda include childhood obesity and healthcare system capacity. The agenda also focuses on personal health actions, such as reducing smoking. The UAE additionally adopted a National Multisectoral Action Plan for Noncommunicable Disease Prevention and Control (2017-2021).⁷¹⁶ This plan detailed various goals such as slowing rates of diabetes and obesity, reducing sodium intake and tobacco use in the population by 30%, improving physical activity levels, and promoting access to essential medicines and health services. In 2020, the Ministry of Health and Prevention, (MoHAP) launched an awareness-raising initiative to improve the quality of life of diabetics and their management of the disease. The Ministry also established the Diabetes Prevention Programme to provide education and training on diabetes-related

healthy habits.⁷¹⁷ In addition, the government launched a National Action Plan in Nutrition (2017-2021) to improve the overall nutritional status of the population.⁷¹⁸ Specific goals relating to self-care were included in the strategy, mainly related to food and physical activity habits, such as fortifying staple foods with vitamins and taking policy action to remove subsidies for unhealthy foods.⁷¹⁹

At the local level, Emiratis launched a number of policy strategies that support wellbeing. Abu Dhabi has several healthcare policies and strategies in place that emphasize childhood nutrition, health screening and data reporting through schools to ensure childhood and adolescent health. They also underscore the importance of pharmacies to the healthcare system.⁷²⁰ The Abu Dhabi Department of Health has also published a Policy on Digital Health (2020) to promote person-centric healthcare supported by digital health tools.⁷²¹

“People are on track to be self-staters. At the community level, there is a lot of health education and promotion going on from authorities and non-governmental organizations, to get people to know more about certain health issues, what decisions to make etc. There is still some reluctance about self-care and giving more power to patients coming from healthcare providers, though some of them have started to talk about self-care and learn about it. At the moment, there is no health promotion and education diploma available in the United Arab Emirates, and I have been approached by Abu Dhabi Health Services Company to develop such curriculum. During my regular interaction with SEHA, employees and patients, an integrated healthcare solutions provider in the UAE, I noticed that nurses are generally supportive of self-care and patient empowerment.”

Dr. Iffat Elbarazi

Assistant Professor in Health Promotion at the Institute of Public Health, College of Medicine, United Arab Emirates University



The Dubai Health Strategy 2016-2021 centers on prevention and a healthy lifestyle through social and environmental interventions at the community level. The goal is to promote a healthy environment and define the public health standards for all of Dubai.⁷²² Sharjah is a member of WHO’s Global Network for Age-Friendly Cities and Communities⁷²³ and includes many services for the elderly. This includes home care and construction, financial aid, health insurance cards, and recreational services such as clubs. There is also an emphasis on promoting physical exercise as self-care through sports initiatives and physiotherapy services for the elderly.

In addition to policy strategies, the UAE governments are running various ongoing campaigns that link to self-care. Compared to other countries we have studied, there are more general campaigns that aim to promote healthy lifestyles and well-being. The Fazaa Healthy Food Basket initiative falls into this category.⁷²⁴ Fazaa is a government-supported social initiative supported that incentivizes healthy behaviors to help prevent disease and is included in the National Behavioral

Reward Strategy. There are also campaigns focused on physical activity, such as the MA’KOM Initiative.⁷²⁵ The Health Heroes App provides children with information on healthy lifestyle habits to help prevent childhood obesity.⁷²⁶ A nutrition labeling program called Weqaya works to lower the prevalence of diabetes and cardiovascular disease and includes the Weqaya Screening Program, the Tobacco Control Program, and the Disease Management Program, Diet and Nutrition, Obesity, Diabetes.⁷²⁷ This public health service recruits nearly all adult UAE nationals into a health screening program, enabling the Health Authorities of Abu Dhabi to rapidly extract data on a large-scale for epidemiological studies. Weqaya was launched in 2008 as a screening and intervention program intended to inform the public about high rate of cardiovascular disease and diabetes. In 2014, it was transformed into a nutritional labeling program. In the Emirati of Dubai, the Happiness and Home Care (Weleef), a social, cultural, and self-care services for elderly persons are also in place. Cardiovascular programs include Keep on Beating (collaboration with Pfizer, 2019), a social media campaign which



aims to help individuals make positive lifestyle changes and detect cardiovascular disease-related risk factors, including smoking, malnutrition, inactivity and stress.^{728 729 730} The Heart Experts Programme (2019) selects groups of students to serve as awareness ambassadors for cardiovascular health in their schools, neighborhoods and local communities where they promote concepts and practices supporting cardiovascular health.⁷³¹ The Salamat Initiative, raises the awareness of early detection of hypertension disorders and highlights risk factors for cardiovascular disease for MoHAP employees.⁷³² As one intervention, Salamat placed self-measured blood pressure devices in MoHAP buildings so employees could regularly measure their blood pressure; at-risk people were referred to nearby health centers.

Finally, TCM practitioners and prescriptions by TCM practitioners are highly regulated by the UAE government. UAE national policy⁷³³ dictates the scope of practice and qualifications to be declared a TCM practitioner, including minimum hours for internship and work experience, degree qualifications, and training program specifications for each category of TCM. The defined TCM professions are expansive, including acupuncture, ayurveda, chiropractic, herbal/oriental medicines, hijama, homeopathy, naturopathy, osteopathy, traditional Chinese medicine, and unani.

TCM practitioners can prescribe OTC products registered by the Ministry of Health and must register as a “dispensing practitioner” to sell self-developed TCM products. Pharmaceutical products derived from natural sources, an umbrella under which TCM products often fall, must be registered as such, rather than as typical pharmaceutical products.⁷³⁴ The regulatory framework for naturally sourced pharmaceuticals products is identical to the framework for typical pharmaceutical products, where manufacturers submit medicinal samples to approved laboratories for safety testing.

REGULATORY ENVIRONMENT

The UAE has different regulators on the federal and local levels. The Ministry of Health and Prevention (MOHaP) is the federal health authority. The Ministry provides comprehensive healthcare to all citizens and residents and is responsible for developing health system readiness to deal with health risks. The Department of Health (DOH) regulates the healthcare sector in Abu Dhabi; the Dubai Health Authority (DHA) regulates Dubai’s healthcare sector; and Sharjah Health Authority (SHA) regulates the emirate of Sharjah. MOHaP and other regulatory bodies aim to maintain a high standard safety, and dispensing practices and over the counter (OTC) products are no exception.⁷³⁵ To address the common practice among UAE residents of self-medication with antibiotics, MOHaP issued legislation prohibiting the dispensing of antibiotics without a medical prescription (article 23 section 2).⁷³⁶ In the UAE, OTC medicines are available for self-selection in pharmacies (including online), but require interaction with a qualified pharmacist or pharmacy assistant/technician at check-out. Intermediaries are not allowed to distribute.^{737 738}

Ministerial-supervised advertisement via the internet, social media, and TV has made consumers a major partner in treating self-care conditions and has enhanced health awareness to promote safe use. The UAE’s regulations permit the marketing and advertising of pharmaceuticals, OTC, and medical products directly to the public; marketing authorization must be obtained from regulatory bodies before advertising can begin. These authorizations are electronic and can be obtained online.

According to UAE federal law, all pharmaceuticals including those dispensing OTC products must be registered with the Ministry of Health. The government has established exhaustive pharmacy standards governed by federal law. Experts said pharmacists may not direct customers to purchase medical products other than those prescribed by their healthcare professional. Pharmacists are required to counsel patients on the safety and use of OTC products, advise on drug-drug interactions, and direct them to always read the product’s safety label. There is no established procedure to accommodate the conversion of a prescription-only product to OTC. In most cases, changes to a product’s dosage or uses require new registration.



Conclusion

This second iteration of the Index confirms the growing importance of self-care, and its diverse benefits for individuals, societies, and health systems. In its Economic & Social Value of Self-Care Report, GSCF found that self-care is already generating savings of nearly \$120 billion each year for global healthcare systems and national economies, and sparing 40.8 billion productive days for both health practitioners and individuals, which translates to an average of 11.83 work days per person per year corresponding to a value of \$1,879 billion in welfare effects and a gain of 22 million quality-adjusted life years (QALYs), the standard measurement for the value of health outcomes.⁷³⁹

However, greater awareness of the concept of self-care and above all more robust self-care government policies could generate even more significant benefits through the implementation of further self-care policy measures. Between 2019 and 2030, cost savings could reach approximately \$178.8 billion. Time savings could amount to 17.9 billion individual hours and 2.8 billion physician hours. Furthermore, gains in productivity of 71.9 billion productive days and about \$2,830 billion in welfare could also be achieved. Self-care also has the potential to significantly improve quality of life, achieving 39 million QALYs in the future potential scenario where additional self-care policy measures are implemented.⁷⁴⁰

The Index also confirms the cross-sectionalism of self-care, and the importance of addressing health topics that might have been underestimated so far, including the need for greater health literacy; stronger health promotion and education; improved access to self-care products; elevating the role of pharmacists in their communities as well as that of other healthcare workers and volunteers; and raising awareness and support for self-care among healthcare providers. The global community stands to benefit immensely from a unified body of work from WHO bringing together these diverse strands of self-care, and clearly defining the value of self-care for individuals, health systems, and governments. Firm government commitments to advancing self-care are needed for the global community to reap the full potential benefits of self-care.

Embedding self-care practices into the health care continuum has the potential to improve health and quality of life while simultaneously supporting health system sustainability. Self-care has existed for ages; however, the pursuit of efficiency in overstretched health systems due to the rise of chronic conditions, aging, and the impact of the recent pandemic, combined with a sharp focus by WHO on Universal Health Coverage, offer an opportunity to reconfigure the value of self-care as a legitimate tool to strengthen overall health system response.

To that end, in early 2022, GSCF launched a global compact bringing together stakeholders from the private sector, non-governmental organizations, academia, and medical and patient associations in order to shape and bring forward a WHO resolution for self-care. The resolution is aimed to (1) clearly define self-care, the products, and practices it represents; and (2) secure commitments for support of self-care behaviors given their potential for improving the physical and mental health of populations and easing the financial burden on health systems.

Appendices

130	Appendix A
135	Appendix B
147	Appendix C

Appendix A

INTERVIEWEES

AUSTRALIA



Dr. Stephen Carbone
CEO of Prevention United



Russell McGowan
Co-convenor of PHC Special Interest Group and Expert Advisor to the International Society for Quality in Health Care



Dr. John Skerritt, PhD
Deputy Secretary of the Department of Health of Australia; Adjunct Professor of the University of Sydney



Prof. Lynne Emmerton
BPharm(Hons) PhD MPS, Dean of Learning and Teaching, Faculty of Health Sciences; Course Coordinator, Master of Pharmacy; Curtin University, Perth, Australia



Prof. Rosemary Calder
Professor of Health Policy and Head of the Mitchell Institute's Australian Health Policy Collaboration (AHPC) at Victoria University in Melbourne, Australia



Prof. Sharon Lawn
Professor in the College of Medicine and Public Health at Flinders University, Australia; Executive Director, Lived Experience Australia



Prof. Julie Redfern, PhD
Professor of Public Health in the Faculty of Medicine and Health at the University of Sydney, Australia



Emeritus Prof. Shalom (Charlie) Benrimoj
University of Sydney, Australia



Karen Booth
President of Australian Primary Health Care Nurses Association and Board Member of the Australian Self-Care Alliance



Dr. Sarah Dineen-Griffin, PhD
Lecturer in Pharmacy Practice at the University of Newcastle in Callaghan, Australia; Vice-President of the New South Wales Branch of the Pharmaceutical Society of Australia; and Executive Committee Member of the International Pharmaceutical Federation's Community Pharmacy Section

CANADA



Tracy Boudreau
Senior Policy Analyst at the Bureau of Nutritional Sciences at Health Canada



Assoc. Prof. Lynda G. Balneaves, RN, PhD
Associate Professor at the College of Nursing at the Rady Faculty of Health Sciences, University of Manitoba, Canada



Amanda Moir
Associate Director General, Natural and Non-prescription Health Products Directorate at Health Canada



Dr. Nardine Nakhla
Clinical Lecturer at the School of Pharmacy at the University of Waterloo, Canada



Matthew Bown
Associate Director, Natural and Non-Prescription Health Products Directorate at Health Canada



Prof. Jeff Taylor
Director of the EduLab Program and Professor at the College of Pharmacy and Nutrition at the University of Saskatchewan, Canada



Natalie Page
Director General, Natural and Non-Prescription Health Products Directorate at Health Canada

COLOMBIA



Dr. Andres Duarte
Director of the Department of Preventive Medicine of the Pontificia Universidad Javeriana in Bogota, self-care expert and industry spokesperson, Colombia

GERMANY



Dr. Alena Rentsch,
M.Sc. Psych
Senior Psychotherapist
at HelloBetter, Germany



Prof Dr. med. Karin Kraft
Chair for Naturopathy at
the University Medicine of
Rostock, Germany



Peter Schwarz
Professor of Prevention and
Care of Diabetes, University of
Dresden, Germany and Chair of
the Strategic Forum on Self-care,
Technology & Digitalization at
European Diabetes Forum

INDONESIA



Budi Gunadi Sadikin
Minister of Health
of Indonesia



Dr. Jarir Atthobari, PhD
Associate Professor at Gajah
Mada University, Indonesia



Dr. Imran Agus Nurali
Sports Medicine Specialist,
Director of Health
Promotion and Community
Empowerment, Ministry of
Health of Indonesia



Dr. Satibi
Professor and Dean of Gajah
Mada University, Indonesia



Dr. Freddy Wilmana
Independent Consultant
on Pharmaceuticals and
European Anti-Aging
Education Board Member



Dr. Zullies Ikawati
Professor at Gajah Mada
University, Indonesia



**Prof. Dr. dr. Purwanti Astuti
Ascobat, M.Sc., SpFK**
Lecturer at the Department
of Pharmacology and
Therapeutics FMUI at
Universitas Indonesia,
Indonesia

INDIA



Prof. Prabhakaran Dorairaj
Vice President (Research
and Policy), Public Health
Foundation of India and
Executive Director, Centre
for Control of Chronic
Diseases, India



Narender Kumar Ahoja
Retired State Drugs
Controller and Ex-Chairman
OTC Sub-committee



Dr Muzamil Rehman
Senior Medical Officer, Central
Government Health Scheme,
Ministry of Health and Family
Welfare, Government of
India and Former Assistant
Adviser, Ministry of AYUSH,
government of India

KENYA



Dr. Salim Hussein
Head of the Department of
Primary Health Care at the
Ministry of Health in Kenya



Dr. Nadia Rizvi
Community Pharmacist
in Nairobi, Kenya



Dr Odhiambo David
Pharmacist in Kenya



Dr. Sylvia Opanga, PhD
Senior Lecturer, Clinical
Pharmacist, and Researcher
at University of Nairobi



Dr. Elizabeth Munini Kioko
General Practitioner
in Nairobi, Kenya

MEXICO



Prof. Sergio Galán Cuevas
Research Professor in the Faculty of Psychology at the Autonomous University of San Luis Potosí in Mexico



Rodrigo Oria y Anaya
President of the Health Committee at COPARMEX, Mexico; Public Affairs Manager at Bayer, Mexico



Jorge Espinosa
Public Policy Expert, Author and Former Legal Director at the Ministry of Health, Mexico



Francisco Montoya
Health General Director for Wunderman Thompson



Senadora Margarita Valdez Martínez
President of the Health Commission, Senate Chamber of the Government of Mexico

SINGAPORE



Adj Assoc Prof (Dr) Raymond CHUA
Deputy Director of Medical Services, Health Regulation Group (HRG) Ministry of Health, Singapore



Dr Andrew Chen
General Practitioner in Singapore



Ms Joy Chong
Pharmacist in Singapore



STRATEGIC COUNSEL

Assoc Prof Jason Yap
Vice Dean (Practice); Director (Public Health Translation) NUS Saw Swee Hock School of Public Health

Ass. Prof Jason Yap provided strategic counsel and review of the Singapore research and narrative in collaboration with Wai Keng Chai, Haleon.

UNITED ARAB EMIRATES



Ma'athir Salah Elshafie
Nurse in the United Arab Emirates



Dr. Iffat Elbarazi
Assistant Professor in Health Promotion at the Institute of Public Health, College of Medicine, United Arab Emirates University



Prof. Abdel Moula Ragab Abdel Karim
Professor of Pharmacy Practice and Pharmacotherapeutics in the College of Pharmacy at the University of Sharjah, United Arab Emirates

REGIONAL EXPERTS FOR LATIN AMERICA



Prof. Magaly Rodriguez de Bittner, PharmD, FAPhA, FNAP
Gyi Endowed Professor in Pharmapreneurship, Associate Dean for Clinical Services and Practice Transformation, Executive Director for the Center for Innovative Pharmacy Solutions at the University of Maryland School of Pharmacy, United States of America



Dra. Omidres Pérez de Carvelli
President of the International Organization of Telehealth and Telemedicine

Appendix B

TABLES PER COUNTRY

INDICATORS	AUSTRALIA
Final Score	3.14
Enabler 1: Stakeholder Support and Adoption	2.80
1.1 Healthcare providers trust and support self-care: 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.	2.44
1.2 Patients and consumers trust and support self-care: 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.	2.42
1.3 Regulators and policymakers have an understanding of self-care: The extent to which policymakers and regulators are familiar with the term “self-care” and can articulate its health and cost-saving benefits.	3.54
Enabler 2: Consumer & Patient Empowerment	3.28
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.	2.75
2.2 Consumer health literacy: 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.	3.27
2.3 Self-testing: The extent to which a country provides incentives for patients to self-care, by making self-testing products and self-monitoring devices available.	3.50
2.4 Digital health tools and resources are accessible to people.	3.25
Enabler 3: Self-Care Health Policy	3.09
3.1 Self-care is embedded in important health policies: The extent to which self-care is part of major health policy documents within a country.	3.50
3.2 Policy actions conducted to raise awareness on the safe use of OTC medicines and encourage the adoption of a healthier lifestyle.	3.27
3.3 Recognition and of traditional and complementary medicine within health policy.	2.50
Enabler 4: Regulatory Environment	3.50
4.1 Approval process: The extent to which regulatory review of self-care products is transparent, efficient, and based on scientific evidence.	3.00
4.2 Drug reclassification: Whether the process for switching drugs from prescription to over-the-counter status is well-defined; there are examples of such switches in line with global best practice; and innovation is rewarded with protection of proprietary product data.	3.83
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.	3.67
4.4 Advertising & pricing: The ability of companies to advertise their self-care products directly to consumers and to price products based on market forces.	3.50

INDICATORS	CANADA
Final Score	2.77
Enabler 1: Stakeholder Support and Adoption	2.93
1.1 Healthcare providers trust and support self-care: 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.	2.58
1.2 Patients and consumers trust and support self-care: 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.	2.60
1.3 Regulators and policymakers have an understanding of self-care: The extent to which policymakers and regulators are familiar with the term “self-care” and can articulate its health and cost-saving benefits.	3.60
Enabler 2: Consumer & Patient Empowerment	2.67
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.	1.00
2.2 Consumer health literacy: 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.	2.85
2.3 Self-testing: The extent to which a country provides incentives for patients to self-care, by making self-testing products and self-monitoring devices available.	3.50
2.4 Digital health tools and resources are accessible to people.	2.93
Enabler 3: Self-Care Health Policy	2.77
3.1 Self-care is embedded in important health policies: The extent to which self-care is part of major health policy documents within a country.	3.42
3.2 Policy actions conducted to raise awareness on the safe use of OTC medicines and encourage the adoption of a healthier lifestyle.	2.50
3.3 Recognition and of traditional and complementary medicine within health policy.	3.50
Enabler 4: Regulatory Environment	2.73
4.1 Approval process: The extent to which regulatory review of self-care products is transparent, efficient, and based on scientific evidence.	3.42
4.2 Drug reclassification: Whether the process for switching drugs from prescription to over-the-counter status is well-defined; there are examples of such switches in line with global best practice; and innovation is rewarded with protection of proprietary product data.	1.83
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.	2.50
4.4 Advertising & pricing: The ability of companies to advertise their self-care products directly to consumers and to price products based on market forces.	3.50

INDICATORS	COLOMBIA
Final Score	2.90
Enabler 1: Stakeholder Support and Adoption	2.69
1.1 Healthcare providers trust and support self-care: 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.	1.98
1.2 Patients and consumers trust and support self-care: 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.	2.30
1.3 Regulators and policymakers have an understanding of self-care: The extent to which policymakers and regulators are familiar with the term “self-care” and can articulate its health and cost-saving benefits.	3.80
Enabler 2: Consumer & Patient Empowerment	2.59
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.	2.00
2.2 Consumer health literacy: 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.	2.85
2.3 Self-testing: The extent to which a country provides incentives for patients to self-care, by making self-testing products and self-monitoring devices available.	3.17
2.4 Digital health tools and resources are accessible to people.	1.83
Enabler 3: Self-Care Health Policy	3.32
3.1 Self-care is embedded in important health policies: The extent to which self-care is part of major health policy documents within a country.	3.80
3.2 Policy actions conducted to raise awareness on the safe use of OTC medicines and encourage the adoption of a healthier lifestyle.	3.50
3.3 Recognition and of traditional and complementary medicine within health policy.	2.50
Enabler 4: Regulatory Environment	3.18
4.1 Approval process: The extent to which regulatory review of self-care products is transparent, efficient, and based on scientific evidence.	3.83
4.2 Drug reclassification: Whether the process for switching drugs from prescription to over-the-counter status is well-defined; there are examples of such switches in line with global best practice; and innovation is rewarded with protection of proprietary product data.	3.00
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.	2.75
4.4 Advertising & pricing: The ability of companies to advertise their self-care products directly to consumers and to price products based on market forces.	2.75

INDICATORS	GERMANY
Final Score	3.14
Enabler 1: Stakeholder Support and Adoption	3.14
1.1 Healthcare providers trust and support self-care: 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.	2.87
1.2 Patients and consumers trust and support self-care: 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.	3.15
1.3 Regulators and policymakers have an understanding of self-care: The extent to which policymakers and regulators are familiar with the term “self-care” and can articulate its health and cost-saving benefits.	3.40
Enabler 2: Consumer & Patient Empowerment	3.18
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.	4.00
2.2 Consumer health literacy: 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.	3.22
2.3 Self-testing: The extent to which a country provides incentives for patients to self-care, by making self-testing products and self-monitoring devices available.	3.00
2.4 Digital health tools and resources are accessible to people.	2.17
Enabler 3: Self-Care Health Policy	2.95
3.1 Self-care is embedded in important health policies: The extent to which self-care is part of major health policy documents within a country.	2.85
3.2 Policy actions conducted to raise awareness on the safe use of OTC medicines and encourage the adoption of a healthier lifestyle.	3.10
3.3 Recognition and of traditional and complementary medicine within health policy.	3.00
Enabler 4: Regulatory Environment	3.43
4.1 Approval process: The extent to which regulatory review of self-care products is transparent, efficient, and based on scientific evidence.	4.00
4.2 Drug reclassification: Whether the process for switching drugs from prescription to over-the-counter status is well-defined; there are examples of such switches in line with global best practice; and innovation is rewarded with protection of proprietary product data.	3.67
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.	3.50
4.4 Advertising & pricing: The ability of companies to advertise their self-care products directly to consumers and to price products based on market forces.	2.75

INDICATORS	INDIA
Final Score	2.70
Enabler 1: Stakeholder Support and Adoption	2.78
1.1 Healthcare providers trust and support self-care: 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.	3.41
1.2 Patients and consumers trust and support self-care: 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.	2.50
1.3 Regulators and policymakers have an understanding of self-care: The extent to which policymakers and regulators are familiar with the term “self-care” and can articulate its health and cost-saving benefits.	2.50
Enabler 2: Consumer & Patient Empowerment	2.48
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.	2
2.2 Consumer health literacy: 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.	2.61
2.3 Self-testing: The extent to which a country provides incentives for patients to self-care, by making self-testing products and self-monitoring devices available.	3.00
2.4 Digital health tools and resources are accessible to people.	1.17
Enabler 3: Self-Care Health Policy	3.31
3.1 Self-care is embedded in important health policies: The extent to which self-care is part of major health policy documents within a country.	3.2
3.2 Policy actions conducted to raise awareness on the safe use of OTC medicines and encourage the adoption of a healthier lifestyle.	2.93
3.3 Recognition and of traditional and complementary medicine within health policy.	3.50
Enabler 4: Regulatory Environment	2.17
4.1 Approval process: The extent to which regulatory review of self-care products is transparent, efficient, and based on scientific evidence.	2.17
4.2 Drug reclassification: Whether the process for switching drugs from prescription to over-the-counter status is well-defined; there are examples of such switches in line with global best practice; and innovation is rewarded with protection of proprietary product data.	1.00
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.	3.00
4.4 Advertising & pricing: The ability of companies to advertise their self-care products directly to consumers and to price products based on market forces.	2.00

INDICATORS	INDONESIA
Final Score	2.73
Enabler 1: Stakeholder Support and Adoption	2.39
1.1 Healthcare providers trust and support self-care: 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.	2.80
1.2 Patients and consumers trust and support self-care: 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.	1.90
1.3 Regulators and policymakers have an understanding of self-care: The extent to which policymakers and regulators are familiar with the term “self-care” and can articulate its health and cost-saving benefits.	3.25
Enabler 2: Consumer & Patient Empowerment	1.95
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.	2.50
2.2 Consumer health literacy: 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.	2.38
2.3 Self-testing: The extent to which a country provides incentives for patients to self-care, by making self-testing products and self-monitoring devices available.	1.70
2.4 Digital health tools and resources are accessible to people.	1.47
Enabler 3: Self-Care Health Policy	3.30
3.1 Self-care is embedded in important health policies: The extent to which self-care is part of major health policy documents within a country.	3.00
3.2 Policy actions conducted to raise awareness on the safe use of OTC medicines and encourage the adoption of a healthier lifestyle.	3.24
3.3 Recognition and of traditional and complementary medicine within health policy.	3.65
Enabler 4: Regulatory Environment	3.56
4.1 Approval process: The extent to which regulatory review of self-care products is transparent, efficient, and based on scientific evidence.	3.67
4.2 Drug reclassification: Whether the process for switching drugs from prescription to over-the-counter status is well-defined; there are examples of such switches in line with global best practice; and innovation is rewarded with protection of proprietary product data.	2.83
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.	4.00
4.4 Advertising & pricing: The ability of companies to advertise their self-care products directly to consumers and to price products based on market forces.	3.75

INDICATORS	KENYA
Final Score	2.38
Enabler 1: Stakeholder Support and Adoption	2.22
1.1 Healthcare providers trust and support self-care: 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.	2.85
1.2 Patients and consumers trust and support self-care: 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.	1.94
1.3 Regulators and policymakers have an understanding of self-care: The extent to which policymakers and regulators are familiar with the term “self-care” and can articulate its health and cost-saving benefits.	1.88
Enabler 2: Consumer & Patient Empowerment	2.26
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.	2.00
2.2 Consumer health literacy: 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.	2.20
2.3 Self-testing: The extent to which a country provides incentives for patients to self-care, by making self-testing products and self-monitoring devices available.	2.87
2.4 Digital health tools and resources are accessible to people.	2.40
Enabler 3: Self-Care Health Policy	2.38
3.1 Self-care is embedded in important health policies: The extent to which self-care is part of major health policy documents within a country.	2.60
3.2 Policy actions conducted to raise awareness on the safe use of OTC medicines and encourage the adoption of a healthier lifestyle.	2.38
3.3 Recognition and of traditional and complementary medicine within health policy.	2.15
Enabler 4: Regulatory Environment	2.54
4.1 Approval process: The extent to which regulatory review of self-care products is transparent, efficient, and based on scientific evidence.	3.08
4.2 Drug reclassification: Whether the process for switching drugs from prescription to over-the-counter status is well-defined; there are examples of such switches in line with global best practice; and innovation is rewarded with protection of proprietary product data.	N/A
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.	2.75
4.4 Advertising & pricing: The ability of companies to advertise their self-care products directly to consumers and to price products based on market forces.	3.00

INDICATORS	MEXICO
Final Score	2.85
Enabler 1: Stakeholder Support and Adoption	2.76
1.1 Healthcare providers trust and support self-care: 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.	2.56
1.2 Patients and consumers trust and support self-care: 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.	2.27
1.3 Regulators and policymakers have an understanding of self-care: The extent to which policymakers and regulators are familiar with the term “self-care” and can articulate its health and cost-saving benefits.	3.45
Enabler 2: Consumer & Patient Empowerment	2.44
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.	1.00
2.2 Consumer health literacy: 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.	3.31
2.3 Self-testing: The extent to which a country provides incentives for patients to self-care, by making self-testing products and self-monitoring devices available.	2.76
2.4 Digital health tools and resources are accessible to people.	2.00
Enabler 3: Self-Care Health Policy	3.20
3.1 Self-care is embedded in important health policies: The extent to which self-care is part of major health policy documents within a country.	2.79
3.2 Policy actions conducted to raise awareness on the safe use of OTC medicines and encourage the adoption of a healthier lifestyle.	3.12
3.3 Recognition and of traditional and complementary medicine within health policy.	3.20
Enabler 4: Regulatory Environment	2.98
4.1 Approval process: The extent to which regulatory review of self-care products is transparent, efficient, and based on scientific evidence.	2.83
4.2 Drug reclassification: Whether the process for switching drugs from prescription to over-the-counter status is well-defined; there are examples of such switches in line with global best practice; and innovation is rewarded with protection of proprietary product data.	2.33
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.	3.75
4.4 Advertising & pricing: The ability of companies to advertise their self-care products directly to consumers and to price products based on market forces.	3.00

INDICATORS	SINGAPORE
Final Score	3.16
Enabler 1: Stakeholder Support and Adoption	2.66
1.1 Healthcare providers trust and support self-care: 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.	2.81
1.2 Patients and consumers trust and support self-care: 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.	1.91
1.3 Regulators and policymakers have an understanding of self-care: The extent to which policymakers and regulators are familiar with the term “self-care” and can articulate its health and cost-saving benefits.	3.26
Enabler 2: Consumer & Patient Empowerment	3.18
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.	3.17
2.2 Consumer health literacy: 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.	3.25
2.3 Self-testing: The extent to which a country provides incentives for patients to self-care, by making self-testing products and self-monitoring devices available.	3.50
2.4 Digital health tools and resources are accessible to people.	2.95
Enabler 3: Self-Care Health Policy	3.22
3.1 Self-care is embedded in important health policies: The extent to which self-care is part of major health policy documents within a country.	3.13
3.2 Policy actions conducted to raise awareness on the safe use of OTC medicines and encourage the adoption of a healthier lifestyle.	3.75
3.3 Recognition and of traditional and complementary medicine within health policy.	3.00
Enabler 4: Regulatory Environment	3.59
4.1 Approval process: The extent to which regulatory review of self-care products is transparent, efficient, and based on scientific evidence.	4.00
4.2 Drug reclassification: Whether the process for switching drugs from prescription to over-the-counter status is well-defined; there are examples of such switches in line with global best practice; and innovation is rewarded with protection of proprietary product data.	2.13
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.	3.93
4.4 Advertising & pricing: The ability of companies to advertise their self-care products directly to consumers and to price products based on market forces.	3.75

INDICATORS	UNITED ARAB EMIRATES
Final Score	2.72
Enabler 1: Stakeholder Support and Adoption	2.43
1.1 Healthcare providers trust and support self-care: 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.	2.86
1.2 Patients and consumers trust and support self-care: 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.	1.99
1.3 Regulators and policymakers have an understanding of self-care: The extent to which policymakers and regulators are familiar with the term “self-care” and can articulate its health and cost-saving benefits.	2.4
Enabler 2: Consumer & Patient Empowerment	2.78
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.	3.00
2.2 Consumer health literacy: 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.	2.38
2.3 Self-testing: The extent to which a country provides incentives for patients to self-care, by making self-testing products and self-monitoring devices available.	2.67
2.4 Digital health tools and resources are accessible to people.	3.17
Enabler 3: Self-Care Health Policy	2.79
3.1 Self-care is embedded in important health policies: The extent to which self-care is part of major health policy documents within a country.	2.35
3.2 Policy actions conducted to raise awareness on the safe use of OTC medicines and encourage the adoption of a healthier lifestyle.	3.00
3.3 Recognition and of traditional and complementary medicine within health policy.	3.25
Enabler 4: Regulatory Environment	3.08
4.1 Approval process: The extent to which regulatory review of self-care products is transparent, efficient, and based on scientific evidence.	3.67
4.2 Drug reclassification: Whether the process for switching drugs from prescription to over-the-counter status is well-defined; there are examples of such switches in line with global best practice; and innovation is rewarded with protection of proprietary product data.	1.00
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.	3.00
4.4 Advertising & pricing: The ability of companies to advertise their self-care products directly to consumers and to price products based on market forces.	2.00

TABLES PER INDICATOR

INDICATORS	AUS	CAN	COL	DEU	IND	IDN	KEN	MEX	SGP	UAE
------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Enabler 1: Stakeholder Support and Adoption	2.80	2.93	2.69	3.14	2.78	2.39	2.22	2.76	2.66	2.72
1.1 Healthcare providers trust and support self-care	2.44	2.58	1.98	2.87	3.41	2.80	2.85	2.56	2.81	2.86
1.2 Patients and consumers trust and support self-care	2.42	2.60	2.30	3.15	2.50	1.90	1.94	2.27	1.91	1.99
1.3 Regulators and policymakers have an understanding of self-care	3.54	3.60	3.80	3.40	2.50	3.25	1.88	3.45	3.26	2.40

Enabler 2: Consumer & Patient Empowerment	3.28	2.67	2.59	3.18	2.48	1.95	2.26	2.44	3.18	2.78
2.1 Access to personal health data	2.75	1.00	2.00	4.00	2.00	2.50	2.00	1.00	3.17	3.00
2.2 Consumer health literacy	3.27	2.85	2.85	3.22	2.61	2.38	2.20	3.31	3.25	2.38
2.3 Self-testing	3.50	3.50	3.17	3.00	3.00	1.70	2.87	2.76	3.50	2.67
2.4 Digital health tools and resources are accessible	3.25	2.93	1.83	2.17	1.17	1.47	2.40	2.00	2.95	3.17

Enabler 3: Self-Care Health Policy	3.09	2.77	3.32	2.95	3.31	3.30	2.38	3.20	3.22	2.79
3.1 Self-care in embedded in important health policies	3.50	2.76	3.80	2.85	3.20	3.00	2.60	2.79	3.13	2.35
3.2 Policy actions conducted	3.27	3.05	3.50	3.10	2.93	3.24	2.38	3.12	3.75	3.00
3.3 Recognition and of TCM within policy	2.50	2.50	2.50	3.00	3.5	3.65	2.15	3.20	3.00	3.25

Enabler 4: Regulatory Environment	3.50	2.73	3.18	3.43	2.17	3.56	2.54	2.98	3.59	3.08
4.1 Approval process	3.00	3.42	3.83	4.00	2.17	3.67	3.08	2.83	4.00	3.67
4.2 Drug reclassification	3.83	1.83	3.00	3.67	1.00	2.83	N/A	2.33	2.13	1.00
4.3 Access/distribution	3.67	2.50	2.75	3.50	3.00	4.00	2.75	3.75	3.93	3.00
4.4 Advertising & pricing	3.50	3.50	2.75	2.75	2.00	3.75	3.00	3.00	3.75	2.00

Appendix B

SELF-CARE READINESS AT A GLANCE

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

Rank Order	Composite Score
Singapore	3.16
Australia	3.14
Germany	3.14
Colombia	2.90
Mexico	2.85
Canada	2.77
Indonesia	2.73
UAE	2.72
India	2.70
Kenya	2.38

Alphabetical Order	Composite Score
Australia	3.14
Canada	2.77
Colombia	2.90
Germany	3.14
India	2.70
Indonesia	2.73
Kenya	2.38
Mexico	2.85
Singapore	3.16
UAE	2.72

HIGHEST/LOWEST SCORING COUNTRIES FOR EACH ENABLER

	Highest-scoring countries	Lowest-scoring countries
Stakeholder Support & Adoption	Germany (3.14)	Kenya (2.22)
Consumer & Patient Empowerment	Australia (3.28)	Indonesia (1.95)
Self-Care Health Policy	Colombia (3.32)	Kenya (2.38)
Regulatory Environment	Singapore (3.59)	India (2.17)

Appendix C

REFERENCES

TABLE: AVAILABILITY OF SELECTED SUBSTANCES OTC, RX, OR DUAL OR SINGLE MODEL

The molecules covered in the table were selected because they represent a good indicator of OTC access in countries.

MOLECULE COMBINATION	THERAPEUTIC AREA	ATC4	BRA	COL	MEX	AUS	CAN	DEU	UK	SGP*	USA
Aciclovir	Antibacterials/Virals/Fungals	J5B3 (Herpes Antivirals)	RX	RX	RX	RX	RX	RX	RX	RX	RX
	Derma	D6D1 (Topical Antivirals)	RX	OTC	RX/OTC	OTC	RX	RX/OTC	RX/OTC	RX	RX
	Ophthalmology	S1D0 (Anti-viral agents - eye)	RX	RX	RX	RX		RX	RX	RX	
Esomeprazole	Anti acid/ulcer	A2B2 (Proton pump inhibitors)	RX	RX	RX/OTC	RX/OTC	RX/OTC	RX/OTC	RX/OTC	RX	RX/OTC
Fluticasone	Asthma & COPD	R3D1 (Corticoids inhalants)	RX	RX	RX	RX	RX	RX	RX	RX	RX
	Derma	D7A0 (Top corticosteroid plain)	RX		RX			RX	RX	RX	RX
	Other Resp	R1A1 (Nasal cortic w/o antiinf)	RX	RX	RX	RX/OTC	RX/OTC	RX/OTC	RX/OTC	OTC	RX/OTC
Mometasone	Asthma & COPD	R3D1 (Corticoids inhalants)	RX				RX	RX	RX	RX	RX
	Derma	D7A0 (Top corticosteroid plain)	RX	RX	RX	RX/OTC	RX	RX	RX	RX	RX
	Other Resp	R1A1 (Nasal cortic w/o antiinf)	RX	RX	RX	RX/OTC	RX/OTC	RX/OTC	RX/OTC	OTC	RX
		R1A6 (Nasal A-allergic agents)					OTC				
Naratriptan	CNS	N2C1 (Antimigraine triptans)	RX	RX		RX	RX	RX/OTC	RX	OTC	RX
Nicotine	CNS	N7B0 (Antismoking products)	OTC	OTC	OTC	RX/OTC	OTC	OTC	OTC	OTC	RX/OTC
Omeprazole	Anti acid/ulcer	A2B2 (Proton pump inhibitors)	RX	RX/OTC	RX/OTC	RX/OTC	RX/OTC	RX/OTC	RX/OTC	OTC	RX/OTC
Pantoprazole	Anti acid/ulcer	A2B2 (Proton pump inhibitors)	RX	RX	RX/OTC	RX/OTC	RX	RX/OTC	RX/OTC	RX	RX
Sildenafil	CV	C6B2 (PDE5 inhibitor PAH prods)	RX		RX	RX	RX	RX	RX	RX	RX
	Urologics	G4E1 (Erect dys PRD PDE5 inhib)	RX	RX	RX	RX	RX	RX	RX/OTC	RX	RX
Sumatriptan	CNS	N2C1 (Antimigraine triptans)	RX	RX	RX	RX	RX	OTC	RX/OTC	RX	RX
Tadalafil	CV	C6B2 (PDE5 inhibitor PAH prods)				RX	RX	RX	RX	RX	RX
	Urologics	G4E1 (Erect dys PRD PDE5 inhib)	RX	RX	RX	RX	RX	RX	RX	RX	RX

■ The molecule is on-prescription only
 ■ The molecule is non-prescription
 ■ The molecule can be sold in dual or single modality (Rx and/or OTC) depending on dosage, form, and sometimes therapeutic target

- Global Self-Care Federation. Self-care Readiness Index 2021. Available at: <https://www.selfcarefederation.org/self-care-readiness-index>
- WHO's conceptual framework for self-care. World Health Organization, 2019. Available at: [https://www.who.int/teams/sexual-and-reproductive-health-and-research-\(srh\)/areas-of-work/self-care-interventions/conceptual-framework#:~:text=The%20conceptual%20framework%20recognizes%20that,%2C%20pharmacies%2C%20and%20the%20internet.](https://www.who.int/teams/sexual-and-reproductive-health-and-research-(srh)/areas-of-work/self-care-interventions/conceptual-framework#:~:text=The%20conceptual%20framework%20recognizes%20that,%2C%20pharmacies%2C%20and%20the%20internet.)
- WHO Guidelines on self-care interventions for health and well-being. World Health Organization, 2022. Available at: https://files.magicapp.org/guideline/d2f259c4-2f9d-4c6c-bacc-26d3dc7fa059/published_guideline_5511-2_3.pdf
- WHO's conceptual framework for self-care. World Health Organization, 2019. Available at: [https://www.who.int/teams/sexual-and-reproductive-health-and-research-\(srh\)/areas-of-work/self-care-interventions/conceptual-framework](https://www.who.int/teams/sexual-and-reproductive-health-and-research-(srh)/areas-of-work/self-care-interventions/conceptual-framework)
- World Health Organization. Self-care can be an effective part of national health systems. Available at: <https://www.who.int/news/item/02-04-2019-self-care-can-be-an-effective-part-of-national-health-systems#:~:text=Health%20systems%20can%20thus%20optimise,outside%20of%20formal%20health%20systems.> Accessed October 2022.
- WHO Guidelines on self-care interventions for health and well-being. World Health Organization, 2022. Available at: <https://www.who.int/publications/i/item/9789240052192>
- Ibid.
- Creswell JW, Klassen AC, Plano Clark VL, Smith KC. Best practices for mixed methods research in the health sciences. Bethesda (Maryland): National Institutes of Health. 2011;2013:541-5. Available at: https://obssr.od.nih.gov/sites/obssr/files/Best_Practices_for_Mixed_Methods_Research.pdf
- Creswell JW, Clark VLP. Designing and conducting mixed methods research: Sage publications; 2017.
- Regnault A, Willgoss T, Barbic S. Towards the use of mixed methods inquiry as best practice in health outcomes research. Journal of patient-reported outcomes. 2018;2(1):1-4. Available at: <https://jpro.springeropen.com/articles/10.1186/s41687-018-0043-8>
- Self-Care Socio-Economic Research: The Global Social and Economic Value of Self-Care. Global Self Care Federation, 2022. Available at: https://www.selfcarefederation.org/sites/default/files/media/documents/2022-06/FINAL_GSCF%20Socio-Economic%20Research%20Report%2022062022.pdf
- WHO Classification of self-care interventions for health. World Health Organization, 2021. Available at: <https://www.who.int/publications/i/item/9789240039469>
- Empowering self-care: A handbook for pharmacists. International Pharmaceutical Federation, 2022. Available at: <https://www.fip.org/file/5111>
- Global Self-Care Federation. Economic & Social Value of Self-Care Report. June 2022. Available at: https://www.selfcarefederation.org/sites/default/files/media/documents/2022-06/FINAL_GSCF%20Socio-Economic%20Research%20Report%2022062022.pdf
- World Health Organization. Seventy-Fifth World Health Assembly. Provisional agenda item 14.1. 27 April 2022. Follow-up to the political declaration of the third high-level meeting of the General Assembly on the prevention and control of non-communicable disease. Annex 3. Draft Global Strategy on Oral Health. Available at: https://apps.who.int/gb/ebwha/pdf_files/WHA75/A75_10Add1-en.pdf
- World Health Organization. Global Action Plan for the Prevention and Control of Noncommunicable Diseases 2013-2020. Available at: <https://apps.who.int/iris/rest/bitstreams/442296/retrieve>
- World Health Organization. Seventy-Third World Health Assembly. Provisional agenda item 15.1. 5 May 2020. Decade of Healthy Ageing. The Global strategy and action plan on ageing and health 2016-2020: towards a world in which everyone can live a long and healthy life. Available at: https://apps.who.int/gb/ebwha/pdf_files/WHA73/A73_INF2-en.pdf
- We examined countries' general diabetes guidelines when they exist; we also examined diabetes guidelines that focus on assessment, diagnosis, prevention, care and treatment of diabetes for adults.
- We examined countries' general cardiovascular disease prevention and treatment guidelines when they exist; we also examined prevention and treatment guidelines for stroke, hypertension and heart failure, which were deemed most relevant for self-care.
- Ibid.
- Empowering self-care: A Handbook for Pharmacists. International Pharmaceutical Federation, 2022. Available at: <https://www.fip.org/file/5111>
- International Self-Care Foundation. The Seven Pillars of Self-Care. Available at: <https://isfglobal.org/practise-self-care/the-seven-pillars-of-self-care/>
- Gregory P & Austin Z. How do Patients Develop trust in Community Pharmacists? Res Social Adm Pharm, 2021. Available at: <https://pubmed.ncbi.nlm.nih.gov/32814664/>
- Community Pharmacists have a Crucial Role to Play in Responsible Over-the-counter Pain Management. International Pharmaceutica Federation, 2021. Available at: <https://www.fip.org/file/5007>
- Previous FIP Digital Events. International Pharmaceutical Federation, 2022. Available at: <https://events.fip.org/previous-fip-digital-events/?pro-%20gramme=2&eventCategory=0>
- WHO's Conceptual Framework for Self-care. World Health Organization, 2019. Available at: [https://www.who.int/teams/sexual-and-reproductive-health-and-research-\(srh\)/areas-of-work/self-care-interventions/conceptual-framework](https://www.who.int/teams/sexual-and-reproductive-health-and-research-(srh)/areas-of-work/self-care-interventions/conceptual-framework)

Source: Data based on IQVIA database accessed on 15 June 2022 and on desk research

*Source: Health Science Authority.

27. WHO Guidelines on Self-care Interventions for Health and Well-being. World Health Organization, 2022. Available at: <https://app.magicapp.org/#/guideline/Lr21gL>
28. OECD, The World Bank. Panorama de la Salud: Latinoamérica y el Caribe 2020. Available at: <https://doi.org/10.1787/740f9640-es>
29. Argumedo G, Taylor JRL, Gaytán-González A, González-Casanova I, Villalobos MFG, Jáuregui, A, et al. Mexico's 2018 Report Card on Physical Activity for Children and Youth: Full report. 2020. Available at: <https://iris.paho.org/handle/10665.2/51937>
30. Dalibalta S, Majdalawieh A, Yousef S, Gusbi M et al. Objectively Quantified Physical Activity and Sedentary Behaviour in a Young UAE Population. 2021. Available at: <https://bmjopensem.bmj.com/content/7/1/e000957>
31. World Health Organization. Germany Physical Activity Fact Sheet 2021. 2021. Available at: https://cdn.who.int/media/docs/librariesprovider2/country-sites/physical-activity-factsheet---germany-2021.pdf?sfvrsn=1faf11c9_1&download=true
32. Ibid.
33. Podder V, et al. Physical Activity Patterns in India Stratified by Zones, Age, Region, BMI and Implications for COVID-19: A Nationwide Study. May 2021. Available at: <https://journals.sagepub.com/doi/full/10.1177/0972753121998507>
34. Self Care for Health: A National Policy Blueprint. Mitchell Institute, 2020. Available at: <https://www.vu.edu.au/sites/default/files/mitchell-institute-self-care-for-health-a-national-policy-blueprint.pdf>
35. Self-Care, Canada: Blueprint for a National Self-Care Strategy. Food, Health & Consumer Products of Canada, 2020. Available at: <https://www.fhpc.ca/Portals/0/Userfiles/PAAlerts/Public2020-2021/20201117%20FHCP%20self-care%20blueprint%20.pdf?ver=2021-01-25-080235-730×tamp=1611583360430>
36. Ministry of Health and Social Protection of Colombia. Ten-Year Public Health Plan 2022-2031.
37. Stepping Up Global Health: Towards Resilient, Responsible and Responsive Health Outcomes. B20 Health Initiative Policy, 2017. Available at: https://www.b20germany.org/fileadmin/user_upload/B20_Germany_Policy_Paper_Health_Initiative.pdf
38. EHP7 Policy Recommendations. European Health Parliament, 2021. Available at: https://www.healthparliament.eu/wp-content/uploads/2022/07/EHP7_Policy_Book.pdf#EHP7_Policy_Book.indd:3%20-%20Preventive%20and%20Self-care:94
39. Self-Care and Prevention Recommendations. European Health Parliament, 2016. Available at: <https://www.healthparliament.eu/self-care-prevention-recommendations/>
40. Self-Care in Europe: Economic and Social Impact on Individuals and Society. May und Bauer - Konzepte im Gesundheitsmarkt GbR, 2021. Available at: <https://aesgp.eu/content/uploads/2022/01/AESGP-Summary-Report-Self-Care-in-Europe-Economic-and-Social-Impact-on-Individuals-and-Society.pdf>
41. Self-Care Socio-Economic Research: The Global Social and Economic Value of Self-Care. Global Self Care Federation, 2022. Available at: https://www.selfcarefederation.org/sites/default/files/media/documents/2022-06/FINAL_GSCF%20Socio-Economic%20Research%20Report%2022062022.pdf
42. Ibid.
43. Djordjevic et al. International Health Care Systems Profiles: Germany. Commonwealth Fund, 2020. Available at: <https://www.commonwealthfund.org/international-health-policy-center/countries/germany#electronic-health-records>
44. World Health Organization. Health Promotion Glossary of Terms, 2021. Available at: <https://www.who.int/publications/i/item/9789240038349>
45. Self-Care Literacy. Global Self-Care Federation, 2022. Available at: <https://www.selfcarefederation.org/sites/default/files/media/documents/2022-04/GSCF%20WP%20Self-Care%20Literacy%20120422.pdf>
46. Scarpetta, S. OECD Health Working Paper No. 107: Health Literacy for People-Centered Care. OECD, Directorate for Employment, Labour and Social Affairs, Health Division, 2018. Available at: [https://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DELSA/HEA/WD/HWP\(2018\)4&docLanguage=En](https://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DELSA/HEA/WD/HWP(2018)4&docLanguage=En)
47. CHPC Self Care Day Survey 2017 Initial Results Unweighted. Redfern Research, 2017. Available at: <https://www.fhpc.ca/Portals/0/Userfiles/REGResources/SCRI%20-%20Self-Care%20Readiness%20Index/CHPC%20Self%20Care%20Day%20Survey%20TOPLINE%20%20July%2013%20Ver%201a%20-%20Redfern%20Research.pdf?-ver=2022-01-24-084357-747>
48. Economist Intelligence Unit Limited. Health Literacy around the world: Policy Approaches to Wellbeing through Knowledge and Empowerment. Reckitt, 2021. Available at: https://impact.economist.com/perspectives/sites/default/files/lon_-_es_-_health_literacy_paper_v8_0.pdf
49. Ibid.
50. Poureslami, I., Nimmon, L., Rootman, I., & Fitzgerald, M. J. Health Literacy and Chronic Disease Management: Drawing from Expert Knowledge to set an Agenda. Health Promotion International, 2017. 32(4), 743-754. Available at: <https://doi.org/10.1093/heapro/daw003>
51. Cunard Chaney, S, and Mechael, P. Digital Self-Care: A Framework for Design, Implementation & Evaluation. Self-Care Trailblazer Group, 2020. Available at: <https://www.psi.org/wp-content/uploads/2020/09/Digital-Self-Care-Final.pdf>
52. Matsuoka, S et al. Health Literacy is Independently Associated with Self-care Behavior in Patients with Heart Failure. Patient Education Counsel, 2016. Available at: <https://pubmed.ncbi.nlm.nih.gov/26830514/>
53. Ibid.
54. Ibid.
55. WHO, Regional Office for South-East Asia. Optimizing Health Literacy: Improving Health and Reducing Health Inequities. University of Australia, Deakin, 2015. Available at: <https://apps.who.int/iris/bitstream/handle/10665/205594/B5147.pdf?sequence=1&isAllowed=y>
56. Ibid.
57. U.S. Department of Health and Human Service, Office of Disease Prevention and Health Promotion. National Action Plan to Improve Health Literacy. United States Government. Available at: <https://health.gov/our-work/national-health-initiatives/health-literacy/national-action-plan-improve-health-literacy>
58. Health Literacy. Australian Commission on Safety and Quality in Health Care. Available at: <https://www.safetyandquality.gov.au/our-work/patient-and-consumer-centred-care/health-literacy>
59. Arrighi et al. Scoping health literacy in Latin America. Global Health Promotion, 2022. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9203673/>
60. Sørensen K, HLS-EU Consortium, et al. Health Literacy in Europe: Comparative Results of the European Health Literacy Survey (HLS-EU). Eur J Public Health, 2015. Available at: <https://academic.oup.com/eurpub/article/25/6/1053/2467145>
61. M-POHL. International Report on the Methodology, Results, and Recommendations of the European-Health Literacy Population Survey 2019-2021 of M-POHL. Austrian National Public Health Institute, 2021. Available at: https://m-pohl.net/sites/m-pohl.net/files/inline-files/HLS19_International%20Report%20%28002%29_0.pdf
62. Economist Intelligence Unit Limited. Health Literacy around the World: Policy Approaches to Wellbeing through Knowledge and Empowerment. Reckitt, 2021. Available at: https://impact.economist.com/perspectives/sites/default/files/lon_-_es_-_health_literacy_paper_v8_0.pdf
63. Ibid.
64. Drop the Jargon. Available at: <https://www.droptheterm.org.au/#:~:text=Drop%20the%20Jargon%20is%20an,government%20to%20use%20PLAIN%20>
65. Government of Mexico. With PrevenIMSS Checkup, Overweight and Obesity are Combated, the other Pandemic that affects Mexicans. Available at: www.imss.gob.mx/prensa/archivo/202203/126
66. Explained: Who are ASHA workers, the Women Healthcare Volunteers Honoured by WHO? In: Indian Express. Available at: <https://indianexpress.com/article/explained/explained-who-asha-workers-women-healthcare-volunteers-who-7932479/>
67. Geidl et al. German Recommendations for Physical Activity and Physical Activity Promotion in Adults with Noncommunicable Diseases. International Journal of Behavior Nutrition and Physical Activity, 2020. Available at: <https://ijbnpa.biomedcentral.com/articles/10.1186/s12966-020-0919-x>
68. Kahlmeier et al. National Physical Activity Recommendations: Systematic Overview and Analysis of the Situation in European Countries. BMC Public Health. Available at: <https://bmcpublihealth.biomedcentral.com/articles/10.1186/s12889-015-1412-3>
69. Physical Activity. National Health Portal, Indonesia. Available at: <https://www.nhp.gov.in/healthyliving/physical-activity#:~:text=Adults%20aged%2018%E2%80%9336%20years,%20and%20vigorous%20intensity%20activity.>
70. National Steps Challenge. Health Promotion Board, 2021. Available at: <https://www.hpb.gov.sg/healthy-living/physical-activity/National-Steps-Challenge>
71. Ibid.
72. Ibid.
73. Regional Office for South-East Asia. Self Care for Health: A Handbook for Community Health Workers & Volunteers. World Health Organization, 2013. Available at: <https://apps.who.int/iris/bitstream/handle/10665/205887/B5084.pdf?sequence=1&isAllowed=y>
74. The State of Self Care in Australia. Australian Health Policy Collaboration, 2018. Available at: <https://www.vu.edu.au/sites/default/files/state-of-self-care-in-australia-mitchell-institute.pdf>
75. National Health Service. The NHS Long Term Plan. August 2019. Available at: <https://bit.ly/39OKZfG>
76. National Health Service. Integrated Health and Care in Action. Self-care and Prevention. 2019. Available at: <https://www.england.nhs.uk/wp-content/uploads/2019/03/integrated-care-case-study-self-care-prevention-v1.pdf>
77. NHS England and NHS Improvement. Supported Self-Management. March 2020. Available at: <https://www.england.nhs.uk/wp-content/uploads/2020/03/supported-self-management-summary-guide.pdf>
78. American Heart Association. Self-Care for the Prevention and Management of Cardiovascular Disease and Stroke. 31 August 2017. Available at: <https://www.ahajournals.org/doi/full/10.1161/JAHA.117.006997>
79. Diabetes Canada Expert Committee. Self-Management Education and Support Diabetes Canada Clinical Practice Guidelines Expert Committee. 2021. Available at: <http://guidelines.diabetes.ca/cpg/chapter7>
80. WHO Self-Cares Wins. Global Action on Men's Health, 2019. Available at: https://gamh.org/wp-content/uploads/2019/04/Who-Self-Cares-Wins.GAMH_April-2019.Final-report.pdf
81. The Man Manual. The Men's Health Forum, 2019. Available at: <https://www.menshealthforum.org.uk/man-manual>
82. Men's Health Knowledge Series. Men's Health Foundation, Germany. Available at: <https://www.stiftung-maennergesundheit.de/wissensreihe>
83. Global Self-Care Federation. Delivery Information to Consumers Through e-Labeling. July 2022. Available at: https://www.wsmi.org/sites/default/files/media/documents/2022-07/FINAL_GSCF%20-%20e-labeling%20paper%20260722.pdf
84. GSCF e-leaflet survey results, August 2021
85. Measurement of Sexual and Reproductive Health Self-care. Self-Care Trailblazer Group, 2022. Available at: <https://www.psi.org/wp-content/uploads/2022/07/SCTG-SRH-Measurement-Brief.pdf>

86. Ibid.
87. Healthdirect. Medicines. Commonwealth of Australia, 2022. Available at: <https://www.healthdirect.gov.au/medicines>
88. National Health Service. United Kingdom, 2022. Available at: <https://www.nhs.uk/>
89. Health Portal goes Online. Bundesministerium, 2020. Available at: <https://www.bundesgesundheitsministerium.de/presse/pressemitteilungen/2020/3-quartal/gesundheitsportal.html>
90. Ibid.
91. Head to Health. Search for Digital Mental Health Resources. Australian Government Department of Health. Available at: <https://www.headtohealth.gov.au/search-resources>
92. Better Health: Every Mind Matters. National Health Service. Available at: <https://www.nhs.uk/every-mind-matters/>
93. Ibid.
94. National Health Portal. Healthy Lifestyle. Centre for Health Informatics Ministry of Health and Family Welfare Government of India. Available at: <https://www.nhp.gov.in/healthylivingViewall>.
95. Heads Up Guys. Available at: <https://headsupguys.org/>
96. True North. Movember. Available at: <https://truenorth.movember.com/en-us>
97. Ministry of Health, Republic of Indonesia. National Strategic Action Plan for the Prevention and Control of Noncommunicable Diseases (Ran Pp-Ptm) 2016-2019. Directorate General of disease control and Environmental Sanitation. Ministry of Health of The Republic of Indonesia, 2016. Available at: https://www.who.int/docs/default-source/searo/ncd-surveillance/pages-from-ino-ncd-action-plan-2016-2019-not-approved.pdf?sfvrsn=fe951ef6_2
98. Ministry of Health, Republic of Kenya. Kenya Primary Health Care Strategic Framework 2019-2024. Ministry of Health of the Republic of Kenya, 2020. Available at: <https://www.health.go.ke/wp-content/uploads/2020/07/Kenya-Primary-Healthcare-Strategic-Framework-Signed.pdf>
99. Health Secretary, Government of Mexico. Undersecretary of Integration and Development of the Health Sector Primary Health Care and Comprehensive Integrated APS-I Mx: The Proposal Methodological and Operational. Salud, 2020. Available at: http://sidss.salud.gob.mx/site2/docs/Distritos_de_Salud_VF.pdf
100. The Mexican Social Security Institute. COM. 500 Self-care, First Action to Preserve Health, Prevent and Control Diseases: IMSS. The Government of Mexico, 2020. Available at: <https://www.gob.mx/imss/prensa/com-500-autocuidado-primera-accion-para-conservar-la-salud-prevenir-y-controlar-enfermedades-imss>
101. Ministry of Health and Social Protection Colombia. Ten-Year Public Health Plan. Government of Colombia, 2013. Available at: <https://www.minsalud.gov.co/PlanDecenal/Paginas/home2013.aspx>
102. Puin Moreno, DC, Ortiz Sepulveda, NI. Gestión de la Corresponsabilidad y Autocuidado en el Usuario, en el Marco de la cultura de la Seguridad Social: Diseño de una Estrategia de Comunicación. Universidad del Rosario, 2021. Available at: <https://repository.urosario.edu.co/handle/10336/31246>
103. National Program for Happiness & Wellbeing. UAE National Wellbeing Strategy 2031. United Arab Emirates, 2021. Available at: <https://www.hw.gov.ae/en/download/uae-national-wellbeing-strategy-2031>
104. Ministry of Health Singapore. Promoting Overall Healthier Living while Targeting Specific Subpopulations 2022. Government of Singapore, 2022. Available at: <https://www.moh.gov.sg/news-highlights/details/promoting-overall-healthier-living-while-targeting-specific-sub-populations>
105. Ministry of Health Singapore. Empowering Singaporeans to live healthily. Government of Singapore, 2019. Available at: <https://www.moh.gov.sg/docs/librariesprovider5/default-document-library/cos-factsheet-empowering-singaporeans-to-live-healthily2d516061f5554318a7bd71d9c1e38414.pdf>
106. Chan A, Matchar DB, Tsao MA, Harding S, Chiu CT, Tay B, et al. Self-Care for Older People (SCOPE): A Cluster Randomized Controlled Trial of Self-care Training and Health Outcomes in Low-income Elderly in Singapore. *Contemp Clin Trials*, 2015. Available at: <https://pubmed.ncbi.nlm.nih.gov/25583272/>
107. Ministry of Health, Republic of Kenya. National Guidelines for Healthy Diets and Physical Activity. Republic of Kenya, 2017. Available at: <http://www.nutritionhealth.or.ke/wp-content/uploads/Downloads/National%20Guidelines%20for%20Healthy%20Diets%20and%20Physical%20Activity%202017.pdf>
108. Department of Health and Aged Care, Government of Australia. National Preventive Health Strategy 2021-2030. Commonwealth of Australia, 2021. Available at: <https://www.health.gov.au/resources/publications/national-preventive-health-strategy-2021-2030>
109. Vital Strategies. Colombia's Bold New Law to Label Foods High in Fat, Salt and Sugar will Save Lives and Empower Consumers. Other Countries should Follow. 6 August 2021. Available at: <https://www.vitalstrategies.org/colombias-bold-new-law-to-label-foodhigh-in-fat-salt-and-sugar-will-save-lives-and-empower-consumers-other-countries-should-follow/>
110. The Australian Sports Commission. Sport Australia Encourages all Australians to 'Move It' or Lose it. Commonwealth of Australia, 2018. Available at: https://www.sportaus.gov.au/media_centre/news/sport_australia_encourages_all_australians_to_move_it_or_lose_it
111. International Self-Care Federation. Self-care Policies. International Self-Care Federation, 2022. Available at: <https://isfglobal.org/self-care-policies/>
112. Integrated Health Services, Traditional, Complementary and Integrative Medicine, WHO. WHO Global Report on Traditional and Complementary Medicine 2019. World Health Organization, 2019. Available at: <https://www.who.int/publications/i/item/978924151536>
113. Health Canada. Next Steps on the Self-care Products Initiative. Government of Canada, 2022. Available at: <https://www.canada.ca/en/health-canada/services/self-care-framework.html>
114. Oleszkiewicz P, Kryszinski J, Religioni U, Merks P. Access to Medicines via Non-Pharmacy Outlets in European Countries-A Review of Regulations and the Influence on the Self-Medication Phenomenon. *Healthcare (Basel)* 2021. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7911380/>
115. Fight the Fakes. Who We Are. Available at: <https://fightthefakes.org/about-us/who-we-are/>
116. Global Self Care Federation. Regulation of e-Commerce of Non-prescription Medicines. Available at: <https://www.selfcarefederation.org/resources/regulation-e-commerce-non-prescription-medicines>
117. Australia Health Policy Collaboration. The State of Self Care in Australia. Victoria University, 2018. Available at: <https://www.vu.edu.au/sites/default/files/the-state-of-self-care-in-australia.pdf>
118. Australia Health Policy Collaboration. The State of Self-Care in Australia. Victoria University, 2018. Available at: <https://www.vu.edu.au/sites/default/files/the-state-of-self-care-in-australia.pdf>
119. Australian Bureau of Statistics. Physical Activity. Commonwealth of Australia, 2022. Available at: <https://www.abs.gov.au/statistics/health/health-conditions-and-risks/physical-activity/latest-release>
120. The Australian Sports Commission. AusPlay Focus: How Australians' Participation in Sport and Physical Activity is Adapting to COVID-normal. SportAus AusPlay, 2022. Available at: <https://www.clearinghouseforsport.gov.au/research/ausplay/results>
121. Health Literacy. Australian Medical Association Ltd., 2021. Available at: <https://ama.com.au/sites/default/files/2021-01/Health%20Literacy%202021%20-%20AMA%20Position%20Statement.pdf>
122. Self Care for Health: A National Policy Blueprint. Mitchell Institute, 2020. Available at: <https://www.vu.edu.au/mitchell-institute/policy-solutions/self-care-for-health-a-national-policy-blueprint>
123. Self-Care for health: A Solid Investment in the Health of Australians. Australian Self-Care Alliance, 2022. Available at: <https://www.selfcarealliance.org.au/wp-content/uploads/2022/02/Self-Care-for-Health-a-solid-investment-in-the-health-of-Australians-Pre-budget-submission-28.01.22.pdf>
124. Australian Government of Health and Aged Care. Medicine Labels: Guidance on TGO 91 and TGO 92. Available at: <https://www.tga.gov.au/medicine-labels-guidance-tgo-91-and-tgo-92>
125. Australian Digital Health Agency. My Health Record. Available at: <https://www.digitalhealth.gov.au/initiatives-and-programs/my-health-record/whats-inside>
126. Australian Government. Therapeutics Goods Act 1989. Available at: <https://www.legislation.gov.au/Details/C2017C00226>
127. Anderson et al. Self-collection for Under-screened Women in a National Cervical Screening Program: Pilot Study. *Current Oncology*, 2018. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5832287/>
128. Consumer Healthcare Products Canada. The Self-care Opportunity Empowering Australia toward Better Health. July 2022. Available at: <https://www.chpaustralia.com.au/Self-Care/The-Self-Care-Opportunity>
129. Medicines. Healthdirect. Available at: <https://www.healthdirect.gov.au/medicines>
130. Consumer Healthcare Products Australia. The Self-care Opportunity Empowering Australia toward Better Health. July 2022. Available at: <https://www.chpaustralia.com.au/Tenant/C0000022/Documents/Self%20Care/The%20Self-Care%20Opportunity%20-%20Report.pdf>
131. Ibid.
132. Drop the Jargon. Available at: <https://www.dropthejargon.org.au>
133. Australia's Long Term National Health Plan. The Commonwealth Fund, 2019. Available at: <https://www.health.gov.au/resources/publications/australias-long-term-national-health-plan>
134. The Fifth National Mental Health and Suicide Prevention Plan. Council of Australian Governments Health Council, 2017. Available at: <https://www.mentalhealthcommission.gov.au/getmedia/0209d27b-1873-4245-b6e5-49e770084b81/Fifth-National-Mental-Health-and-Suicide-Prevention-Plan.pdf>
135. National Strategic Framework for Chronic Conditions. Council of Australian Governments Health Council, 2017. Available at: <https://www.health.gov.au/resources/publications/national-strategic-framework-for-chronic-conditions#:~:text=The%20National%20Strategic%20Framework%20for,and%20management%20of%20chronic%20conditions>
136. Australia's Primary Health Care 10 Year Plan 2022-2032. Australian Government, Department of Health, 2015. Available at: <https://www.health.gov.au/resources/publications/australias-primary-health-care-10-year-plan-2022-2032>
137. National Strategic Action Plan for Lung Conditions. Australian Government Department of Health, 2019. Available at: <https://www.health.gov.au/resources/publications/national-strategic-action-plan-for-lung-conditions>
138. National Strategic Action Plan for Heart Disease and Stroke. Australian Government, Department of Health and Aged Care, 2021. Available at: <https://www.health.gov.au/resources/publications/national-strategic-action-plan-for-heart-disease-and-stroke>
139. Strategic Plan 2020-25. Diabetes Australia. Available at: <https://www.diabetesaustralia.com.au/about-us/strategic-approach-and-plan/>
140. Australia's National Oral Health Plan 2015-2024. Australian Government. Available at: <https://www.health.gov.au/resources/publications/healthy-mouths-healthy-lives-australias-national-oral-health-plan-2015-2024>
141. Commonwealth of Australia. The Nation Obesity Strategy 2022-2032. Health Ministers Meeting, 2022. Available at: <https://www.health.gov.au/sites/default/files/documents/2022/03/national-obesity-strategy-2022-2032.pdf>

142. National Women's Health Strategy 2020-2030. Australian Government, Department of Health, 2018. Available at: <https://www.health.gov.au/sites/default/files/documents/2021/05/national-women-s-health-strategy-2020-2030.pdf>
143. National Men's Health Strategy 2020-2030. Australian Government, Department of Health, 2019. Available at: <https://www.health.gov.au/sites/default/files/documents/2021/05/national-men-s-health-strategy-2020-2030.pdf>
144. National Preventative Health Strategy 2021-2030. Australian Government, Department of Health and Aged Care, 2021. Available at: <https://www.health.gov.au/resources/publications/national-preventive-health-strategy-2021-2030>
145. Carroll, L., Daniel, D., and Ward, M. Disease Control Agency will be 'White Elephant' without Support of States: Coatsworth. The Sydney Morning Herald, 2022. Available at: <https://www.smh.com.au/national/disease-control-agency-will-be-white-elephant-without-support-of-states-coatsworth-20220506-p5aj9h.html>
146. Australians Deserved More. Public Health Association of Australia, 2020. Available at: <https://www.phaa.net.au/documents/item/4838>
147. Health Literacy: Taking Action to Improve Safety and Quality. Australian Commission on Safety and Quality in Health Care, 2014. Available at: <https://www.safetyandquality.gov.au/sites/default/files/migrated/Health-Literacy-Taking-action-to-improve-safety-and-quality.pdf>
148. Health Literacy Action Plan 2019-2024. Tasmanian Government, Department of Health, 2021. Available at: https://www.health.tas.gov.au/sites/default/files/2021-11/Health_Literacy_Action_Plan_DoHTasmania2019.pdf
149. Health Literacy Framework: Guide to Action. Clinical Excellence Commission, 2019. Available at: https://www.cec.health.nsw.gov.au/___data/assets/pdf_file/0008/487169/NSW-Health-Literacy-Framework-2019-2024.pdf
150. Health Literacy for Health Services & Providers. Canberra Health Literacy. Available at: <https://cbrhl.org.au/health-services-providers/>
151. Ibid.
152. About Preventative Health in Australia. Australian Government, Department of Health and Aged Care. Available at: <https://www.health.gov.au/health-topics/preventive-health/about>
153. Be Sun Smart. Available at: <https://www.cancer.org.au/cancer-information/causes-and-prevention/sun-safety/be-sunsmart>
154. Slip, Slop, Slap, Seek, Slide. Available at: <https://www.cancer.org.au/cancer-information/causes-and-prevention/sun-safety/campaigns-and-events/slip-slop-slap-seek-slide>
155. Ibid.
156. Ibid.
157. TGA basics. Therapeutic Goods Administration. Available at: <https://www.tga.gov.au/tga-basics>
158. Advisory Committee on Committee on Complementary Medicines. Therapeutic Goods Administration, 2022. Available at: <https://www.tga.gov.au/committee/advisory-committee-complementary-medicines-accm>
159. Assessed Listed Medicines. Therapeutic Goods Administration, 2021. Available at: <https://www.tga.gov.au/how-we-regulate/supply-therapeutic-good-0/supply-non-prescription-medicine/assessed-listed-medicines>
160. Overview of the Regulation Listed Medicines and Registered Complementary Medicines. Therapeutic Goods Administration, 2021. Available at: <https://www.tga.gov.au/sites/default/files/overview-regulation-listed-medicines-and-registered-complementary-medicines.pdf>
161. Complementary Medicines. Therapeutic Goods Administration, 2020. Available at: <https://www.tga.gov.au/topics/complementary-medicines>
162. The Pharmaceutical Benefits Advisory Committee Guidelines. Australian Government, Department of Health and Aged Care, 2016. Available at: <https://pbac.pbs.gov.au/>
163. Pearson, G.J., et al. 2021 Canadian Cardiovascular Society Guidelines for the Management of Dyslipidemia for the Prevention of Cardiovascular Disease in Adults. Canadian Journal of Cardiology 37 p. 1129-50. 16, 2021. Available at: <https://doi.org/10.1016/j.cjca.2021.03.016>
164. Abrams, H., et al. Comprehensive Update of the Canadian Cardiovascular Society Guidelines for the Management of Heart Failure. Canadian Journal of Cardiology 33 no. 11: 1342-1433, 2017. Available at: <https://doi.org/10.1016/j.cjca.2017.08.022>
165. Prevention & Treatment: Hypertension Canada Guidelines. Available at: <https://guidelines.hypertension.ca/prevention-treatment/>
166. Diabetes Canada Clinical Practice Guidelines: Processes Manual. Diabetes Canada, 2018. Available at: <https://guidelines.diabetes.ca/cpg>
167. Cheng AYY. Blood Glucose Monitoring in Adults and Children with Diabetes: Update 2021. Diabetes Canada Clinical Practice Guidelines Expert Committee, 2021. Available at: <https://guidelines.diabetes.ca/cpg/chapter-9-2021-update#sec12>
168. CPG Infobase: Clinical Practice Guidelines. CMA J. Available at: <https://joulecma.ca/cpg/homepage>
169. Chronic Asthma: Clinical Practice Guideline. Toward Optimized Practice, 2018. Available at: <https://actt.albertadoctors.org/CPGs/Lists/CPGDocumentList/Chronic-Asthma-CPG.pdf>
170. Campbell-Scherer, D., et al. Canadian Adult Obesity Clinical Practice Guidelines: Primary Care and Primary Healthcare in Obesity Management. Obesity Canada, 2020. Available at: <https://obesity-canada.ca/guidelines/primarycare>
171. Family Medicine Forum. The College of Family Physicians of Canada, 2021. Available at: <https://fmf.cfpc.ca/wp-content/uploads/2021/11/FMF-2021-Certified-Program-ENG-Nov-8.pdf>
172. Family Medicine Forum 2020 Program. The College of Family Physicians of Canada, 2020. Available at: https://fmf.cfpc.ca/wp-content/uploads/2020/10/2020-Program_Oct-22.pdf
173. Ibid.
174. AFPC Special Interest Groups. Association of Faculties of Pharmacy of Canada. Available at: <https://afpc.info/content/afpc-special-interest-groups-0>
175. Nakhla, N., et al. Self-care Education across Canadian Pharmacy Schools: Curriculum Survey Findings. Canadian Pharmacists Journal / Revue Des Pharmaciens Du Canada, 2021. 154(1), 52-60. Available at: <https://doi.org/10.1177/1715163520976161>
176. Interview with Matthew Brown, Associate Director, Naturaland Non-Prescription Health Products Directorate at Health Canada.
177. Self-Care Products. Government of Canada. Available at: <https://www.canada.ca/en/health-canada/topics/self-care-products.html>
178. Message from the Minister of Health – International Self-Care Day. Government of Canada, 2019. Available at: <https://www.canada.ca/en/health-canada/news/2019/07/message-from-the-minister-of-health-international-self-care-day--july-24-2019.html>
179. Bethord, L. Petition 432-00087 (Health). House of Commons Canada, 2020. Available at: <https://petitions.ourcommons.ca/en/Petition/Details?Petition=432-00087>
180. Willemsen, KR., and Harrington, G. The Role of Self-Care in Patient-Centered Care of Minor Ailments. SelfCare, 2012. Available at: <https://www.fhcp.ca/Portals/0/Userfiles/REGResources/SCRI%20-%20Self-Care%20Readiness%20Index/Willemsen4355.pdf?ver=2022-01-24-085120-340>
181. Value of Consumer Health Products. The Conference Board of Canada, 2022. Available at: https://www.fhcp.ca/Portals/0/Userfiles/REGResources/SCRI%20-%20Self-Care%20Readiness%20Index/8681_EcoImpactsRxTtoOTC_RPT.pdf?ver=2022-01-24-085338-073
182. Survey of Minor Ailment Sufferers. Redfern Research, 2015. Available at: <https://www.chpcanada.ca/wp-system/uploads/2020/07/Redfern-Research-Self-care-During-Pandemic-Report-July-13-2020-FINAL.pdf>
183. Canadians Want a National Self-Care Strategy to Help Protect the Public Healthcare System. Abacus Data, 2022. Available at: <https://www.fhcp.ca/Portals/0/Userfiles/REGResources/SCRI%20-%20Self-Care%20Readiness%20Index/Abacus%20Release%20-%20FHCP%20-%20January%202021%20-%20v1.pdf?ver=2022-01-24-084359-603>
184. Self-care Information and Behavior Among Canadians During the COVID-19 Pandemic: A Report to Consumer Health Products Canada. Redfern Research, 2020. Available at: <https://www.fhcp.ca/Portals/0/Userfiles/REGResources/SCRI%20-%20Self-Care%20Readiness%20Index/Redfern%20Research%20-%20Self-care%20During%20Pandemic%20Report%20June%2024%202020%20Draft%201.pdf?ver=2022-01-24-084402-287>
185. Canadians' Strong Health Literacy Scores Tied to Good Health Status, But Navigating Health System Remains a Challenge. Consumer Health Products Canada, 2017. Available at: <https://www.newswire.ca/news-releases/canadians-strong-health-literacy-scores-tied-to-good-health-status-but-navigating-health-system-remains-a-challenge-636253273.html>
186. Our Province. Our Health. Our Future. A 110-Year Health Transformation: The Report. Health Accord NL, 2022. Available at: <https://www.gov.nl.ca/hcs/files/Health-Accord-NL-Report.pdf>
187. Changing My Mind: Margaret Trudeau on Mental Health. Office of the President, University of British Columbia, 2019. Available at: <https://president.ubc.ca/homepage-feature/2019/06/17/changing-my-mind/>
188. Labelling Research Forum: Report on Outcomes & Proceedings. Food and Consumer Products of Canada, 2018. Available at: https://www.fhcp.ca/Portals/0/Userfiles/REGResources/SCRI%20-%20Self-Care%20Readiness%20Index/LabellingResearchForum_FinalReport%20v2.pdf?ver=2022-01-24-084358-243
189. Ibid.
190. Statistics Canada. Change in Vegetable and Fruit Consumption in Canada between 2004 and 2015. Government of Canada, 2020. Available at: <https://www150.statcan.gc.ca/n1/pub/82-003-x/2020004/article/00001-eng.htm>
191. Statistics Canada. Fruit and Vegetable Consumption, 5 Times or More per Day, by Age Group. Government of Canada, 2017. Available at: <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1310009612>
192. ParticipACTION Pulse Report. MEC, 2018. Available at: <https://www.participaction.com/en-ca/resources/pulse-report#:~:text=According%20to%20Statistics%20Canada%2C%20only,population%20is%20not%20active%20enough>
193. Physical and Health Education Curriculum in Canada. PHE Canada, 2022. Available at: <https://phecanada.ca/about/physical-and-health-education-curriculum-canada>
194. G7 patient access to health records. United Kingdom, 2021. Available at: <https://www.gov.uk/government/publications/g7-health-track-digital-health-final-reports/g7-patient-access-to-health-records-final-report>
195. Integrating Digital Health into the Health Care Experience. Canada Health Infoway. Available at: <https://www.infoway-inforoute.ca/en/>
196. Interoperability Enablement Program: A Shared Pan Canadian Collaboration Initiative. Canada Health Infoway, 2021. Available at: <https://www.infoway-inforoute.ca/en/component/edoc-man/6329-1240pm-abhi-kalra-infoway-interoperability-enablement-program-pdf/view-document?Itemid=101>
197. 1st HIV Self-test Approved in Canada. CBC, 2020. 3 November 2020. Available at: <https://www.cbc.ca/news/health/hiv-self-test-canada-1.5787600>

198. Medical Test Kits for Home Use. Government of Canada. Available at: <https://www.canada.ca/en/health-canada/services/healthy-living/your-health/medical-information/medical-test-kits-home-use.html>
199. Nicorette. Available at: https://www.nicorette.ca/?gclid=CjwKCAiAOKmPBhBqEiwAJqKK4_Ieap_k2cli-QGjS6tFp-3Xb3S7pNbiu8MPLK9McQRwwJXeHB-Nwn-2BoCpzEQAvD_BwE&gclid=aw.ds
200. Guidance Document: Software as a Medical Device (SaMD): Definition and Classification. Government of Canada. Available at: <https://www.canada.ca/en/health-canada/services/drugs-health-products/medical-devices/application-information/guidance-documents/software-medical-device-guidance-document.html#a1.1>
201. Pharmacist-lead Smoking Cessation Cure in Canada: Current Status & Strategies for Expansion. University of Waterloo School of Pharmacy. January 2019. Available at: https://uwaterloo.ca/pharmacy/sites/ca.pharmacy/files/uploads/files/whitepaper_final_nov_28_2019.pdf
202. Drug Product Database: Access the Database. Government of Canada. Available at: <https://www.canada.ca/en/health-canada/services/drugs-health-products/drug-products/drug-product-database.html>
203. Licensed Natural Health Products Database. Government of Canada. Available at: <https://www.canada.ca/en/health-canada/services/drugs-health-products/natural-non-prescription/applications-submissions/product-licensing/licensed-natural-health-products-database.html>
204. Regulatory Innovation for Health Products: Information to Canadians – Mobile Strategy. Government of Canada. Available at: <https://www.canada.ca/en/health-canada/corporate/about-health-canada/activities-responsibilities/strategies-initiatives/health-products-food-regulatory-modernization/mobile-strategy.html>
205. Diseases and Conditions. Government of Canada. Available at: <https://www.canada.ca/en/public-health/Services/diseases.html>
206. Smart Label. Available at: <https://smartlabelcanada.org/ca-en>
207. Front-of-package nutrition labelling. Health Canada. Accessed August 2022. Available at: <https://www.canada.ca/en/health-canada/services/food-labelling-changes/front-package.html#a1>
208. About Supplemented Foods and their Labels. Health Canada. Accessed August 2022. Available at: <https://www.canada.ca/en/health-canada/services/food-nutrition/supplemented-foods/about.html>
209. Software as a Medical Device (SaMD): Definition and Classification. Government of Canada. Available at: <https://www.canada.ca/en/health-canada/services/drugs-health-products/medical-devices/application-information/guidance-documents/software-medical-device-guidance-document.html#a1.1>
210. Agile Nations Work Programme Plan 2021 to 2022. Available at: <https://www.gov.uk/government/publications/agile-nations-work-programme-plan-2021-to-2022>
211. Provincial and Territorial Helplines and Websites. Government of Alberta. Available at: <https://myhealth.alberta.ca/Health/Pages/conditions.aspx?hwid=abo4579>
212. Première Ligne du Futur. Gouvernement du Québec, 2022. Available at: https://cdn-contenu.quebec.ca/cdn-contenu/gouvernement/MCE/memoires/21-210-217F_Napperon_Premiere_ligne_futur_accessible_VF.pdf?164855537#:~:text=Des%20outils%20d'aide%20%C3%A0,%C3%A9t%C3%A9%20d%C3%A9montr%C3%A9e%20durant%20la%20pand%C3%A9mie.&text=Une%20gamme%20de%20services%20tr%C3%A8s.habitation%20ou%20la%20r%C3%A9insertion%20sociale
213. Self-Management British Columbia. Self-Management BC, 2020. Available at: <https://www.selfmanagementbc.ca/>
214. Integrated Strategy on Healthy Living and Chronic Diseases – Healthy Living Program Component. Government of Canada. Available at: <https://www.canada.ca/en/public-health/corporate/mandate/about-agency/office-evaluation/evaluation-reports/formative-evaluation-integrated-strategy-on-healthy-living-chronic-diseases/integrated-strategy-healthy-living-chronic-diseases-healthy-living-program-component.html>
215. Next Steps on the Self-care Products Initiative. Government of Canada. Available at: <https://www.canada.ca/en/health-canada/services/self-care-framework.html>
216. Canada's Food Guide. Government of Canada. Available at: <https://food-guide.canada.ca/en/>
217. Health Canada's healthy eating strategy. Government of Canada. Available at: <https://www.canada.ca/en/services/health/food-nutrition/healthy-eating.html>
218. Minister of Health Mandate Letter. Office of the Prime Minister, 2021. Available at: <https://pm.gc.ca/en/mandate-letters/2021/12/16/minister-health-mandate-letter>
219. Use Antibiotics Wisely – Not all Bugs need Drugs. Government of Canada. Available at: <https://www.canada.ca/en/public-health/services/publications/drugs-health-products/use-antibiotics-wisely.html>
220. Wellness Together Canada. Available at: <https://www.wellnesstogether.ca/en-CA>
221. Canada's Tobacco Strategy. Government of Canada. Available at: <https://www.canada.ca/en/health-canada/services/publications/healthy-living/canada-tobacco-strategy.html>
222. Influenza: Symptoms and treatment. Government of Canada. Available at: <https://www.canada.ca/en/public-health/services/diseases/flu-influenza.html>
223. Ibid.
224. Using Medications Safely. Government of Canada. Available at: <https://www.canada.ca/en/health-canada/services/drugs-medical-devices/using-medications-safely.html>
225. How to Get Relief Responsibly with Tylenol. Tylenol. Available at: <https://www.tylenol.ca/safety-dosing/adult/get-relief-responsibly>
226. Acetaminophen. Arthritis Society. Available at: <https://arthritis.ca/treatment/medication/medication-reference-guide/medications/acetaminophen#:~:text=Although%20acetaminophen%20is%20one%20of,maximum%20daily%20dose%20of%20acetaminophen>
227. Reminding Canadians About Using Acetaminophen Safely. Health Canada, 2011. Available at: <https://recalls-rappels.canada.ca/en/alert-recall/reminding-canadians-about-using-acetaminophen-safely>
228. Let's talk about acetaminophen. Government of Canada. Available at: <https://www.canada.ca/en/health-canada/services/publications/drugs-health-products/let-s-talk-about-acetaminophen.html>
229. Ibid.
230. Using Acetaminophen Safely – Web Banners. Government of Canada. Available at: <https://www.canada.ca/en/health-canada/services/publications/drugs-health-products/web-banners-using-acetaminophen-safely.html>
231. Take Care, Canada: Blueprint for a National Self-Care Strategy. Food, Health & Consumer Products of Canada, 2020. Available at: <https://www.fhpc.ca/Portals/0/Userfiles/PAerts/Public2020-2021/20201117%20FHCP%20self-care%20blueprint%20.pdf?ver=2021-01-25-080235-730×tamp=1611583360430>
232. A Blueprint for Self-care Strategy for England. 2021. Available at: <https://www.pagb.co.uk/featured-news/self-care-strategy/>
233. Self-Care for Health: A National Policy Blueprint. 2020. Available at: <https://www.vu.edu.au/sites/default/files/mitchell-institute-self-care-for-health-a-national-policy-blueprint.pdf>
234. Ibid.
235. Natural Health Products: 53 Recommendations of the Standing Committee on Health. Government of Canada, 2013. Available at: <https://www.canada.ca/en/health-canada/services/drugs-health-products/natural-non-prescription/regulation/53-recommendations-standing-committee-health.html>
236. Canada Association of Naturopathic Doctors. Available at: <https://www.cand.ca/>
237. College of Homeopaths of Ontario. Available at: <http://collegeofhomeopaths.com/index.html>
238. Health Canada. Natural Health Products Management of Applications Policy. Government of Canada, 2019. Available at: <https://www.canada.ca/en/health-canada/services/drugs-health-products/natural-health-products/legislation-guidelines/guidance-documents/management-product-licence-applications-attestations.html>
239. Natural Health Products - Over 43,000 Products Authorized for Sale and Growing. Government of Canada, 2011. Available at: <https://www.canada.ca/en/health-canada/services/drugs-health-products/natural-non-prescription/regulation/43-000-products-authorized-sale-growing.html>
240. Natural Health Products Online System. Government of Canada, 2020. Available at: <https://www.canada.ca/en/health-canada/services/drugs-health-products/natural-non-prescription/applications-submissions/online-solution.html>
241. Natural Health Product License Application Form. Government of Canada, 2022. Available at: <https://nnhpd-pla-dlmm-dpsnso.hc-sc.gc.ca/pla-dlmm/>
242. Health Canada. Pathway for Licensing Natural Health Products Making Modern Health Claims. Government of Canada, 2006. Available at: <https://www.canada.ca/en/health-canada/services/drugs-health-products/natural-non-prescription/legislation-guidelines/guidance-documents/pathway-licensing-making-modern-health-claims.html>
243. Health Canada. Pathway for Licensing Natural Health Products used as Traditional Medicines. Government of Canada, 2012. Available at: <https://pharmexcil.com/ayush/canada/viii.pdf>
244. Natural Health Products Regulations (SOR/2003-196). Government of Canada, 2022. Available at: <https://laws-lois.justice.gc.ca/eng/regulations/sor-2003-196/>
245. Next Steps in the Self-care Products Initiative. Government of Canada. Available at: <https://www.canada.ca/en/health-canada/services/self-care-framework.html>
246. Forward Regulatory Plan 2022-2024: Regulations Amending the Natural Health Products and the Food and Drug Regulations (Self-Care Framework). Government of Canada. Available at: <https://www.canada.ca/en/health-canada/corporate/about-health-canada/legislation-guidelines/acts-regulations/forward-regulatory-plan/plan/self-care-framework.html>
247. Switch Candidates in Canada. Food, Consumer & Health Products Canada, 2020. Available at: <https://www.fhpc.ca/Portals/0/Userfiles/REGResources/SCRI%20-%20Self-Care%20Readiness%20Index/Switch%20Candidates%20in%20Canada.pdf?ver=2022-01-24-084400-677>
248. Guidance Document: Determining Prescription Status for Human and Veterinary Drugs. Government of Canada. Available at: <https://www.canada.ca/en/health-canada/services/drugs-health-products/drug-products/prescription-drug-list/guidance-document.html>
249. Notices of Changes to the Prescription Drug List. Government of Canada. Available at: <https://www.canada.ca/en/health-canada/services/drugs-health-products/drug-products/prescription-drug-list/notices-changes.html>
250. The Drug and Health Product Register. Government of Canada. Available at: <https://hpr-rps.hres.ca/pdl.php?lang=en>
251. Agreement on Technical Barriers to Trade. World Trade Organization. Available at: https://www.wto.org/english/tratop_e/tbt_e.htm#:~:text=The%20Technical%20Barriers%20to%20Trade,create%20unnecessary%20obstacles%20to%20trade
252. Drug Scheduling in Canada. National Association of Pharmacy Regulatory Authorities. Available at: <https://www.napra.ca/drug-scheduling-canada-general-overview>

253. Eliminating Internal Barriers to Trade for the Canadian Consumer Health Products Industry. Consumer Health Products Canada. December 2017. Available at: <https://www.fhpc.ca/Portals/0/Userfiles/REGResources/SCRI%20-%20Self-Care%20Readiness%20Index/CHPC%20CFTA%20Submission%20Dec%202017%20FINAL.pdf?ver=2022-01-24-084359-450>
254. LegisQuebec. Regulation respecting the terms and conditions for the sale of medications (chapter P-10,s. 37.1). Pharmacy Act, 2012. Available at: <https://www.legisquebec.gouv.qc.ca/en/document/cr/p-10.%20r.%2012>
255. 2018 QC Scheduling Analysis. Food, Health & Consumer Products of Canada. Available at: <https://www.fhpc.ca/Portals/0/Userfiles/REGResources/SCRI%20-%20Self-Care%20Readiness%20Index/2018%20QC%20Scheduling%20Analysis.pdf?ver=2022-01-24-084357-740>
256. National Drug Scheduling Advisory Committee. National Association of Pharmacy Regulatory Authorities, 2022. Available at: <https://www.napra.ca/national-drug-scheduling-advisory-committee>
257. Implementation of National Drug Schedules. National Association of Pharmacy Regulatory Authorities, 2022. Available at: <https://www.napra.ca/implementation-national-drug-schedules>
258. Canada for personal use (GUI-0116). Government of Canada. 2021. Available at: <https://www.canada.ca/en/health-canada/services/drugs-health-products/compliance-enforcement/importation-exportation/personal-use-health-products-guidance/document.html>
259. NDS Process and Scheduling Factors. National Association of Pharmacy Regulatory Authorities. Available at: <https://www.napra.ca/nds-process-and-scheduling-factors>
260. Health Canada. Guidance Document: Determining Prescription Status for Human and Veterinary Drugs. Government of Canada. 2013. Available at: <https://www.canada.ca/en/health-canada/services/drugs-health-products/drug-products/prescription-drug-list/guidance-document.html>
261. Scope of Practice. Canada Pharmacists Association. Available at: <https://www.pharmacists.ca/advocacy/scope-of-practice/>
262. Patented Medicine Prices Review Board. Government of Canada. Available at: <http://pmprb-cepmb.gc.ca/home>
263. Patented Medicine Prices Review Board. PMPRB Guidelines. Government of Canada, 2021. Available at: <https://www.canada.ca/content/dam/pmprb-cepmb/documents/legislation/guidelines/PMPRB-Guidelines-en.pdf>
264. Health Canada. Guidance Document on the Distribution of Drugs as Samples – Summary. Government of Canada. 2022. Available at: <https://www.canada.ca/en/health-canada/services/drugs-health-products/natural-non-prescription/legislation-guidelines/guidance-documents/distribution-drugs-samples-summary.html>
265. Smith, J, Marks & Clerk. Pharmaceutical Advertising Laws and Regulations Canada 2022. ICLG. Available at: <https://iclg.com/practice-areas/pharmaceutical-advertising-laws-and-regulations/canada>
266. Summary of Rules that Impact Advertising of Consumer Health Products. Food, Health & Consumer Products of Canada. Available at: <https://www.fhpc.ca/Portals/0/Userfiles/REGResources/SCRI%20-%20Self-Care%20Readiness%20Index/Summary%20of%20Provincial%20Advertising%20Rules%20FINAL.pdf?ver=2022-01-24-084401-397>
267. Plazas, J. Welcome to the XXIX Colombian Congress of Cardiology and Cardiovascular Surgery. Columbian Society of Cardiology and Cardiac Surgery, 2022. Available at: <https://congreso.scc.org.co/>
268. Congreso Virtual. 2020. Available at: https://www.scc.org.co/servicios/public/uploads/MatrizBasica_v4.pdf?fbclid=IwAR3DKyU1LQy8Y-C9Pm-Pq-jjo-G10mm_JyAjCxI8_TvteSIR4ipB8-8O4LI_kk
269. Otálvaro, T., Muriel, S., Arias, V. Reconocimiento el Autocuidado Como Deber y Corresponsabilidad de las Personas Que Contribuye a la Sostenibilidad del Sistema de Salud. Universidad ces Facultad de Medicina. 2020. Available at: https://repository.ces.edu.co/bitstream/handle/10946/4741/1053803934_2020.pdf?sequence=5&isAllowed=y
270. Ilustrar al Paciente en el Autocuidado de su Seguridad. Minsalud, Todos por un Nuevo País. Version 2.0. Available at: <https://www.minsalud.gov.co/sites/rid/Lists/BibliotecaDigital/RIDE/DE/CA/Ilustrar-al-paciente-en-autocuidado-seguridad.pdf>
271. Congress of the Republic of Colombia. Chamber of Representatives. Bill No. 262 of 2020. “Through which the general law for the comprehensive management of overweight and obesity is issued”. Available at: <https://www.camara.gov.co/ley-general-del-sobrepeso#:text=Tiene%20por%20objeto%20establecer%20los,el%20Sistema%20General%20de%20Seguridad>
272. Oportunidades para un Futuro Optimista en Colombia. Congreso Empresarial Colombiano, 2020. Available at: <http://www.andi.com.co/Home/Evento/54-5-cec>
273. Autocuidado: una medida que ayuda a evitar contagios. ANDI. 2020. Available at: <https://www.andi.com.co/Home/Noticia/15762-autocuidado-una-medida-que-ayuda-a-evitar#:text=Para%20el%20Presidente%20de%20la,ser%20la%20respuesta%20m%C3%A1s%20efectiva%E2%80%9D>
274. Resolución 777 de 2021 Ministerio de Salud y Protección Social. El Servicio Público es des Todos. 2021. Available at: <https://www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=163987>
275. Interview with Melissa Valencia Salazar, Coordinator at the Pharmaceutical Chamber in the National Business Association of Colombia, ANDI (2018 – 2022).
276. Serie lineamientos curriculares Educación Física, Recreación y Deporte. Ministerio de Educación Nacional. Available at: https://www.mineducacion.gov.co/1759/articles-339975_recurso_10.pdf
277. Minsalud. Estudio sobre el Autocuidado en Colombia: actitudes y practicas, y potenciales impactos de una politica nacional de autocuidado. Available at: <https://www.minsalud.gov.co/sites/rid/Lists/BibliotecaDigital/RIDE/DE/CA/Ilustrar-al-paciente-en-autocuidado-seguridad.pdf>
278. Resolución Numero 01281 de 2014. Ministerio de Salud y Protección Social, 2014. Available at: <https://www.minsalud.gov.co/sites/rid/Lists/BibliotecaDigital/RIDE/DE/DIJ/Resolucion-1281-de-2014.pdf>
279. Ten Year Public Health Plan. Ministerio de Salud y Protección Social. Available at: <https://www.minsalud.gov.co/sites/rid/Lists/BibliotecaDigital/RIDE/VS/ED/PSP/documento-plan-decenal-salud-publica-2022-2031.pdf>
280. Caicedo, Garcia, Martinez, Pereira, Reina, et al. Taking Action to Improve Health Literacy in Colombia: Knowledge Transfer and Information and Communication Technologies Platform as Health System Responses. The International Journal of Communication and Health, 2016. Available at: <http://communicationandhealth.ro/upload/number10/JUAN-CARLOS-RIVILLAS.pdf>
281. Ibid.
282. Visualización sin título: Basado en Listado de Medicamentos en Venta Libre. Gobierno de Colombia. Available at: <https://www.datos.gov.co/Salud-y-Proteccion-Social/Visualizacion-sin-titulo-Basado-en-LISTADO-DE-MEDI/m85a-6fu3>
283. Herramientas. Gobierno de Colombia. Available at: <https://gobiernodigital.mintic.gov.co/692/w3-propertyvalue-227660.html>
284. Agencia Nacional de Referencia Regional. Gobierno de Colombia, 2021. Available at: <https://www.invima.gov.co/documentos/20143/795611/itadoto+OTC+JUNIO+2021.pdf>
285. Ministry of Health and Social Protection of Colombia. Press Release No. 294 of 2022. “La mayor responsabilidad es el autocuidado”: Bermont. Available at: <https://www.minsalud.gov.co/Paginas/La-mayor-responsabilidad-es-el-autocuidado-Bermont.aspx>
286. Arrighi, E., Castilla, E., Peres, F., Mejia, R., et al. Scoping Health Literacy in Latin America. Global Health Promotion. 2021. Available at: <https://journals.sagepub.com/doi/full/10.1177/17579759211016802>
287. Lemley, S., Diaz, S., Cubillos, L., et al. Health Related Quality of Life and Health Literacy Among Adult Primary Care Patients with Subsidized or Contributive Health Insurance in Colombia. HHS Public Access. 2021. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8666104/>
288. Ibid.
289. Ibid.
290. Bröder, J., Chang, P., Kickbusch, I., Levin-Zamir, D., McElhinney, E., Nutbeam, D., et al. IUHPE Position Statement on Health Literacy: A Practical Vision for a Health Literate World. Global Health Promot. 2018; 25: 79–88.
291. Rice, M. Trends and Achievements in Promoting Health in the Americas: Developments from 2003–2011. PAHO. 2011. Available at: <https://iris.paho.org/handle/10665.2/33830>
292. Member States Portal. UNESCO. Available at: <https://www.unesco.org/en/member-states-portal>
293. Resolution 1035 of 2022. Ministerio de Salud y Protección Social. Available at: <https://www.minsalud.gov.co/sites/rid/Lists/BibliotecaDigital/RIDE/DE/DIJ/resolucion-1035-de-2022.pdf>
294. Ten-Year Public Health Plan 2022-2031. Ministerio de Salud y Protección Social. Available at: <https://www.minsalud.gov.co/plandecenal/Paginas/PDSP-2022-2031.aspx>
295. Ibid.
296. Ibid.
297. Ley Numero 1122 de 2007. El Congreso de la Republica de Colombia, 2007. Available at: <https://www.minsalud.gov.co/sites/rid/Lists/BibliotecaDigital/RIDE/DE/DIJ/ley-1122-de-2007.pdf>
298. Ley Estatutaria No. 1751. El Congreso de Colombia, 2015. Available at: https://www.minsalud.gov.co/Normatividad_Nuevo/Ley%201751%20de%202015.pdf
299. Observatorios. Observatorio Nacional de Calidad en Salud. Humanización en Salud. Gobierno de Colombia. Available at: <https://www.sispro.gov.co/observatorios/oncalidadsalud/Paginas/default.aspx>
300. Abello Bolivar, A., Acosta Amador, N., et al. Gestión de la Corresponsabilidad y Autocuidado en el Usuario, en el Marco de la Cultura de la Seguridad Social: Diseño de una Estrategia de Comunicación. Universidad del Rosario. Available at: <https://repository.urosario.edu.co/handle/10336/31246>
301. Colombia’s Constitution of 1991 with Amendments through 2015. The Constitute Project, 2015. Available at: https://www.constituteproject.org/constitution/Colombia_2015.pdf?lang=en
302. Servicios de Salud Amigables para Adolescentes y Jóvenes (SSAAJ). República de Colombia. Available at: <https://www.minsalud.gov.co/salud/publica/ssr/Paginas/Servicios-de-salud-amigables-para-adolescentes-y-jovenes-SSAAJ.aspx#:text=El%20Modelo%20de%20SSAAJ%20es,Derechos%20Reproductivos%20de%20esta%20poblaci%C3%B3n>
303. Política Nacional de Sexualidad, Derechos Sexuales y Derechos Reproductivos. República de Colombia. 2010. Available at: https://www.mineducacion.gov.co/1621/articles-172061_archivo_pdf_politicaSSR.pdf
304. Modos, Condiciones y Estilos de Vida Saludables. República de Colombia. Available at: <https://www.minsalud.gov.co/salud/Paginas/habitos-saludables.aspx>
305. Cáncer. República de Colombia. Available at: <https://www.minsalud.gov.co/salud/publica/PENT/Paginas/Prevenciondel-cancer.aspx>
306. ¿Qué es la diabetes? República de Colombia. Available at: <https://www.minsalud.gov.co/salud/publica/PENT/Paginas/diabetes.aspx>
307. Control de Tabaco. República de Colombia. Available at: <https://www.minsalud.gov.co/salud/publica/HS/Paginas/somos-mas-sin-tabaco.aspx>
308. Salud Bucal, Visual y Auditiva. República de Colombia. Available at: <https://www.minsalud.gov.co/salud/publica/HS/Paginas/salud-bucal-visual-auditiva.aspx>

309. Actividad Física. República de Colombia. Available at: <https://www.minsalud.gov.co/salud/Paginas/Actividad-F%C3%ADsica.aspx>.
310. Los 12 Mandamientos Contra la AMR. República de Colombia. Available at: <https://www.minsalud.gov.co/Regiones/Paginas/-MinSalud-promueve-los-12-mandamientos-contra-la-resistencia-anti-microbiana.aspx>.
311. Plan Nacional de Respuesta a la Resistencia a los Antimicrobianos. República de Colombia. Available at: <https://www.minsalud.gov.co/sites/rid/Lists/BibliotecaDigital/RIDE/VS/MET/plan-respuesta-resistencia-antimicrobianos.pdf>.
312. Santa María, M, Escobar, A and González, T. Autocuidado en Colombia: Estudio de opinión pública y cálculos fiscales. Available at: <http://www.andi.com.co/Uploads/12%20Mauricio%20Santamaria%20Salamanca.pdf>
313. Decreto Numero 3553 de 2004. República de Colombia, 2004. Available at: https://www.minsalud.gov.co/Normatividad_Nuevo/DECRETO%203553%20DE%202004.pdf.
314. Decreto Numero 677 de 1995. República de Colombia, 1995. Available at: <https://www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=9751#:~:text=Es%20el%20procedimiento%20t%C3%A9cnico%20experimental%20dise%C3%BDado%20con%20el%20fin%20de,el%20condiciones%20normales%20de%20almacenamiento>.
315. Montoya J., et al. Observatorio Nacional e Intersectorial de Embarazo en Adolescentes. República de Colombia. Available at: <https://www.minsalud.gov.co/sites/rid/Lists/BibliotecaDigital/RIDE/VS/ED/GCFI/ross-embarazo-adolescentes-oniea.pdf>.
316. Grupos étnicos. República de Colombia. Available at: <https://www.minsalud.gov.co/proteccionsocial/promocion-social/Paginas/grupos-etnicos.aspx>.
317. Determined by Decree No. 677/951 and Resolution 886042 of the Review Board of the Department of 2 Medications of the National Institute of Medicines and Food Surveillance. Decree No. 677 (1995) Resolution No. 866. INVIMA, 2004.
318. Invima. Government of Colombia. Available at: <https://www.emergobyul.com/recursos/colombia/invima>.
319. Decreto Numero 334 de 2022. República de Colombia, 2022. Available at: <https://www.minsalud.gov.co/Paginas/Colombia-le-apunta-a-la-optimizacion-de-tramites-para-producir-medicamentos-.aspx>.
320. Resolucion Numero 1036 de 2022. República de Colombia, 2022. Available at: https://www.minsalud.gov.co/Normatividad_Nuevo/Resoluci%C3%B3n%20No.%201036%20de%202022.pdf.
321. Rincon, A., Duran, A., et al. Regulatory, Pricing and Reimbursement: Colombia. Pharma Boardroom, 2021 Available at: <https://pharmaboardroom.com/legal-articles/regulatory-pricing-and-reimbursement-colombia/>.
322. Jimenez, C., Arias, G., and Galindo, L. Q&A: Pharma & Medical Device Regulation in Colombia. Available at: <https://www.lexology.com/library/detail.aspx?g=d732e0ba-ba46-4c4c-8d0b-4ee182c236e0>
323. Schlaganfall. AWMF Online. 2021. Available at: https://www.awmf.org/uploads/tx_szleitlinien/053-011l_S3_Schlaganfall_2021-03.pdf
324. Edelmann, F., Knosalla, C., Mörike, K., et al. Chronic Heart Failure. Aertzblatt. 2017. Available at: <https://www.aerzteblatt.de/int/archive/article/196412>
325. Leitlinie Therapie des Typ-1-Diabetes. DDG, 2018. Available at: https://www.awmf.org/uploads/tx_szleitlinien/057-013m_S3-Therapie-Typ-1-Diabetes_2018-04.pdf
326. S3-Leitlinie zur kardiologischen Rehabilitation (LL-KardReha) im deutschsprachigen Raum Europas Deutschland, Österreich, Schweiz (D-A-CH). AWMF Online. Available at: https://www.awmf.org/uploads/tx_szleitlinien/133-001k_S3-Kardiologische-Rehabilitation-in-D-A-CH_2020-12_-_verlaengert.pdf
327. S2e Leitlinie zur Akuttherapie des ischämischen Schlaganfalls AWMF-Registernummer 030-04. AMWF Online. 2021. Available at: https://www.awmf.org/uploads/tx_szleitlinien/030-046l_S2e_Akuttherapie-des-ischämischen-Schlaganfalls_2021-05.pdf
328. Werdan K., Boeken, U., et al. Kurzversion der 2. Auflage der deutsch-österreichischen S3- Leitlinie, Infarkt-bedingter Kardiogener Schock - Diagnose, Monitoring und Therapie. Der Kardiologe. 2020. Available at: https://leitlinien.dgk.org/files/2020_awmf_leitlinie_infarktbedingter_kardiogener_schock_kurzversion_ow.pdf
329. SELF-MEDICATION 2025. .B.A.H. Available at: https://www.bah-bonn.de/index.php?id=2&type=565&file=redakteur_filesystem/public/BAH_Broschuere_OTC-Vision_ENG_WEB.pdf
330. Möglichkeiten und Grenzen von Selbstmedikation. B.A.H., 2022. Available at: https://www.bah-bonn.de/index.php?id=2&type=565&file=redakteur_filesystem/public/Weitere_oeffentliche_Dateien/Faktenblatt_zur_Selbstmedikation_04-2022.pdf
331. Der Arzneimittelmarkt in Deutschland. B.A.H., 2020. Available at: https://www.bah-bonn.de/index.php?id=2&type=565&file=redakteur_filesystem/public/Weitere_oeffentliche_Dateien/BAH_Zahlenbroschuere_2020_21-05-07_WEB.pdf
332. Marktstruktur Rezeptfreier Produkte aus Apotheken in 2020. IQVIA. 2020. Available at: <https://www.iqvia.com/-/media/iqvia/pdfs/germany/library/infographic/infografik-otc-marktstruktur-062021.pdf>
333. German Medicines Manufacturers' Association (B.H.A.). Apothekenunterstützungskampagne. Available at: <https://www.bah-bonn.de/presse/apothekenunterstuetzungskampagne/>.
334. May U., Bauer, C. Pharmacy-based Self-care of Minor Ailments – A Health Economic Analysis focused on the German Healthcare system. Selfcare. Available at: <https://selfcarejournal.com/article/pharmacy-based-self-care-of-minor-ailments-a-health-economic-analysis-focused-on-the-german-healthcare-system/>
335. HIV Self-tests. Paul-Ehrlich-Institute. 2022. Available at: <https://www.pei.de/EN/newsroom/hiv-self-tests/hiv-self-tests-node.html>
336. The Promise of Digital Tools: A Roadmap for Apps. European Diabetes Forum. Available at: <https://www.eudf.org/our-work/recommendations/diabetes-technologies/>
337. The Economist Intelligence Unit. Digital Diabetes Index. Medtech Europe, 2020. Available at: <https://www.medtecheurope.org/diabetes/economist-intelligence-unit-digital-diabetes-index/>
338. The Health Economic Benefits of Self-Care in Europe. Vintura. Available at: https://assets.gskstatic.com/corporate/Health-Economic-Study/GSK_report_summary-FINAL.pdf
339. Informationen zu Ihren Gesundheitsfragen. Gesundbund. Available at: <https://gesund.bund.de/>
340. Gesundheitsportal geht online. Bundesministerium für Gesundheit. 2020. Available at: <https://www.bundesgesundheitsministerium.de/presse/pressemitteilungen/2020/3-quartal/gesundheitsportal.html>
341. Gesundheitsinformation.de. Available at: <https://www.gesundheitsinformation.de/>
342. Das Portal für Arzneimittelinformationen des Bundes und der Länder. PharmNet.Bund. Available at: <https://www.pharmnet-bund.de/static/de/index.html>
343. Informationen zu Ihren Gesundheitsfragen. Gesundbund. Available at: <https://gesund.bund.de/>
344. Heilpraktikerschulen in Deutschland und Lehrinstitut für Psychotherapie. HPA. Available at: <https://www.heilpraktiker-akademie.de/>
345. Gesundheitsförderung. Bildungsland. Available at: <https://www.schulministerium.nrw/ge-sundheitsfoerderung>
346. National Action Plan for Health Literacy: Healthcare and Academic Experts Call for a Comprehensive Strategy. Hertie School. Available at: <https://www.hertie-school.org/en/nap-pr/>
347. Allianz für Gesundheitskompetenz. Bundesministerium für Gesundheit. Available at: <https://www.bundesgesundheitsministerium.de/gesundheitskompetenz/allianz-fuer-gesundheitskompetenz.html>
348. Gauld NJ, Kelly FS, Emmerton LM, Kurosawa N, Bryant LJM, Buetow SA. Medicines Reclassification from a Pharmaceutical industry perspective: An International Qualitative Study. Res Social Adm Pharm. 2019;15:387-94.
349. Gauld N. Analysing the Landscape for Prescription to Non-prescription Reclassification (switch) in Germany: an Interview Study of Committee Members and Stakeholders. BMC. 2019. Available at: <https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-019-4219-6>
350. Researchers from ten Institutions Call on German Government to Bolster Health Literacy. Hertie School. 2022. Available at: <https://www.hertie-school.org/en/news/research/detail/content/researchers-from-ten-institutions-call-on-german-government-to-bolster-health-literacy>
351. Bundestag will mehr Prävention bei Adipositas und Diabetes mellitus. Deutscher Bundestag. 2020. Available at: <https://www.bundestag.de/dokumente/textarchiv/2020/kw27-de-diabetes-strategie-701742>
352. Digital Strategy 2025. Federal Ministry for Economic Affairs and Energy. Available at: https://www.de.digital/DIGITAL/Redaktion/EN/Publikation/digital-strategy-2025.pdf?__blob=publicationFile&v=9
353. Apps auf Rezept: Viel genutzt, Nutzen umstritten. Die Techniker. 2022. Available at: <https://www.tk.de/presse/themen/digitale-gesundheit/digitaler-fortschritt/diga-report-apps-auf-rezept-2125140?tkc-m=aaus>
354. Wels-Maug, C. Digital Health Apps in Germany – An Update on the DiGA Journey. Healthcare IT News. 2021. Available at: <https://www.healthcareitnews.com/news/emea/digital-health-apps-germany-update-diga-journey>
355. Paul, M. Saying Hello to Better Mental Health! German Startup Unlocks €10 million for Digital Therapeutics. Tech EU. 2022. Available at: <https://tech.eu/2022/03/10/saying-hello-to-better-mental-health-german-startup-unlocks-eur10-million-for-digital-therapeutics/>
356. Keating, F. Digital therapeutic 'HelloBetter Stress and Burnout' available to 50 million adults in Germany. Mobihealthnews. 2021. Available at: <https://www.mobihealthnews.com/news/emea/digital-therapeutic-hellobetter-stress-and-burnout-available-50-million-adults-germany>
357. Jungmann, S., Kraft, D. European Healthtech needs Stronger Medicine than Germany's Weak Digital Law. Sifted, 2022. Available at: <https://sifted.eu/articles/europe-germany-digital-health/>
358. Arzneimittel-Richtlinie. Gemeinsamer Bundesausschuss. Available at: <https://www.g-ba.de/richtlinien/anlage/17/>
359. Übersicht der Satzungsleistungen gesetzlicher Krankenkassen bezüglich der Erstattung rezeptfreier Arzneimittel. .B.A.H., 2022. Available at: https://www.bah-bonn.de/index.php?id=2&type=565&file=redakteur_filesystem/public/Weitere_oeffentliche_Dateien/20220601_UEbersicht_Satzungsleistungen_vs3.pdf
360. Gesundheitskurse. AOK. Available at: <https://www.aok.de/pk/gesundheitskurse/>.
361. Die Entwicklung von Sicherheit: Entwicklungspolitische Programme der USA und Deutschlands im Grenzbereich zur Sicherheitspolitik. B.A.H, 2009. Available at: https://www.academia.edu/6914503/Die_Entwicklung_von_Sicherheit_Entwicklungspolitische_Programme_der_USA_und_Deutschlands_im_Grenzbereich_zur_Sicherheitspolitik.
362. Medicinal Products Act. Federal Ministry of Justice. 2021. Available at: https://www.gesetze-im-internet.de/englisch_amg/englisch_amg.html#p0962
363. Global Report on Traditional and Complementary Medicine 2019. World Health Organization, 2019. Available at: <https://www.who.int/publications/i/item/978924151536>
364. Complementary and Alternative Medicines (CAM) and Traditional Medicinal Products (TMP). Federal Institute for Drugs and Medical Devices. Available at: https://www.bfarm.de/EN/Medicinal-products/Licensing/Types-of-marketing-authorisation/Complementary-alternative-medicines-and-traditional-medicinal-products/_node.html

365. German Medicines Manufacturers' Association (B.H.A.). Der Arzneimittelmarkt in Deutschland. 2020. Available at: https://www.bah-bonn.de/index.php?id=2&type=565&file=redakteur_filesystem/public/Weitere_oeffentliche_Dateien/BAH_Zahlen-broschuere_2020_21-05-07_WEB.pdf
366. Germany. Available at: <https://www.kingsfund.org.uk/sites/default/files/Germany.pdf>.
367. Grünes Rezept. .B.A.H. Available at: <https://www.bah-bonn.de/unsere-themen/gruenes-rezept/>
368. Selbstmedikation. ABDA. Available at: <https://www.abda.de/themen/selbstmedikation/>
369. Rochemont, R., Runkel, K., et al. Legal & Regulatory > Germany > Traditional Medicines and OTC Products. Pharma Boardman. 2019. Available at: <https://pharmaboardroom.com/legal-articles/traditional-medicines-and-otc-products-germany/>
370. Neufassung der Dosierungsempfehlungen der Kommission D für homöopathische Arzneimittel. Bundesinstitut für Arzneimittel und Medizinprodukte. Available at: <https://www.bfarm.de/DE/Arzneimittel/Zulassung/Zulassungsarten/Besondere-Therapie-richtungen-und-traditionelle-Arzneimittel/Homoeopathische-und-anthroposophische-Arzneimittel/neufass-dos-empfehlung.html>
371. 70 Prozent der Deutschen sind offen für Homöopathie – mehr als jeder zweite Deutsche hat schon Erfahrungen damit. Gesundheit erfahren. 2021. Available at: <https://www.dhu.de/presse/for-sa-umfrage-zur-homoeopathie-2021.html>
372. New survey: More than half of Germans have used Homeopathy and 70% are open to it. Ecch. Available at: <https://homeopathy-ecch.org/2021/09/morethan-half-of-germans-have-used-homeopathy/>
373. German Medicines Manufacturers' Association (B.H.A.). Self-Medication. Available at: <https://www.bah-bonn.de/en/topics/self-medication/>.
374. Germany was one of the major forces behind switch of triptans for migraine, with naratriptan (2005), almotriptan, sumatriptan (tablets and nasal spray, both 2009) and zolmitriptan (2013) all gaining OTC approval. 2014 notably saw a switch of ketotifen, while EHC ingredients ulipristal acetate (ellaOne) and levonorgestrel were switched in 2015. Nasal corticosteroids beclomethasone, fluticasone, and mometasone switched in 2016 (with initial diagnosis by GP); beclomethasone was previously available OTC, but only for short-term relief of hayfever. 2017 switches included ibuprofen patches (up to 200mg) for topical pain relief and aciclovir (<100mg) + hydrocortisone (<1%) combinations to treat cold sores in consumers aged 12+ years. In September 2018 the Federal Council approved Rx-to-OTC switch of ibuprofen + caffeine in a single dose of 400 mg and 100mg (maximum daily dose 1,200mg + 300mg). 2019 saw switch approval for levocetirizine solid preparations (5mg) and sodium bituminosulfonate + hydrocortisone acetate 0.2% (packs up to 20mg; indicated for non-infected inflammatory, allergic or itchy skin conditions).
375. Ibid.
376. German Medicines Manufacturers' Association (B.H.A.). Selbstmedikation. Ein wertvoller Beitrag für den Menschen und für unser Gesundheitssystem. April 2022. Available at: https://www.bah-bonn.de/redakteur_filesystem/public/Weitere_oeffentliche_Dateien/Faktenblatt_zur_Selbstmedikation_04-2022.pdf
377. German Medicines Manufacturers' Association (B.H.A.). Self-Medication. Available at: <https://www.bah-bonn.de/en/topics/self-medication/>.
378. Gauld J, N. Analysing the landscape for prescription to non-prescription reclassification (switch) in Germany: an interview study of committee members and stakeholders. BMC Health Services Research. 2019. Available at: <https://bmchealthservres.biomed-central.com/track/pdf/10.1186/s12913-019-4219-6.pdf>
379. Ibid.
380. Krogell, N., Stippler, A. et al. "OTC switch of phosphodiesterase-5 inhibitors." SelfCare. Available at: <https://selfcarejournal.com/article/otc-switch-of-phosphodiesterase-5-inhibitors/>
381. Stippler A., Kroth E., et al. Flu vaccinations as a service in German pharmacies: survey results from german healthcare professionals and patients. SelfCare. Available at: <https://selfcarejournal.com/article/flu-vaccinations-as-a-service-in-german-pharmacies-survey-results-from-german-healthcare-professionals-and-patients/>
382. Stippler A., Kroth E., et al. Oral Contraceptives as Potential OTC-products: The Views of German Pharmacies, Physicians, Patients and Stakeholders. SelfCare. Available at: <https://selfcarejournal.com/article/oral-contraceptives-as-potential-otc-products-the-views-of-german-pharmacies-physicians-patients-and-stakeholders/>
383. Stippler A., Kroth E., et al. Key results of a series of surveys among German pharmacies, physicians, patients and stakeholders regarding further triptans as potential OTC products. Springer Medizin, 2022. Available at: https://www.researchgate.net/publication/341542460_Key_results_of_a_series_of_surveys_among_German_pharmacies_physicians_patients_and_stakeholders_regarding_further_triptans_as_potential_OTC_products
384. Stippler A., Kroth E., et al. To Switch or not to Switch—First Germany-wide Study from the Perspective of Pharmacists in the European environment. Sringer Medizin. Available at: https://www.researchgate.net/publication/334115266_To_switch_or_not_to_switch-first_Germany-wide_study_from_the_perspective_of_pharmacists_in_the_European_environment
385. Stippler A., Kroth E., et al. To Switch or not to Switch— German Physicians' Views on Proposed New OTC Medicines. SelfCare. Available at: <https://selfcarejournal.com/wp-content/uploads/2019/03/Kroth-10.11-23.pdf>
386. Traxler, C., Kroth, E. A Comparison of National Switch Processes in Europe. ResearchGate. 2018. Available at: https://www.researchgate.net/publication/322399993_A_comparison_of_national_switch_processes_in_Europe
387. Kroth E. Switch – The German Process for Moving Medicines from Prescription to Non-prescription Status. ResearchGate. 2017. Available at: https://www.researchgate.net/publication/318578675_Switch_-_The_German_process_for_moving_medicines_from_prescription_to_non-prescription_status
388. ICMR Guidelines for Management of Type 2 Diabetes. Indian Council of Medical Research. 2018. Available at: https://main.icmr.nic.in/sites/default/files/guidelines/ICMR_GuidelinesType2diabetes2018_0.pdf
389. Guidelines for Management of Type 1 Diabetes. ICMR. 2022. Available at: https://main.icmr.nic.in/sites/default/files/upload_documents/ICMR_Guidelines_for_Management_of_Type_1_Diabetes.pdf
390. Standard Treatment Guidelines – Hypertension. Ministry of Health & Family Welfare Government of India. 2016. Available at: https://nhm.gov.in/images/pdf/guidelines/nrhm-guidelines/stg/Hypertension_full.pdf
391. Seth, S., Singh, S., et al. Heart Failure Guidelines for India: Update 2017. Journal of the Practice of Cardiovascular Sciences. Available at: <https://www.jpccs.org/article.asp?issn=2395-5414;year=2017;volume=3;issue=3;spage=133;epage=138;aulast=Seth>
392. DiabetesIndia 2022. Scientific Program 2022.
393. DiabetesIndia 2021. Available at: http://diabetesindia2021.com/scientific_program/
394. National Conference of Family Medicine and Primary Care. Available at: <https://fmppc2022.com/#1649142077699-ec6a52bc-655a>
395. Annual Conference of Cardiological Society of India CSICON 2019 Delhi. 5th-8th December the Ashok Hotel, New Delhi. DocPlayer. 2019. Available at: <https://docplayer.net/142704142-Annual-conference-of-cardiological-society-of-india-csicon-2019-delhi-5th-8th-december-the-ashok-hotel-new-delhi.html>
396. 72nd Annual Cardiology Conference. Cardiological Society of India. 2020. Available at: <https://www.apollovhf.com/CSI-2020.pdf>
397. 'Self-care' is the most searched Google query right now. ETimes. 2020. Available at: <https://timesofindia.indiatimes.com/life-style/health-fitness/de-stress/self-care-is-the-most-searched-google-query-right-now/articleshow/75709693.cms>
398. Global views on Exercise and Team Sports. Game Changers. 2021. Available at: <https://www.ipsos.com/sites/default/files/ct/news/documents/2021-08/Global%20views%20on%20sports%20and%20exercise%20Global%20Advisor.pdf>
399. Podder, V et al. Physical Activity Patterns in India Stratified by Zones, Age, Region, BMI and Implications for COVID-19: A Nationwide Study. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8455010/>
400. International Institute for Population Sciences, Deemed University. National Family Health Survey – 5—India Fact Sheet. Ministry of Health and Family Welfare; Government of India. Available at: http://rchiips.org/nfhs/NFHS-5_FCTS/India.pdf
401. Ray, S., Suri, S. Global nutrition report 2021 – India's Nutrition Profile and how to meet Global Nutrition Target. ORF. 2021. Available at: <https://www.orfonline.org/expert-speak/global-nutrition-report-2021/>
402. Obesity prevalence. Global Obesity Observatory. 2021. Available at: https://data.worldobesity.org/country/india-95/#data_prevalence
403. Value of OTC in India. Organization of Pharmaceutical Producers of India. 2021. Available at: <https://www.indiaoppi.com/wp-content/uploads/2022/03/Value-of-OTC-in-India-1.pdf>
404. Ibid.
405. Tikkanen, R., Osborn, R., et al. International Health Care System Profiles – India. The Commonwealth Fund. 2020. Available at: <https://www.commonwealthfund.org/international-health-policy-center/countries/india#electronic-health-records>
406. Ministry of Human Resource Development. Operational Guidelines on School Health Programme under Ayushman Bharat. Government of India. 2018. Available at: https://nhm.gov.in/New_Updates_2018/NHM_Components/RMNCHA/AH/guidelines/Operational_guidelines_on_School_Health_Programme_under_Ayushman_Bharat.pdf
407. Ministry of Health and Family Welfare. National Health Policy. Government of India. 2017. Available at: https://www.nhp.gov.in/nhpfiles/national_health_policy_2017.pdf
408. Ministry of Health and Family Welfare. About National Health Portal. Government of India. 2015. Available at: https://www.nhp.gov.in/fa-q%E2%80%99s_pg
409. Barve, S. A Literature review of Measurement of Health Literacy in India. ResearchGate. 2019. Available at: https://www.researchgate.net/publication/335137516_A_Literature_review_of_Measurement_of_Health_Literacy_in_India
410. Motwani, P. Health Literacy in India: A Challenge for Millions. Medfin. 2021. Available at: <https://blog.medfin.in/health/health-literacy-in-india/>
411. Kumar, R. Health literacy a must to empower patients. The Tribune. Available at: <https://www.tribuneindia.com/news/archive/comment/health-literacy-a-must-to-empower-patients-752945>
412. National Health Portal. Healthy Lifestyle. Ministry of Health and Family Welfare. Available at: <https://www.nhp.gov.in/>
413. Chilukoti, B. World AIDS Day 2021: Rapid HIV Testing Kits in India -- How to Get Tested at Home. TheHealthSite. 2021. Available at: <https://www.thehealthsite.com/diseases-conditions/hiv/rapid-hiv-testing-kits-in-india-how-to-get-tested-at-home-b1217-539846/>
414. Rawat, S., Suhas, S., et al. Community Perspectives on Making HIV Self-Testing Accessible as a Comprehensive Prevention Package. NACO. Available at: <http://naco.gov.in/sites/default/files/Technical%20Brief%20on%20HIV%20Self%20testing.pdf>
415. Ramakant, B., Shukla S. Virtual approaches boost HIV self-testing in India. Aidsmap. 2022. Available at: <https://www.aidsmap.com/news/feb-2022/virtual-approaches-boost-hiv-self-testing-india>

416. Poli, U., Muwonge, R., et al. Feasibility, Acceptability, and Efficacy of a Community Health Worker-Driven Approach to Screen Hard-to-Reach Periurban Women Using Self-Sampled HPV Detection Test in India. *JCO Global Oncology*. Available at: <https://ascopubs.org/doi/full/10.1200/GO.20.00061>
417. Ibid.
418. Ibid.
419. About Accredited Social Health Activist (ASHA). National Health Mission. Available at: <https://nhm.gov.in/index1.php?lang=1&level=1&sublinkid=150&lid=226>
420. Ibid.
421. Ministry of Wealth and Family Welfare. Ayushman Bharat Health and Wellness Centres Transforming India's Primary Health Care System. Government of India. Available at: https://nhm.gov.in/New_Updates_2018/publication/AB-HWC-Brochure-March-2021-English.pdf
422. Ibid.
423. Ministry of Wealth and Family Welfare. National Multisectoral Action Plan for Prevention and Control of Common Noncommunicable Diseases. Government of India. 2017. Available at: https://main.mohfw.gov.in/sites/default/files/National%20Multisectoral%20Action%20Plan%20%28NMAP%29%20for%20Prevention%20and%20Control%20of%20Common%20NCDs%20%282017-22%29_1.pdf
424. Nourishing India. NITI Aayog. Available at: https://www.niti.gov.in/writereaddata/files/document_publication/Nutrition_Strategy_Booklet.pdf
425. Sarwal, R. Take Home Ration. World Food Programme. 2022. Available at: https://www.niti.gov.in/sites/default/files/2022-06/Take-home-ration-report-30_06_2022.pdf
426. Eat Right India. Eat Right India. Available at: <https://eatrightindia.gov.in/eatrightindia.jsp>
427. About Fit India Movement. Fit India. Available at: <https://fitindia.gov.in/>
428. Travasso, C. India Draws a Red Line under Antibiotic Misuse. *Thebmj*. 2016. Available at: <https://www.bmj.com/content/352/bmj.i1202#:~:text=The%20Medicines%20with%20the%20Red,marked%20with%20a%20red%20line>
429. What Does the Red Line on Packets of Some Medicine Indicate? *News18*. 2021. Available at: <https://www.news18.com/news/buzz/what-does-the-red-line-on-packets-of-some-medicine-indicate-4507610.html>
430. National Policy on Indian Systems of Medicine & Homoeopathy-2002. India Science and Technology. 2002. Available at: https://indiascienceandtechnology.gov.in/sites/default/files/file-uploads/sciencetechnology/policies/1527506899_7870046089-Ayush%20%20on%20policy%20ISM%20and%20H%20Homeopathy_0.pdf
431. Kalubhai, M., Sonowal, S. National Commission for Indian System of Medicine. NCISM. Available at: <https://www.ccimindia.org/>
432. Chegu, S., Nagabhushanam, M. A Comprehensive Study on Regulation of Herbal Drugs in India, US and European Union. *International Journal of Drug Regulatory Affairs*. 2021. Available at: <http://ijdra.com/index.php/journal/article/view/458>
433. World Health Organization. WHO Global Report on Traditional and Complementary Medicine 2019. Available at: <https://www.who.int/publications/i/item/978924151536>
434. Ministry of Ayush. Guidelines for AYUSH Practitioners for COVID-19. Government of India, 2022. Available at: <https://www.ayush.gov.in/ayush-guidelines.html>
435. World Health Organization. WHO Integrated Health Services, Traditional, Complementary and Integrative Medicine. WHO Global Report on Traditional and Complementary Medicine 2019. Available at: <https://www.who.int/publications/i/item/978924151536>
436. About CDSCO. Central Drugs Standard Control Organization. Available at: <https://cdsco.gov.in/opencms/opencms/en/Home/>
437. The Drugs and Cosmetics Act and Rules. Government of India. Available at: https://cdsco.gov.in/opencms/export/sites/CDSCO_WEB/Pdf-documents/acts_rules/2016DrugsandCosmeticsAct1940Rules1945.pdf
438. Ghangurde, A. India Proposes OTC List In Draft Rule Lacking Clarity On Pricing, Switching Pathway. *HBW Insight*. 2022. Available at: <https://hbw.pharmaintelligence.informa.com/RS152605/India-Proposes-OTC-List-In-Draft-Rule-Lacking-Clarity-On-Pricing-Switching-Pathway>
439. Mumbai, A. Health Ministry to Finalise OTC Drug Policy soon. *Pharmabiz*. 2021. Available at: <http://www.pharmabiz.com/NewsDetails.aspx?aid=143333&sid=1>
440. Cyril Amarchand Mangaldas. India Corporate Law. Over The Counter Drugs - Regulatory Clarity on the Horizon. September 2019. Available at: <https://corporate.cyrilamarchandblogs.com/2019/09/over-the-counter-drugs-regulations-clarity-india/>
441. Money Control. Government Proposes OTC Sale of 16 Commonly Used Medicines. Available at: <https://www.moneycontrol.com/news/economy/policy/exclusive-i-india-proposes-over-the-counter-sale-of-16-commonly-used-medicines-for-first-time-8585411.html>
442. Ghangurde, A. India Proposes OTC List in Draft Rule Lacking Clarity on Pricing, Switching Pathway. *Informa*, 2022. Available at: <https://hbw.pharmaintelligence.informa.com/RS152605/India-Proposes-OTC-List-In-Draft-Rule-Lacking-Clarity-On-Pricing-Switching-Pathway>
443. The Indonesian Diabetes Association. Guidelines on the Management and Prevention of Prediabetes. Clinical Practice, 2014. Available at: <http://www.actamedindones.org/index.php/ijim/article/view/112/107>
444. Purnamasari, D., Waspadji, S., et al. Indonesian Clinical Practice Guidelines for Diabetes in Pregnancy. *Journal of the ASEAN Federation of Endocrine Societies*. 2013. Available at: <https://www.asean-endocrinejournal.org/index.php/JAFES/article/view/44>
445. Pedoman Tatalaksana Gagal Jantung. PERKI. 2020. Available at: https://inaheart.org/wp-content/uploads/2021/07/Pedoman_Tatalaksana_Gagal_Jantung_2020.pdf
446. Panduan Tatalaksana Penyakit Jantung Bawaan Dewasa (PJBD). PERKI. 2020. Available at: https://inaheart.org/wp-content/uploads/2021/08/PAN-DUAN_TATALAKSANA_PJBD.pdf
447. Indonesian Heart Association Pedoman TataLaksana hipertensi pada penyakit Kardiovaskular 2015. INA Heart, 2015. Available at: https://inaheart.org/wp-content/uploads/2021/07/Pedoman_TataLaksana_hipertensi_pada_penyakit_Kardiovaskular_2015.pdf
448. Panduan Praktik Klinis Bagi Dokter di Fasilitas Pelayanan Kesehatan Primer. *JDIH*. 2014. Available at: <https://www.google.com/url?q=https://peraturan.bpk.go.id/Home/Details/116719/permenkes-no-5-tahun-2014&sa=D&source=docs&ust=1655229737947153&usq=AOvVaw3m49xfJcwuR-LONLMal9Hyx>
449. Interview with Dr Ikawati
450. Interview with Mr. Satibi PhD, Pharm
451. Interview with Dr. Purwastyastuti
452. wJoeseof, R. Challenges with Asean Pharmaceutical Regulation Schemes to OTC Products Indonesia Experience. *TSMIA*. Available at: [http://www.tsmia.or.th/Phuket2014/presentations/Day2/Day2_Session7_1_Presentation_2_-_Rachmadi_Joesoef_\(Challenges_with_Asean\).pdf](http://www.tsmia.or.th/Phuket2014/presentations/Day2/Day2_Session7_1_Presentation_2_-_Rachmadi_Joesoef_(Challenges_with_Asean).pdf)
453. Indonesia Wash Overview. *Digication*. Available at: <https://bu.digication.com/dylankirby/home-1>
454. Key Aspects of Implementation in Indonesia. *Fit for School*. Available at: <http://www.fitforschool.international/fit-in-action/indonesia/ourwork/>
455. Duijster D and all. 'Fit for school' - A School-based Water, Sanitation and Hygiene Programme to Improve Child health: Results from a longitudinal study in Cambodia, Indonesia and Lao PDR. 2017. Available at: <https://bmcpublihealth.biomedcentral.com/articles/10.1186/s12889-017-4203-1>
456. Kementerian Kesehatan Republik Indonesia. Cetak Biru Strategi Transformasi Digital Kesehatan 2024. Jakarta: Kementerian Kesehatan Republik Indonesia, 2021. Available at: <https://dto.kemkes.go.id/Digital-Transformation-Strategy-2024.pdf>
457. Ministry of Health of the Republic of Indonesia. Strategic Planning Ministry of Health 2015-2019. Available at: https://extranet.who.int/countryplanningcycles/sites/default/files/planning_cycle_repository/indonesia/restra_2015_translated_1.pdf
458. National Strategic Action Plan for the Prevention and Control of Noncommunicable Diseases (RAN PP-PTM) 2016-2019. World Health Organization, 2015. Available at: https://cdn.who.int/media/docs/default-source/searo/ncd/ino-ncd-action-plan-2016-2019-not-approved.pdf?sfvrsn=ae44c84a_2
459. Setiadi AP., Wibowo Yi. Strategies to Implement Community Training to Promote Responsible Self Medication in Indonesia: A Qualitative Study of Trainers. *RSTMH*. 2020. Available at: <https://rstmh.org/strategies-to-implement-community-training-to-promote-responsible-self-medication-in-indonesia-a>
460. Wibowo, Y., Setiadi, A. P., Halim, S. V., Saputra, R. D., Oktavia, R., Irianti, R., Lestari, P. I., Puspitasari, C. R., & Sunderland, B. A pilot study of cadre training to promote responsible self-medication in Indonesia: Which is better specific or general modules?. *Health & social care in the community*, 2021 29(2), 554-563. Available at: <https://doi.org/10.1111/hsc.13118>
461. Rizal, Y. Public Response to the Implementation of Clean and Healthy Living Behavior (PHBS) in Coastal Community in Rokan Hilir Regency. *Emerald Insight*, 2018. Available at: <https://www.emerald.com/insight/content/doi/10.1108/JGR-12-2017-0059/full/html?skipTracking=true>
462. Desmawan, D., Pratama, M., et al. Implemented Clean and Healthy Behavior Activities in the Aftermath of the COVID-19 Pandemic, Cerukcuk Village, Tanara District. *MOVE*. 2022. Available at: <https://equators-science.com/index.php/move/article/view/45>
463. Purba, N., Reynhat, M. Clean and Healthy Lifestyle Behavior (PHBS Program) for Children with Intellectual Disability. 2020. Available at: https://www.researchgate.net/publication/346628281_Clean_and_Healthy_Lifestyle_Behavior_PHBS_Program_for_Children_with_Intellectual_Disability
464. Anggorro, W. "Govt, WFP Launch Digital Campaign to Promote Healthy Eating among Indonesian Adolescents." *Medcom*. 2022. Available at: <https://www.medcom.id/english/lifestyle/ybDX-Ovjb-govt-wfp-launch-digital-campaign-to-promote-healthy-eating-among-indonesian-adolescents>
465. Country Nutrition Status. *Scaling Up Nutrition*. Available at: <https://scalingupnutrition.org/sun-countries/indonesia/>
466. Technical Brief Indonesia Minimum Service Standards for Nutrition: Technical Brief for District Health Administrators. Kementerian Kesehatan Republik Indonesia. 2017. Available at: <https://www.fantaproject.org/sites/default/files/resources/Indonesia-MSS-TechBrief-Governors-Districts-ENGLISH-May2017.pdf>
467. Strategic Planning Ministry of Health 2015- 2019. Ministry of Health of the Republic of Indonesia. 2015 - 2019. Available at: https://extranet.who.int/countryplanningcycles/sites/default/files/planning_cycle_repository/indonesia/restra_2015_translated_1.pdf
468. The Republic of Indonesia Health System Review. Asia Pacific Observatory on Health System and Policies. Available at: <https://apps.who.int/iris/bits-tream/handle/10665/254716/9789290225164-eng.pdf>

469. Mahadewi, E., Hilmy, M., et al. Improved Learning of the Healthy Living Community Movement During the Pandemic for Budi Cendekia Islamic School Students. *International Journal of Community Service*. Available at: <https://ijcsnet.id/index.php/go/article/download/29/23#:~:text=The%20Healthy%20Living%20Community%20Movement%20or%20commonly%20known%20as%20GERMAS,without%20compromising%20curative%2D%20rehabilitative%20efforts.>
470. Presidential Instruction No.1 of 2017, Indonesia. Available at: https://jdih.bappenas.go.id/peraturan/countviewer/162/Inpres_Nomor_1_Tahun_2017.pdf
471. Indonesia: Evaluation of the Urban Community Driven Development Program. Program Nasional Pemberdayaan Masyarakat Mandiri Perkotaan (PNPM Urban). 2013. Available at: <https://openknowledge.worldbank.org/bitstream/handle/10986/17870/799030WP0RE-PLA-0P124477000UO0900ACS.pdf?sequence=1&isAllowed=y>
472. GERMAS - Healthy Living Community Movement. Direktorat Promosi Kesehatan Dan Pemberdayaan Masyarakat. 2017. Available at: https://kesmas.kemkes.go.id/assets/uploads/contents/others/Buku_Tiga_Tahun_Germas_Lesson_Learned.pdf
473. Interview with Dr. Imran Agus Nurali
474. Integrasi Pengobatan Tradisional Dalam Sistem Kesehatan Nasional. Kementerian Kesehatan Republik Indonesia. 2011. Available at: <https://www.kemkes.go.id/article/view/1706/integrasi-pengobatan-tradisional-dalam-sistem-kesehatan-nasional.html>
475. Undang-undang Republik Indonesia Nomor 36 Tahun 2009 Tentang KESEHATAN. Republik Indonesia. 2009. Available at: https://infeksiemerging.kemkes.go.id/download/UU_36_2009_Kesehatan.pdf
476. Undang-undang Republik Indonesia Nomor 36 Tahun 2009 Tentang Kesehatan. Departemen Kesehatan Republik Indonesia. 2007. Available at: <https://bikinpabrik.id/wp-content/uploads/2019/03/Buku-Kebijakan-Obat-Tradisional-Nasional-Tahun-2007.pdf>
477. Presidential Decree No. 18 of 2021 on Ministry of Health and Minister of Health Regulation No. 5 of 2022.
478. Presidential Decree number 80 of 2017 on National Agency for Drug and Food Control (NADFC).
479. Regulation of the Ministry of Health Number 949 Concerning Registration of Finished Drugs. 2000. Available at: <http://www.flevin.com/id/lgso/translations/JICA%20Mirror/english/80.949-2000.eng.qc.html>
480. Kepala Badan Pengawas Obat Dan Makanan Republik Indonesia Nomor: HK.00.05.41.1384. Badan Pengawas Obat Dan Makanan Republik Indonesia. Available at: <https://sireka.pom.go.id/requirement/HK.00.05.41.1384-2005.pdf>
481. Peraturan Menteri Kesehatan Republik Indonesia Nomor 3 Tahun 2021. Menteri Kesehatan Republik Indonesia. 2021. Available at: <https://dinkes.jatimprov.go.id/userfile/dokumen/PMK-No.-3-Th-2021-Pe-ubahan-Penggolongan-Pembatasan-dan-Kategori-Obat-961.pdf>
482. PMK No 3 Th 2021, Perubahan Penggolongan, Pembatasan, dan Kategori Obat. Menteri Kesehatan Republik Indonesia. 2021. Available at: <https://gudangilmu.farmasetika.com/pmk-no-3-th-2021-perubahan-penggolongan-pembatasan-dan-kategori-obat/>
483. Mr. Rachmadi Joesoef, Representative, Gabungan Perusahaan Farmasi Indonesia (G. P. Farmasi); Director, Pharmaceutical Laboratories, KONIMEX
484. Ministry of Health Regulation 919 on Criteria for Drugs that can be Delivered without a Prescription. 1993.
485. Regulation of NADFC No. 8 of 2020, dated April 7, 2020 on control of Distribution On Line of Drug and Food 2020.
486. Decree of the Minister of Health No. 386/MENKES/SK/IV/1994 concerning Guidelines for Advertising Over-the-counter Medicines, Traditional Medicines, Medical Devices, Cosmetics, Household Health Supplies and Food and Beverages.
487. Regulation of NADFC No. 2 of 2021, dated February 3, 2021, on drug advertising guidelines
488. Minister of Health Regulation Number 98 of 2015
489. Division of Non-Communicable Diseases Ministry of Health, Kenya. Kenya National Guidelines for Cardiovascular Diseases Management. Republic of Kenya, 2018. Available at: https://www.health.go.ke/wp-content/uploads/2018/06/Cardiovascular-guidelines-2018_A4_Final.pdf
490. Ministry of Public Health and Sanitation, Kenya. National Clinical Guidelines for Management of Diabetes Mellitus. Republic of Kenya, 2010. Available at: <https://www.worlddiabetesfoundation.org/sites/default/files/WDF09-436%20National%20Clinical%20Guidelines%20for%20Management%20of%20Diabetes%20Mellitus%20-%20Complete.pdf>
491. Ministry of Public Health and Sanitation, Kenya. Kenya National Diabetes Educators Manual. Republic of Kenya, 2010. Available at: <https://www.worlddiabetesfoundation.org/sites/default/files/Kenya%20National%20Diabetes%20Educators%20Manual.pdf>
492. Kenya Cardiac Society. 15th PASCAR Congress. *CardioVascular Journal of Africa*, 2021. Available at: <https://cvja.co.za/onlinejournal/vol32/pascar-2021/15thPASCAR-Congress-2021-updated.pdf>
493. Langat, A. In quest for UHC, Kenya faces Pharmacy Regulation Battles. *Devex*, 2019. Available at: <https://www.devex.com/news/in-quest-for-uhc-kenya-faces-pharmacy-regulation-battles-95134>
494. Kenya Institute of Curriculum Development. Basic Education Curriculum Framework. Republic of Kenya, 2017. Available at: <https://kicd.ac.ke/wp-content/uploads/2017/10/CURRICULUMFRAMEWORK.pdf>
495. Muinga N, Magare S, Monda J, Kamau O, Houston S, Fraser H, Powell J, English M, Paton C. Implementing an Open Source Electronic Health Record System in Kenyan Health Care Facilities: Case Study. *JMIR Med Inform*, 2018. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5932328/>
496. Ministry of Medical Services, Ministry of Public Health and Sanitation. Kenya National e-Health Strategy 2011-2017. Republic of Kenya, 2011. Available at: https://www.isfteh.org/files/media/kenya_national_ehealth_strategy_2011-2017.pdf
497. Njuguna, R, Tenambergen, W, Mapesa, J. Health Literacy on Patients' Rights Charter Among Users of Primary Care Health Facilities in Kiambu and Machakos Counties in Kenya. *International Journal of Professional Practice*, 2020. Available at: https://www.researchgate.net/publication/344652801_Health_Literacy_on_Patients'_Rights_Charter_Among_Users_of_Primary_Care_Health_Facilities_in_Kiambu_and_Machakos_Counties_in_Kenya
498. Gatimu, W. Constraints Facing Promotion of Health Literacy Among Women in Kenya. *East African Journal of Information Science*, 2018. Available at: <https://doi.org/10.21428/f02b3832>
499. Mwangi, J., Miruka, F., Mugambi, M. et al. Characteristics of users of HIV self-testing in Kenya, outcomes, and factors associated with use: results from a population-based HIV impact assessment, 2018. *BMC Public Health*, 2022. Available at: <https://doi.org/10.1186/s12889-022-12928-0>
500. Little, K, Rosenberg, S. Update on Kenya HIVST landscape. *PSI*, 2020. Available at: <https://www.psi.org/wp-content/uploads/2020/02/Update-on-Kenya-HIV-Self-Testing-Landscape.pdf>
501. Ministry of Health, Kenya. Kenya Primary Health Care Strategic Framework, 2019-2024. Republic of Kenya, 2020. Available at: <https://www.health.go.ke/wp-content/uploads/2020/07/Kenya-Primary-Healthcare-Strategic-Framework-Signed.pdf>
502. Ministry of Health, Kenya. Kenya Community Health Strategy 2020-2025. Republic of Kenya, 2021. Available at: https://www.health.go.ke/wp-content/uploads/2021/01/Kenya-Community-Health-Strategy-Final-Signed-off_2020-25.pdf
503. Ministry of Health, Kenya. National Community Health Digitization Strategy 2020-2025. Republic of Kenya, 2021. Available at: <https://www.health.go.ke/wp-content/uploads/2021/03/eCHIS-Strategy-2020-2025.pdf>
504. Ministry of Health, Kenya. National Community Health Digitization Strategy 2020-2025. Republic of Kenya, 2021. Available at: <https://www.health.go.ke/wp-content/uploads/2021/03/eCHIS-Strategy-2020-2025.pdf>
505. Ministry of Health, Kenya. National Strategic Plan for the Prevention and Control of Non-communicable Diseases, 2021-2026. Republic of Kenya, 2021. Available at: <https://www.health.go.ke/wp-content/uploads/2021/07/Kenya-Non-Communicable-Disease-NCD-Strategic-Plan-2021-2025.pdf>
506. Ministry of Health, Kenya. National Guidelines for Healthy Diets and Physical Activity. Republic of Kenya, 2017. Available at: <http://www.nutritionhealth.or.ke/wp-content/uploads/Downloads/National%20Guidelines%20for%20Healthy%20Diets%20and%20Physical%20Activity%202017.pdf>
507. Ministry of Health, Kenya. Kenya National Violence and Injury Prevention and Control Action Plan 2018 -2022. Republic of Kenya, 2019. Available at: <https://www.health.go.ke/wp-content/uploads/2019/03/Violence-and-Injury-Prevention-Action-Plan-Final-I.pdf>
508. Ministry of Health, Kenya. National Physical Activity Action Plan 2018 - 2023. Republic of Kenya, 2019. Available at: <https://www.health.go.ke/wp-content/uploads/2019/03/National-Physical-Activity-Action-Plan.pdf>
509. Ministry of Health, Kenya. Menstrual Hygiene Management Strategy 2019 - 2024. Republic of Kenya, 2020. Available at: <https://www.health.go.ke/wp-content/uploads/2020/05/MHM-Strategy-11-May-2020.pdf>
510. Ministry of Labour, Social Security and Services, Kenya. National Policy on Older Persons and Ageing. Republic of Kenya, 2014. Available at: http://www.partners-popdev.org/ageing/docs/National_Policy_on_Older_Persons_and_Ageing_Kenya.pdf
511. About Us: Transition to PS Kenya. Population Services Kenya, 2022. Available at: <https://www.pskkenya.org/about-us/>
512. Ongoing Strategies to Improve the Management of Upper Respiratory Tract Infections and Reduce Inappropriate Antibiotic Use Particularly among Lower and Middle-income Countries: Findings and Implications for the Future. *Current Medical Research and Opinion*, 2020. Available at: <https://www.tandfonline.com/doi/abs/10.1080/03007995.2019.1700947?cookieSet=1>
513. Godman B.,egwuenu A., Haque M., et al. Strategies to Improve Antimicrobial Utilization with a Special Focus on Developing Countries. *Life*, 2021. Available at: <https://doi.org/10.3390/life11060528>
514. Ministry of Health, Kenya. Kenya Health Policy 2014 - 2030. Republic of Kenya, 2014. Available at: <https://www.ncikenya.or.ke/documents/kenya-health-policy.pdf>
515. Self-Care Trailblazer Group. Digital Self-Care: A Framework for Design, Implementation, and Evaluation. *Population Services International*, 2020. Available at: <https://www.psi.org/wp-content/uploads/2020/10/Digital-Self-Care.pdf>
516. Pharmacy and Poisons Board, Kenya. Guidelines for Registration of Herbal Products. Republic of Kenya, 2022. Available at: <https://web.pharmacyboardkenya.org/downloads/guidelines/>
517. The National Policy on Traditional Knowledge, Genetic Resources and Traditional Cultural Expressions, 2009. Republic of Kenya, 2009. Available at: <https://www.wipo.int/edocs/lexdocs/laws/en/ke/ke022en.pdf>
518. Republic of Kenya. Kenya Health Act 2017. Kenya Gazette Supplement Acts, 2017. Available at: <http://kenyalaw.org/kl/fileadmin/pdf-downloads/Acts/HealthActNo.21of2017.pdf>
519. Department of Culture, Ministry of Sports, Culture, and Heritage, Kenya. Application Form for Registration/Recognition of Traditional Medical Practitioners and Medicinal Plant Conservationists. Republic of Kenya, 2003. Available at: <https://sports-heritage.go.ke/wp-content/uploads/2020/05/TRADITIONAL-MED-FORM0001.pdf>
520. Owino, S. Kenya: Bill Seeks to Regulate Alternative Medicine. *The Nation*, 2021. Available at: <https://allafrica.com/stories/202111100051.html>

521. WHO Africa. WHO, Africa CDC in joint push for COVID-19 traditional medicine research in Africa. World Health Organization, 2020. Available at: <https://www.afro.who.int/news/who-africa-cdc-joint-push-covid-19-traditional-medicine-research-africa>
522. Pharmacy and Poisons Board. Regulatory Functions. Republic of Kenya, 2022. Available at: <https://web.pharmacyboardkenya.org/>
523. Pharmacy and Poisons Board. Guidelines on Medicines Evaluation and Registration. Republic of Kenya, 2022. Available at: <https://web.pharmacyboardkenya.org/download/guidelines-on-medicines-evaluation-and-registration/>
524. Pharmacy and Poisons Board. Guidelines on Medicines Evaluation and Registration. Republic of Kenya, 2022. Available at: <https://web.pharmacyboardkenya.org/download/guidelines-on-medicines-evaluation-and-registration>
525. Sykei, J. Healthy respect for advertising guidelines is critical in Kenyan pharmaceutical sector. *Bowmans*, 2018. Available at: <https://www.bowmanslaw.com/insights/intellectual-property/healthy-respect-for-advertising-guidelines-is-critical-in-kenyan-pharmaceutical-sector/>
526. Pharmacy and Poisons Board. Marketing Authorisation. Republic of Kenya, 2002. Available at: <https://pharmacyboardkenya.org/registrationretentionvariations/>
527. Pharmacy and Poisons Board. Herbs and Complementary Medicines Registration Procedure. Republic of Kenya, 2022. Available at: <https://web.pharmacyboardkenya.org/herbs-and-complementary-medicines-registration-procedure/>
528. Toroitich AM, Dunford L, Armitage R, Tanna S. Patients Access to Medicines – A Critical Review of the Healthcare System in Kenya. *Risk Manag Health Policy*, 2022. Available at: <https://doi.org/10.2147/RMHP.S348816>
529. Pharmacy and Poisons Board. Regulatory Functions. Republic of Kenya, 2022. Available at: <https://web.pharmacyboardkenya.org/>
530. Merab, E. Sale of Popular Cough Syrups without Doctor's Note Banned. *Nation*, 2018. Available at: <https://nation.africa/kenya/news/sale-of-popular-cough-syrups-without-doctor-s-note-banned--1254030>
531. Merab, E. Kenya Restricts Sale of Medicines with Codeine. *The East African*, 2018. Available at: <https://www.theeastafrican.co.ke/tea/science-health/kenya-restricts-sale-of-medicines-with-codeine-1381532>
532. Pharmacy and Poisons Board. Guidelines on Medicines Evaluation and Registration. Republic of Kenya, 2022. Available at: <https://web.pharmacyboardkenya.org/download/guidelines-on-medicines-evaluation-and-registration/>
533. Ministry of Health, Kenya. Kenya Essential Medicines List 2019. Republic of Kenya, 2019. Available at: <https://www.health.go.ke/wp-content/uploads/2020/07/Kenya-Essential-Medicines-List-2019.pdf>
534. Diagnóstico y Tratamiento de la Hipertensión Arterial en el Primer Nivel de Atención. Instituto Mexicano del Seguro Social. 2014. Available at: <https://www.imss.gob.mx/sites/all/statics/guiasclinicas/076GER.pdf>
535. Ibid.
536. Instituto Mexicano del Seguro Social. Detección y Estratificación de factores de riesgo cardiovascular. Mexico, 2011. Available at: <http://www.imss.gob.mx/sites/all/statics/guiasclinicas/421GRR.pdf>
537. Ibid.
538. Ibid.
539. CENAPRECE Secretaría de Salud. Diabetes guía para pacientes. Mexico, 2011. Available at: <http://www.cenaprece.salud.gob.mx/programas/interior/adulto/descargas/pdf/GuiaPacientesDiabetes.pdf>
540. Mexican Association of Diabetes. Blog. Mexican Association of Diabetes, 2022. Available at: <https://www.amdiabetes.org/blog>
541. XXXII National Diabetes Congress. Educational Program. Mexican Federation of Diabetes, A.C. 2022. Available at: <https://congresodediabetes.org/programa-educativo/>
542. Ibid.
543. XXXI National Diabetes Congress. Mexican Federation of Diabetes AC, 2019. Available at: <https://fmdiabetes.org/xxxi-congreso-fmd/>
544. Centro Nacional de Programas Preventivos y Control de Enfermedades Dirección General de Promoción de la Salud. Manual de Operación para las Intervenciones contra el Sobrepeso y la Obesidad en el marco del Acuerdo Nacional de Salud Alimentaria. Government of Mexico, 2011. Available at: <http://www.cenaprece.salud.gob.mx/programas/interior/adulto/descargas/pdf/manualoperativoANSA.pdf>
545. Cenaprece. Guía de Consulta para el Médico de Primer Nivel de Atención : Prevención y Atención de las Caídas en la Persona Adulta Mayor. Government of Mexico, 2013. Available at : http://www.cenaprece.salud.gob.mx/programas/interior/adulto/descargas/pdf/Guia_Caidas_2aa.pdf
546. Secretaría de Desarrollo Social. Manual de prevención y autocuidado para las personas adultas mayores. Gobierno del Distrito Federal, 2000. Available at : http://www.sideso.cdmx.gob.mx/documentos/manual_de_prevenion_y_autocuidado_para_las_personas_adultas_mayores.pdf
547. Oficina Regional para las Américas de la Organización Mundial de la Salud. Guías: Enfermedades cardiovasculares. Pan American Health Organization, 2019. Available at: https://www3.paho.org/hq/index.php?option=com_docman&view=list&slug=guias-4421&Itemid=270&lang=es
548. House of the Heart. XVIII National Congress of Cardiology. Asociación Nacional de Cardiólogos de México, 2018. Available at: <https://ancam.org.mx/#/eventos/ancam/28>
549. National Institute for Older Adults. Self-care: key to healthy aging. Government of Mexico, 2022. Available at: <https://www.gob.mx/inapam/articulos/autocuidado-clave-para-envejecer-saludablemente>
550. National Institute for Older Adults. The Importance of Self-care in Caregivers of Dependent Elderly People. Government of Mexico, 2020. Available at: <https://www.gob.mx/inapam/articulos/importancia-del-autocuidado-de-quien-cuida-a-personas-adultas-mayores-dependientes?idiom=es>
551. National Institute for Older Adults. Self-care and wellness for caregivers. Government of Mexico, 2022. Available at: <https://www.gob.mx/inapam/articulos/autocuidado-y-bienestar-para-personas-cuidadoras?idiom=es>
552. Government of Mexico. INAPAM promotes a culture of self-care to prevent disability. Available at: <https://www.gob.mx/inapam/prensa/promueve-inapam-cultura-de-autocuidado-para-prevenir-la-discapacidad?idiom=es-MX>. Accessed October 2022.
553. National Institute for Older Adults. INAPAM promotes a culture of self-care to prevent disability. Government of Mexico, 2013. Available at: <https://www.gob.mx/issste/prensa/indispensable-que-la-poblacion-se-comprometa-con-su-autocuidado-para-mejorar-niveles-de-salud-issste>
554. Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado. Recomienda ISSSTE enfatizar medidas de autocuidado para prevenir enfermedades respiratorias ante las bajas temperaturas. Government of Mexico, 2018. Available at: <https://www.gob.mx/issste/es/prensa/recomienda-issste-enfatizar-medidas-de-autocuidado-para-prevenir-enfermedades-respiratorias-ante-las-bajas-temperaturas?idiom=en>
555. El Valor Económico del Autocuidado de la Salud. ILAR, 2018. Available at: <https://ilar.squarespace.com/s/Estudio-Valor-Economico-Autocuidado-ILAR.pdf>
556. The economic value of self care in selected countries of Latin America. ILAR, 2018. Available at : <https://drive.google.com/file/d/1xZTozTybD-yTEMVDpVM-gHDSzi-1x9D7i/view>
557. AFAMELA. Value of OTC and Self-Care in Mexico. Self Care Federation, 2018. Available at: <https://www.selfcarefederation.org/sites/default/files/media/documents/2019-07/AFAMELA%20Value%20of%20OTC%20and%20Self%20Care%20in%20Mexico%20May%202018.pdf>
558. Moreno, M. Mexico: They create a campaign to avoid self-medication. *Internacional Society of Drug Bulletins*, 2013. Available at: <https://www.saludyfarmacos.org/lang/es/boletin-farmacos/boletines/nov2010/crean-campana-para-evitar-automedicacion/>
559. Executive Summary. The Impact of COVID-19 on Health Habits, Use and Purchase of Over-The-Counter Medicines, and Experience with Digital Services in Latin America. ILAR. 2022. Available at: <https://drive.google.com/file/d/1HsZIEWsNBSyj4zF431WJkCftBU-5JdKgn/view>
560. 2021 Global Nutrition Report. Global Nutrition Report, 2021. Available at: <https://globalnutritionreport.org/>
561. Panorama de la Salud: Latinoamérica y el Caribe 2020. OECD, The World Bank. Available on: <https://doi.org/10.1787/740f9640-es>.
562. Eschenbacher, S., Jasso, C. Factbox: Mexico's Obesity Epidemic. *Reuters*, 2021. Available at: <https://www.reuters.com/world/americas/mexicos-obesity-epidemic-2021-06-16/>
563. Health at a Glance: Latin America and the Caribbean 2020. OECD. Health statistics for Mexico. Available at: <https://openknowledge.worldbank.org/bitstream/handle/10986/34959/Health-at-a-Glance-Latin-America-and-the-Caribbean-2020.pdf?sequence=1&isAllowed=y>.
564. Hernández, A., Tamez Hidalgo G., Fiorella Espinosa A. 'Vida Saludable': Healthy living is on the school curriculum in Mexico. *Field Exchange* 66, 2021. Available at: <https://www.enonline.net/fex/66/healthy-livings-school-curriculum>
565. Smart, A., Sinclair, M. SEL in Context: Mexico. *Nissem*, 2021. Available at: <https://www.nissem.org/sel/target-4.7/renewing-textbooks/blogs-and-news/activity/sel-context-mexico>
566. Valenzuela-Lara, M., Baruch-Dominguez R., Algarin, A.B., Hernandez-Avila, M., Smith, L.R., Sanchez, T.H. Mexico Must Promote HIV Self-testing: Evidence from a Survey of 11,000 Mexican MSM. *IAS 2021 – the 11th IAS Conference on HIV Science*, 2021. Available at: https://theprogramme.ias2021.org/PAGMaterial/PPT/598_919/IAS2021_MVL_Poster_6_28_2021_HIVST_vf.pdf
567. Coparmex. Balance 4 Years after the Electoral Victory of this Government. Employer Confederation of the Mexican Republic, 2022. Available at: <https://coparmex.org.mx/>
568. Subsecretaría de Integración y Desarrollo del Sector Salud. Atención Primaria de Salud Integral e Integrada aps-i mx: La Propuesta Metodológica y Operativa. Government of Mexico, 2019. Available at: http://sidss.salud.gob.mx/site2/docs/Distritos_de_Salud_VF.pdf
569. Secretaría de Salud. Programa Sectorial de Salud 2019 – 2024. Government of Mexico, 2019. Available at: http://saludsignalo.gob.mx/wp-content/uploads/2019/transparencia/PROGRAM_SECTORIAL_DE_SALUD_2019_2024.pdf
570. Secretaría de Salud. National Strategy for the Prevention and Control of Overweight, Obesity and Diabetes. Government of Mexico, 2014. Available at: <https://www.paho.org/hq/dmdocuments/2014/2-COFEPRIS-Mexico-RicardoCavazos-17nov2014.pdf>
571. PAHO. Front-of-package labeling advances in the Americas. Pan American Health Organization, 2020. Available at: <https://www.paho.org/en/news/29-9-2020-front-package-labeling-advances-americas>
572. National Commission for Social Protection in Health. Health Self-care. Government of Mexico, 2018. Available at: <https://www.gob.mx/salud%7Cseguro-popular/articulos/autocuidado-de-la-salud-167494>
573. Secretary of Health. Health self-care, Essential for a Pleasant Vacation. Government of Mexico, 2015. Available at: <https://www.gob.mx/salud/articulos/el-autocuidado-de-la-salud-fundamental-para-unas-gratas-vacaciones>

574. Secretary of Health. Indigenous Communication Plan in Oaxaca on Health Self-care. Government of Mexico, 2014. Available at: <https://www.gob.mx/salud/prensa/plan-de-comunicacion-indigena-en-oaxaca-sobre-autocuidado-de-la-salud>
575. PrevenIMSS. Guía para el Cuidado de la Salud Familiar. Government of Mexico, 2021. Available at: https://www.imss.gob.mx/sites/all/statics/salud/guias_salud/Guia-Cuidado-Salud-Familiar-2021.pdf
576. La Jornada. Issste Jornada for self-care and prevention. La Jornada, 2022. Available at: <https://www.lajornada.com.mx/2022/07/06/politica/018n2pol>
577. Francisco Trejo Gutiérrez. Safe and Healthy Work Environments. La Jornada, 2022. Available at: <https://trejogutierrez.com/en/2022/05/07/safe-and-healthy-work-environments%EF%BF%BC/>
578. ISSA. Promoting a prevention culture: Good practices in Latin America. 26 March 2021. Available at: <https://ww1.issa.int/analysis/prevention-americas>
579. The IMSS presents a program for the health of workers. Paudal, 2022. Available at: <https://www.paudal.com/2022/05/05/the-imss-presents-a-program-for-the-health-of-workers/>
580. The National Institute of Public Health (INSP). They Present Recommendations for the Attention to the COVID-19 Pandemic. The Government of Mexico, 2021. Available at: <https://www.insp.mx/avisos/presentan-recomendaciones-para-la-atencion-a-la-pandemia-de-covid-19>
581. Secretary of Health. 183. Strategy Based on Primary Health Care, A Pillar in Mitigating COVID-19 at the Community Level. Government of Mexico, 2021. Available at: <https://www.gob.mx/salud/prensa/183-estrategia-basada-en-atencion-primaria-de-la-salud-pilar-en-mitigacion-de-covid-19-a-nivel-comunitario>
582. Mexican Social Security Institute. COM. 500 Selfcare, first action to preserve health, prevent and control diseases: IMSS. Government of Mexico, 2020. Available at: <https://www.gob.mx/imss/prensa/com-500-autocuidado-primera-accion-para-conservar-la-salud-prevenir-y-controlar-enfermedades-imss>
583. Ibid.
584. Mexican Social Security Institute. Campaign Check, Measure and Move. ISSA, 2013. Available at: <https://ww1.issa.int/gp/162158>
585. Arrighi E, Ruiz de Castilla EM, Peres F, et al. Scoping Health Literacy in Latin America. *Global Health Promotion*, 2022. Available at: <https://journals.sagepub.com/doi/full/10.1177/17579759211016802>
586. PAHO. Overweight affects almost half the population of all countries in Latin America and the Caribbean except for Haiti. Pan American Health Organization, 2017. Available at: [https://www3.paho.org/hq/index.php?option=com_content&view=article&id=12911:overweight-affects-half-population-latin-america-caribbean-except-haiti&Itemid=1926&lang=en#:~:text=Panorama%20of%20Food%20and%20Nutrition,and%20Chile%20\(63%20percent\).](https://www3.paho.org/hq/index.php?option=com_content&view=article&id=12911:overweight-affects-half-population-latin-america-caribbean-except-haiti&Itemid=1926&lang=en#:~:text=Panorama%20of%20Food%20and%20Nutrition,and%20Chile%20(63%20percent).)
587. Revereda, E. Government of Mexico launches La Nueva Mesa, a campaign to guide Mexican families in nutritious eating. Directo al Paladar Mexico, 2020. Available at: <https://www.directopaladar.com.mx/eventos/gobierno-mexico-lanza-nueva-mesa-campana-para-orientar-a-familias-mexicanas-alimentacion-nutritiva>
588. Merca2.0. Activate campaign “The new table” and seek to end Obesity in Mexico Using Advertising. 22 June 2020. Available at: <https://www.merca20.com/activan-campana-la-nueva-mesa-y-buscan-acaban-con-obesidad-en-mexico-usando-publicidad/>
589. Ve Mas Por Ti. Afamela, 2022. Available at: <https://afamela.org/ve-mas-por-ti/>
590. Health against COVID with Online Courses. Government of Mexico, 2021. Available at: <https://www.gob.mx/imss/articulos/imss-promueve-la-salud-ante-covid-con-cursos-en-linea?idiom=es>
591. Reiley, L. Mexico moves to ban junk food sales to children, citing obesity as coronavirus risk factor. *The Washington Post*, 2020. Available at: <https://www.washingtonpost.com/business/2020/08/19/mexico-kids-junk-food-ban/>
592. Universidad Veracruzana’s Food Security & Health Promotion Initiatives During the COVID-19 Crisis (Mexico). Tufts University, 2022. Available at: <https://talloiresnetwork.tufts.edu/university-award-for-innovative-civic-engagement-archived/mexico/>
593. Mexican Social Security Institute. In April IMSS and the Federal Health Sector carry out an intensive vaccination against COVID-19 throughout Mexico. Government of Mexico, 2022. Available at: <https://www.imss.gob.mx/prensa/archivo/202204/177>
594. The Congress of the United Mexican States. Health General Act. The Government of Mexico, 2015. Available at: <https://www.global-regulation.com/translation/mexico/560288/law-general-of-health.html>
595. Honorable Chamber of Deputies. Reforms are approved to Recognize Traditional Indigenous and Complementary Medicine. The Government of Mexico, 2021. Available at: <https://comunicacionnoticias.diputados.gob.mx/comunicacion/index.php/boletines/aprueban-reformas-para-reconocer-medicina-tradicional-indigena-y-complementaria#gsc.tab=0>
596. Secretaría de Salud. Hacia una política farmacéutica integral para México. The Government of Mexico, 2005. Available at: <https://www.gob.mx/cms/uploads/attachment/data/file/304663/HaciaPoliticaFarmaceutica.pdf>
597. COFEPRIS: the Mexican health authority. Latam Pharma, 2013. Available at: <https://latampharmara.com/mexico/cofepris-the-mexican-health-authority/>
598. Cámara de Diputados del H. Congreso De La Unión. Ley General de Salud. Government of Mexico, 1984. Available at: <https://www.diputados.gob.mx/Leyes-Biblio/pdf/LGS.pdf>
599. Cofepris. Government of Mexico, 2022. Available at: <https://www.gob.mx/cofepris/>
600. GSCF e-leaflet survey results, August 2021.
601. Ministry of Health Singapore [MOH]. About Us. Government of Singapore, 2021. Available at: <https://www.moh.gov.sg/about-moh>
602. Ministry of Health Singapore [MOH], Affordable Health Care White Paper. Government of Singapore, 1993. Available at: https://www.moh.gov.sg/docs/librariesprovider5/resources-statistics/information-papers/affordable_health_care.pdf
603. United Nations, World Population Ageing Report. United Nations, 2017. Available at: https://www.un.org/en/development/desa/population/publications/pdf/ageing/WPA2017_Highlights.pdf
604. Government of Singapore. How the Government keeps healthcare costs affordable in the face of rising global healthcare costs. Government of Singapore, 2021. Available at: <https://www.gov.sg/article/how-government-keeps-healthcare-costs-affordable-in-face-of-rising-global-health-care-costs>
605. Ministry of Health Singapore [MOH]. MOH News Highlight - Smoking rates down, chronic disease prevalence remains of concern. Government of Singapore, 2021. Available at: <https://www.moh.gov.sg/news-highlights/details/smoking-rates-down-chronic-disease-prevalence-remains-of-concern>
606. Phan, T.P., et al., Forecasting the burden of type 2 diabetes in Singapore using a demographic epidemiological model of Singapore. *BMJ Open Diabetes Research & Care*, 2014. 2(1): p. e000012. Available at: <https://pubmed.ncbi.nlm.nih.gov/25452860/>
607. Tan, C.C., et al., Singapore’s health-care system: key features, challenges, and shifts. *The Lancet*, 2021. 398(10305): p. 1091-1104. Available at: <https://pubmed.ncbi.nlm.nih.gov/34481560/>
608. Health Promotion Board [HPB]. National Steps Challenge. 2021. Available at: <https://www.hpb.gov.sg/healthy-living/physical-activity/National-Steps-Challenge>
609. Kwang, K. HPB Partners Fitbit to Encourage Singaporeans to Adopt Healthier Habits. *Channel News Asia*, 2019. Available at: <https://www.todayonline.com/singapore/hpb-partners-fitbit-encourage-singaporeans-adopt-healthier-habits>
610. Tan, T. HPB partners Apple to promote healthy lifestyle; S’pore residents can earn rewards of up to \$380 for using app. *Straits Times*, 2020. Available at: <https://www.straitstimes.com/tech/wearables/health-promotion-board-partners-apple-to-launch-health-app-for-apple-watch-users>
611. Ministry of Health Singapore [MOH]. MOH COS 2019 Factsheet on Empowering Singaporeans to Live Healthily. Government of Singapore, 2019. Available at: <https://www.moh.gov.sg/docs/librariesprovider5/default-document-library/cos-factsheet-empowering-singaporeans-to-live-healthily2d516061f5554318a7bd71d9c1e38414.pdf>
612. MOH Office for Healthcare Transformation [MOHT]. Mindline.sg - Empowering People to Improve their Health and Emotional Wellbeing. Government of Singapore, 2022. Available at: <https://www.moht.com.sg/mindline-sg>
613. Yip, C. COVID-19: One-stop Mental Health Platform Launched to Match Users with Resources and Helplines. *Channel News Asia*, 2020. Available at: <https://www.channelnewsasia.com/singapore/covid-19-mental-health-platform-launched-mindline-sg-946961>
614. Chan, A., et al. Self-Care for Older People (SCOPE): A Cluster Randomized Controlled Trial of Self-care Training and Health Outcomes in low-Income Elderly in Singapore. *Contemp Clin Trials*, 2015. 41: p.313-24. Available at: <https://pubmed.ncbi.nlm.nih.gov/25583272/>
615. Report, G.N. Country Nutrition Profiles - Singapore. 2020. Available at: <https://globalnutritionreport.org/resources/nutrition-profiles/asia/south-eastern-asia/singapore/>
616. Ibid.
617. World Values Survey Association [WVSA]. World Values Survey Wave 7:2017-2020. 2020; Available at: <https://www.worldvaluessurvey.org/WVSONline.jsp>
618. Ministry of Health Singapore [MOH], National Population Health Survey 2019/20. 2020. Available at: <https://www.moh.gov.sg/resources-statistics/reports/national-survey-2019-20#:~:text=The%20Survey%2C%20which%20tracks%20the,and%20breast%20cancer%20has%20increased.>
619. Lee, C.E. International Health Care System Profiles - Singapore. Commonwealth Fund, 2020. Available at: <https://www.commonwealthfund.org/international-health-policy-center/countries/singapore#electronic-health-records>
620. Alexandra Hospital. Next Generation Electronic Medical Record (NGEMR). 2022. Available at: <https://www.ah.com.sg/Documents/NGEMR/About%20NGEMR.pdf>
621. Ministry of Health Singapore [MOH]. Institutions Participating in the National Electronic Health Records system (NEHR). Government of Singapore, 2022. Available at: [https://www.moh.gov.sg/institutions-participating-in-the-national-electronic-health-records-system-\(nehr\)](https://www.moh.gov.sg/institutions-participating-in-the-national-electronic-health-records-system-(nehr))
622. Health Promotion Board [HPB]. Programmes for Tertiary Institutions. 2021. Available at: <https://hpb.gov.sg/schools/school-programmes/health-promoting-programmes-for-tertiary-institutions>
623. Health Promotion Board [HPB]. Health Promoting Programmes For Secondary Schools and JCs. 2021. Available at: <https://hpb.gov.sg/schools/school-programmes/health-promoting-programmes-for-secondary-schools-and-jcs>
624. Health Promotion Board [HPB]. Health Promoting Programmes for Primary Schools. 2021. Available at: <https://hpb.gov.sg/schools/school-programmes/health-promoting-programmes-for-primary-school>
625. Health Promotion Board [HPB]. Health Promoting Programmes for Pre-schools. 2021. Available at: <https://hpb.gov.sg/schools/school-programmes/health-promoting-programmes-for-pre-schools>
626. Ministry of Education [MOE]. Holistic Health Framework. Government of Singapore, 2022. Available at: <https://www.moe.gov.sg/education-in-sg/our-programmes/holistic-health-framework>
627. Ministry of Education [MOE]. Nurturing Confident, Resilient Learners & Supporting Students with Different Needs. Government of Singapore, 2022. Available at: <https://www.moe.gov.sg/news/press-releases/20220307-nurturing-confident-resilient-learners-and-supporting-students-with-different-needs>

628. Raffles Medical Group [RMG]. HPV Prevention, Vaccination & Screening. 2022. Available at: <https://www.rafflesmedicalgroup.com/services/family-medicine/family-clinic-services/vaccinations/hpv-vaccination/>
629. Fernehealth. Caring for your sexual health. 2022. Available at: <https://www.fernehealth.com/>
630. Health Sciences Authority of Singapore [HSA]. Infosearch for health products and services. Government of Singapore, 2022. Available at: <https://www.hsa.gov.sg/e-services/infosearch>
631. Healthhub. Self Care and Self Medication. 2016. Available at: <https://www.healthhub.sg/a-z/medications/39/Self-Care-and-Self-Medication>
632. Healthhub. Chronic Disease Management Programme: Hypertension, Diabetes, Lipids Clinic (HDL-C). 2021. Available at: <https://www.healthhub.sg/>
633. Health Sciences Authority of Singapore [HSA], Appendix 7A - Guidance on Electronic Labelling For Therapeutic Products. 2021. Available at: https://www.hsa.gov.sg/docs/default-source/hprg-tpb/registration/tpb-gn-021-000_appendix-7a-guidance-on-electronic-labelling-for-therapeutic-products.pdf?sfvrsn=1f3ad3d0_0
634. Health Sciences Authority of Singapore [HSA], Guideline on Voluntary Electronic Labelling for Complementary Health Products. 2022. Available at: https://www.hsa.gov.sg/docs/default-source/hprg-tmhs/chpb-tmhs/chp_vel_guidelines.pdf
635. Ministry of Health Singapore [MOH]. National Telemedicine Guidelines. Government of Singapore, 2015. Available at: <https://www.moh.gov.sg/resources-statistics/guidelines/national-telemedicine-guidelines>
636. Ministry of Health Singapore [MOH], Healthcare 2020: Improving Accessibility, Quality & Affordability, in Healthscope. Government of Singapore, 2012.
637. Ministry of Health Singapore and Health Promotion Board [MOH and HPB], Healthy Living Master Plan. Government of Singapore, 2014. Available at: https://extranet.who.int/countryplanningcycles/sites/default/files/planning_cycle_repository/singapore/moh_healthscope_july-august_2012_issue.pdf
638. Ministry of Health Singapore [MOH]. War on Diabetes. Government of Singapore, 2021. Available at: <https://www.moh.gov.sg/wodcj>
639. Healthhub. Singapore's War on Diabetes. Available at: <https://www.healthhub.sg/>
640. Ministry of Health Singapore [MOH], MOH COS 2019 Factsheet: Empowering Singaporeans to Live Healthily. Government of Singapore, 2019. Available at: <https://www.moh.gov.sg/docs/librariesprovider5/default-document-library/cos-factsheet-empowering-singaporeans-to-live-healthily2d516061f5554318a7bd71d9c1e38414.pdf>
641. Ministry of Health Singapore [MOH], Action Plan for Successful Ageing. Government of Singapore, 2016. Available at: <https://www.moh.gov.sg/ifeelyoungsg/about/what-is-the-action-plan-about>
642. Ministry of Health Singapore [MOH], Healthcare Manpower Plan. Government of Singapore, 2020. Available at: <https://www.moh.gov.sg/docs/librariesprovider5/pressroom/highlights/2020-healthcare-manpower-plan.pdf>
643. Ministry of Health Singapore [MOH]. Promoting overall healthier living while targeting specific sub-populations. Government of Singapore, 2022. Available at: <https://www.moh.gov.sg/news-highlights/details/promoting-overall-healthier-living-while-targeting-specific-sub-populations>
644. Ministry of Health Singapore [MOH]. Promoting Overall Healthier Living While Targeting Specific Sub-populations. Government of Singapore, 2022. Available at: <https://www.moh.gov.sg/news-highlights/details/promoting-overall-healthier-living-while-targeting-specific-sub-populations>
645. Pharmaceutical Society of Singapore [PSS]. Pharmacy Week 2021. 2021. Available at: <https://www.pss.org.sg/pharmweeksg>
646. Health Product Regulation Group [HPRG], Annual Report 2020/2021. 2021. p. 8. Available at: https://www.hsa.gov.sg/docs/default-source/default-document-library/hprg.pdf?sfvrsn=54be06f_0
647. HealthHub. My Healthy Plate. Available at: <https://www.healthhub.sg/programmes/55/my-plate>
648. HealthHub. Eat, Drink, Shop Healthy Challenge. Available at: <https://www.healthhub.sg/programmes/136/eat-drink-shop-healthy-challenge>
649. Health Promotion Board [HPB]. Food & Beverage. 2022. Available at: <https://hpb.gov.sg/healthy-living/food-beverage>
650. Health Promotion Board [HPB]. Physical Activity. 2021. Available at: <https://hpb.gov.sg/healthy-living/physical-activity>
651. HealthHub. Help Your Child Smile for Life. 2022. Available at: <https://www.healthhub.sg/live-healthy/1272/growing-kid-help-your-child-smile-for-life>
652. Ministry of Health Singapore [MOH]. Project Silver Screen. Government of Singapore, 2022. Available at: <https://www.moh.gov.sg/ifeelyoungsg/how-can-i-age-actively/stay-healthy/project-silver-screen>
653. Ministry of Health Singapore [MOH]. Speech by Mr. Gan Kin Yong, Minister for Health at the Official Opening of the University Center for Oral Health, Singapore (NUCOHS). 2019. Available at: [https://www.moh.gov.sg/news-highlights/details/speech-by-mr-gan-kim-yong-minister-for-health-at-the-official-opening-of-the-national-university-centre-for-oral-health-singapore-\(nucohs\)-on-friday-5-july-2019-10.20am](https://www.moh.gov.sg/news-highlights/details/speech-by-mr-gan-kim-yong-minister-for-health-at-the-official-opening-of-the-national-university-centre-for-oral-health-singapore-(nucohs)-on-friday-5-july-2019-10.20am)
654. HealthHub. I Quit Programme. Available at: https://www.healthhub.sg/programmes/88/iquit?utm_source=hpb-corp-website&utm_medium=organic&utm_campaign=workplace-programmes&utm_content=s-moking-cessation-programmes-cta-link
655. Health Promotion Board [HPB]. Substance Abuse. Government of Singapore, 2017. Available at: <https://hpb.gov.sg/healthy-living/substance-abuse>
656. Health Promotion Board [HPB]. Smoking Cessation Programmes. Government of Singapore, 2017. Available at: <https://hpb.gov.sg/workplace/workplace-programmes/smoking-cessation-programmes>
657. Health Promotion Board [HPB]. Let's Beat Diabetes. Government of Singapore, 2021. Available at: <https://hpb.gov.sg/healthy-living/preventive-health/lets-beatdiabetes>
658. Health Promotion Board [HPB]. Preventative Health. Government of Singapore, 2021. Available at: <https://hpb.gov.sg/healthy-living/preventive-health>
659. Health Promotion Board [HPB]. Screen For Life. Government of Singapore, 2021. Available at: <https://hpb.gov.sg/healthy-living/preventive-health/screen-forlife>
660. Healthhub. Stay One Step Ahead With Vaccinations. 2021. Available at: <https://www.healthhub.sg/programmes/163/vaccinate>
661. Health Promotion Board [HPB]. Immunisation. Government of Singapore, 2021. Available at: <https://hpb.gov.sg/healthy-living/preventive-health/immunisation>
662. HealthHub. Fight The Spread of Infectious Diseases. 2022. Available at: https://www.healthhub.sg/programmes/52/Fight_The_Spread
663. Health Promotion Board [HPB]. Antimicrobial Resistance. Government of Singapore, 2021. Available at: <https://hpb.gov.sg/healthy-living/preventive-health/antimicrobial-resistance>
664. HealthHub. Use antibiotics right: Antibiotics do not treat viral infections. Available at: <https://www.healthhub.sg/programmes/146/use-antibiotics-right>
665. World Health Organisation [WHO], WHO Global Report on Traditional and Complementary Medicine 2019. 2019. Available at: <https://apps.who.int/iris/handle/10665/312342>
666. Institute of Chinese Medical Studies Pte Ltd. Homepage. 2022. Available at: <https://www.tcminstitution.edu.sg/>
667. Ministry of Health Singapore [MOH]. TCM Practitioners. Government of Singapore, 2022. Available at: <https://www.moh.gov.sg/hpp/tcm-practitioners>
668. Singapore College of Traditional Chinese Medicine. Homepage. 2022. Available at: <http://www.singaporetcm.edu.sg/en/>
669. The Traditional Chinese Medicine Practitioners Board [TCMPB]. Homepage. 2022. Available at: <https://www.healthprofessionals.gov.sg/tcmpb/en>
670. Health Sciences Authority of Singapore [HSA]. Therapeutic Products Guidance. Government of Singapore, 2022. Available at: https://www.hsa.gov.sg/docs/default-source/hprg-tpb/guidances/guidance-on-therapeutic-product-registration-in-singapore_aug22.pdf?sfvrsn=cd174383_43
671. Health Sciences Authority of Singapore [HSA]. Fees and Turnaround Time for Therapeutic Products. 2022. Available at: <https://www.hsa.gov.sg/therapeutic-products/fees>
672. Health Sciences Authority of Singapore [HSA]. Reclassification of therapeutic products. Government of Singapore, 2022. Available at: <https://www.hsa.gov.sg/therapeutic-products/reclassification>
673. Health Sciences Authority of Singapore [HSA]. Updates on reclassified medicines. Government of Singapore, 2022. Available at: <https://www.hsa.gov.sg/announcements/reclassified-medicines/updates-on-reclassified-medicines>
674. Health Sciences Authority of Singapore [HSA]. List of reclassified medicines. Government of Singapore, 2022. Available at: <https://www.hsa.gov.sg/therapeutic-products/reclassification/list-of-reclassified-medicines>
675. Lee, H.K., Forum: Risk-based Approach Taken in Regulating Health Supplements. The Straits Times, 2022. Available at: <https://www.hsa.gov.sg/announcements/reclassified-medicines/updates-on-reclassified-medicines>
676. Health Sciences Authority of Singapore [HSA]. Advertisements and promotions of therapeutic products. Government of Singapore, 2021. Available at: <https://www.hsa.gov.sg/therapeutic-products/advertisements>
677. Program. Edec2022. 2022. Available at: <https://www.edec-uae.com/program.php>
678. Rashid, F., Ibrahim, E., et al. Highlights of the 11th Emirates Diabetes and Endocrine (Virtual) Congress, March 4-6, 2021. Karger. 2021. Available at: <https://www.karger.com/Article/FullText/520783>
679. 5th Emirates Family Medicine Society Congress. EFMS. 2022. Available at: <https://az659834.vo.msecnd.net/eventsairwesteuprod/production-wiredin-public/b511a3eaf4ba42abbc9681ace4127f85>
680. EFMS Congress. 2019.
681. Congress Book. EFMS. 2020. Available at: <https://www.efmsociety.com/uploads/mdLrg/v1.0/mdLrgLab/7/pdfBooklet/efms-dubai-2020in-partnership-with-theemirates-family-medicine-society-1.pdf>
682. ACC Middle East 2022 Together with 13th Emirates Cardiac Society Congress. ACC, 2022. Available at: <https://medgress-media.s3.amazonaws.com/doc/ECS/ECS2022-Program.pdf>
683. Scientific Program. Medgress Media. 2021. Available at: <https://medgress-media.s3.amazonaws.com/doc/ECS/ECS2021-Program.pdf>
684. Ibid.
685. Ministry of Health and Prevention launches updated Hypertension Guide for 2019. United Arab Emirates Ministry of Health and Prevention. 2019. Available at: <https://mohap.gov.ae/en/media-center/news/ministry-of-health-and-prevention-launches-updated-hypertension-guide-for-2019>
686. Scope of Practice Guidelines for Licensed Healthcare Professionals (Cardiologist). Department of Health. 2022. Available at: <https://www.doh.gov.ae/-/media/5A085FA2181F4605A81687F3D97ADC34.ashx>
687. Ibid.
688. Ibid.
689. Ibid.
690. The Management of Type 2 Diabetes Mellitus - 2020. Dubai Diabetes and Endocrinology Journal. 2020. Available at: <https://www.emiratesdiabetessociety.org/emirates-diabetes-society-consensus-guidelines-for-the-management-of-type.pdf>

691. Dalibalta, S., Yousef, S., et al. Objectively Quantified Physical Activity and Sedentary Behaviour in a Young UAE Population. *BMJ Journals*, 2021. Available at: <https://bmjopensem.bmj.com/content/7/1/e000957>
692. Daliba Ita, S., Davison, G. Exercise and Cardiovascular Health in the UAE. *Springer Link*. 2021. Available at: https://link.springer.com/referenceworkentry/10.1007/978-3-030-36811-1_84
693. Ministry of Education announces a brand new Physical and Health Education reform in the UAE. United Arab Emirates Ministry of Education. Available at: <https://www.moe.gov.ae/En/MediaCenter/News/Pages/sport.aspx>
694. Health Heroes App Launched to Fight Childhood Obesity. UAE Health. 2016. Available at: <https://gulfnews.com/uae/health/health-heroes-app-launched-to-fight-childhood-obesity-1.1935563>
695. Ministry of Health & Prevention wins first place for its Heroes of Health smart application. Ministry of Health and Prevention. 2017. Available at: <https://www.albawaba.com/business/pr/ministry-health-prevention-wins-first-place-its-heroes-health-smart-application-979408>
696. Awareness Center. United Arab Emirates Ministry of Health and Prevention. Available at: <https://mohap.gov.ae/en/more/awareness-center>
697. Malaffi Connecting Healthcare. Available at: <https://malaffi.ae/>
698. Samala Healthcare. Available at: <https://www.salamahealthcare.ae/>
699. Ministry of Health & Prevention wins first place for its Heroes of Health smart application. U.A.E. Available at: <https://u.ae/en/about-the-uae/leaving-no-one-behind/3goodhealthandwellbeing>
700. Gassner L, Zechmeister-Koss I, Reinsperger I. National Strategies for Preventing and Managing Non-communicable Diseases in Selected Countries. *Front Public Health*. 2022 Feb 10;10:838051. doi: 10.3389/fpubh.2022.838051. Available at: <https://www.frontiersin.org/articles/10.3389/fpubh.2022.838051/full>
701. Atalla, G., McQueen, J. Embracing digital: is COVID-19 the catalyst for lasting change? *EY*. 2021. Available at: https://www.ey.com/en_gl/government-public-sector/embracing-digital-is-covid-19-the-catalyst-for-lasting-change
702. Alawadi F., Hassanein M., et al. The Prevalence of Diabetes and Pre-Diabetes among the Dubai Population: Findings from Dubai Household Health Surveys, 2014 and 2017. *Karger*. 2020. Available at: <https://www.karger.com/Article/Full-text/508833#:text=According%20to%20the%202019%20IDF,that%20they%20have%20the%20condition>
703. Govender, R., Regmi, D., et al. Incidence and risk factors for recurrent cardiovascular disease in middle-eastern adults: a retrospective study. *BMC*. 2019. Available at: <https://bmccardiovascdisord.biomedcentral.com/articles/10.1186/s12872-019-1231-z#:text=The%20UAE%20has%20one%20of,males%2C%20respectively%20%5B13%5D>
704. Sulaiman, N., Elbadawi, S., et al. Prevalence of overweight and obesity in United Arab Emirates Expatriates: the UAE National Diabetes and Lifestyle Study. *BMC*. 2017. Available at: <https://dmsjournal.biomedcentral.com/articles/10.1186/s13098-017-0287-0>
705. National Strategy for Wellbeing 2031. U.A.E. Available at: <https://u.ae/en/about-the-uae/strategies-initiatives-and-awards/federal-governments-strategies-and-plans/national-strategy-for-wellbeing-2031>
706. UAE Government Launches 3 Initiatives to Promote Wellbeing. United Arab Emirates Ministry of Cabinet Affairs. 2018. Available at: <https://www.moca.gov.ae/en/media/news/uae-government-launches-three-3-to-promote-wellbeing>
707. Community Design platform for Wellbeing. U.A.E. 2022. Available at: <https://u.ae/en/about-the-uae/community-and-public-engagement-in-the-uae/the-community-design-platform-for-wellbeing>
708. National Program for Happiness and Wellbeing. Available at: <https://www.hw.gov.ae/>
709. Ibid.
710. National Program for Happiness and Wellbeing Launches Business for Wellbeing Council. National Program for Happiness and Wellbeing. Available at: <https://www.hw.gov.ae/en/news/to-promote-healthy-lifestyle-and-wellbeing-in-the-uae-national-program-for-happiness-and-wellbeing-launches-nutrition-labelling-policy>
711. UAE Government Launches 3 Initiatives to Promote Wellbeing. United Arab Emirates Ministry of Cabinet Affairs. 2018. Available at: <https://www.moca.gov.ae/en/media/news/uae-government-launches-three-3-to-promote-wellbeing>
712. UAE Government Launches Initiatives to Promote Community Wellbeing. News Agency – WAM. 2018. Available at: <http://www.wam.ae/en/details/1395302723960#:text=The%20Community%20Wellbeing%20Nutrition%20Programme,all%20segments%20of%20the%20society>
713. National Behavioral Reward Program Strategy. U.A.E. Available at: <https://u.ae/en/about-the-uae/strategies-initiatives-and-awards/federal-governments-strategies-and-plans/national-behavioral-reward-program-strategy>
714. The Department of Behavioral Rewards. United Arab Emirates Ministry of Possibilities. Available at: <https://mop.gov.ae/en/departments/dep-4>
715. Ibid.
716. Ibid.
717. UAE launches drive-in initiative and diabetes prevention programme. UAE Health. 2020. Available at: <https://gulfnews.com/uae/health/uae-launches-drive-in-initiative-and-diabetes-prevention-programme-1.75273685>
718. Arab Emirates National Action Plan in Nutrition. Ministry of Health and Prevention. Available at: <https://extranet.who.int/nutrition/gina/sites/default/filesstore/ARE%202017%20National%20Strategy%20Plan%20in%20Nutrition.pdf>
719. National Nutrition Strategy 2017-2021. U.A.E. Available at: <https://u.ae/en/about-the-uae/strategies-initiatives-and-awards/federal-governments-strategies-and-plans/national-nutrition-strategy-2017-2021>
720. Department of Health. Available at: <https://www.doh.gov.ae/en>
721. DOH Policy on Digital Health (Abu Dhabi). Available at: <https://www.doh.gov.ae/-/media/B5F0E47029F04CD8AD4CA16DC1FDBC66.ashx>
722. Dubai Health Strategy 2016 – 2021. Government of Dubai. 2021. Available at: https://www.dha.gov.ae/Documents/Dubai_Health_Strategy_2016-2021_En.pdf
723. Emirate of Sharjah. World Health Organization. Available at: <https://extranet.who.int/agefriendlyworld/network/emirate-of-sharjah/>
724. Faza'a Healthy Food Basket. The National Program for Behavioral Rewards Faza'a. Available at: <https://www.fazaanationalrewards.ae/en/initiatives/faza-a-healthy-food-basket-2/>
725. Ma'kom Initiative. United Arab Emirates Ministry of Health and Prevention. 2021. Available at: <https://mohap.gov.ae/en/about-us/projects-and-initiatives/makom-initiative>
726. Health Heroes App Launched to Fight Childhood Obesity. UAE Health. 2016. Available at: <https://gulfnews.com/uae/health/health-heroes-app-launched-to-fight-childhood-obesity-1.1935563>
727. Weqaya. Available at: <https://www.weqaya.ae/en>
728. Home Care Program – Weleef. Government of Dubai. Available at: <https://www.cda.gov.ae/en/socialcare/SeniorCitizens/Pages/HomeCareWeleef.aspx>
729. CDA and Bait Al Khair launch Elderly Happiness Initiative. Government of Dubai. Available at: <https://www.cda.gov.ae/en/MediaCenter/News/Pages/2014/CDA-ElderlyHappiness.aspx>
730. Keep on Beating Campaign. United Arab Emirates Ministry of Health and Prevention. 2021. Available at: <https://mohap.gov.ae/en/about-us/projects-and-initiatives/keep-on-beating-campaign>
731. Heart Experts Programme. United Arab Emirates, Ministry of Health and Prevention, 2021. Available at: <https://mohap.gov.ae/en/about-us/projects-and-initiatives/heart-experts-programme>
732. MoHAP launches Salamat initiative for Early Detection of Hypertension Disorders among the Staff. United Arab Emirates, Ministry of Health and Prevention, 2020. Available at: <https://mohap.gov.ae/en/media-center/news/mohap-launches-salamat-initiative-for-early-detection-of-hypertension-disorders-among-the-staff>
733. Requirements and Considerations for TCAM. Department of Health. Available at: <https://www.doh.gov.ae/en/pqr/tcam>
734. Registration of a Pharmaceutical Product Derived from Natural Sources. United Arab Emirates Ministry of Health and Prevention. Available at: <https://mohap.gov.ae/en/services/registration-of-a-pharmaceutical-product-derived-from-natural-sources>
735. Achar, A. Traditional Medicines and OTC Products STA / UAE. Pharma Bedroom. 2021. Available at: <https://pharmaboardroom.com/legal-articles/traditional-medicines-and-otc-products-uae/>
736. Yeboah, D., Yeboah, T. Strategies to Address over the Counter Sale of Prescription Medicines in Abu Dhabi, UAE. *Greener Journal of Medical Sciences*. 2012. Available at: <https://pdfs.semanticscholar.org/216d/a9bd1b6cc2deed4fd998b34601b4fd5a4e01.pdf>
737. Achar, A. Traditional Medicines and OTC Products STA / UAE. Pharma Bedroom. 2021. Available at: <https://pharmaboardroom.com/legal-articles/traditional-medicines-and-otc-products-uae/>
738. Pharmacy Guidelines. Government of Dubai. 2021. Available at: <https://www.dha.gov.ae/uploads/112021/f6eb62ac-f666-4cce-9a2f-47788a25f565.pdf>
739. Global Self-Care Federation. Economic & Social Value of Self-Care Report. June 2022. Available at: <https://www.selfcarefederation.org/ecosoc-report>
740. Ibid.
741. Take Care, Canada: Blueprint for a National Self-Care Strategy. Food, Health & Consumer Products of Canada, 2020. Available at: <https://www.fhccp.ca/Portals/0/Userfiles/PAAerts/Public2020-2021/20201117%20FHCCP%20self-care%20blueprint%20.pdf?ver=2021-01-25-080235-730×tamp=1611583360430>
742. Santa María, M, Escobar, A and González, T. Autocuidado en Colombia: Estudio de opinión pública y cálculos fiscales. Available at: <http://www.andi.com.co/Uploads/12%20Mauricio%20Santamaria%20Salamanca.pdf>
743. Executive Summary. The Impact of COVID-19 on Health Habits, Use and Purchase of Over-The-Counter Medicines, and Experience with Digital Services in Latin America. ILAR. 2022. Available at: <https://www.infoilar.org/en/news/covid19-impact-on-self-care-latin-america>
744. GSCF e-leaflet survey results, August 2021.
745. World Health Organization. Seventy-Fifth World Health Assembly. Provisional agenda item 14.1. 27 April 2022. Follow-up to the political declaration of the third high-level meeting of the General Assembly on the prevention and control of non-communicable disease. Annex 3. Draft Global Strategy on Oral Health. Available at: https://apps.who.int/gb/ebwha/pdf_files/WHA75/A75_10Add1-en.pdf
746. World Health Organization. Global Action Plan for the Prevention and Control of Noncommunicable Diseases 2013-2020. Available at: <https://apps.who.int/iris/rest/bitstreams/442296/retrieve>
747. World Health Organization. Seventy-Third World Health Assembly. Provisional agenda item 15.1. 5 May 2020. Decade of Healthy Ageing. The Global Strategy and Action Plan on Ageing and Health 2016-2020: Towards a World in which Everyone can live a Long and Healthy life. Available at: https://apps.who.int/gb/ebwha/pdf_files/WHA73/A73_INF2-en.pdf



GLOBAL
SELF-CARE
FEDERATION

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.