



The Power of Self-Care in Achieving Health-for-All

A Bespoke Discussion Paper
for Vietnam

May 2020





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2 FOREWORD

10 Years and counting.

Not only are ten years how long countries such as Vietnam have left to achieve the United Nations' Strategic Development Goals for Universal Health Coverage (UHC), but moreover, by most estimates ten years is the estimated runway for many countries to sustain their health financing. Facing growing demand on the system, combined with an ageing population and a possibly shrinking tax base, we must find a better way.

The most sustainable health models around the world have a mutually-reinforcing setup of state-funded protection with individual accountability toward well-being. For countries struggling with healthcare, it is often because one of the two sides is being over-emphasized. Either "health-for-all" becomes synonymous with an overuse of free services, or a reliance on out-of-pocket expenditures (OOPE) is pressuring families into poverty. A strong balance in the middle can deliver the socioeconomic returns of UHC investment, and we believe Vietnam is well-positioned to act on such a strategy.

The story of Vietnam is remarkable. Since 2002, more than 45 million people have been lifted out of poverty. GDP per capita increased 2.5 times ^[1], and, under the bold "Vietnam 4.0" vision, labor productivity is expected to grow at 7.5% per year. However, many countries like Vietnam risk suffering from the "middle-income trap": going from low-income to middle-income is radically different from what is required to achieve a higher income status. Healthcare as an economic lever, not a cost center, can be the gamechanger for policymakers to accelerate progress. A healthy population is a productive population, which has direct correlations to maturation factors such as tax contribution and human capital development. Sadly, the opposite scenario is also true, and must be avoided.

One solution is relatively straightforward: **Self-Care**. People can manage their own wellness, simple acute needs, and ongoing chronic conditions. Not only does Self-Care free up capacity for the system to more effectively control expenditures, it also encourages the right behaviors by allowing individuals to hold a level of responsibility for health outcomes. Vietnam, like many countries, is challenged to fund and expand the healthcare ecosystem needed to meet rising demand. By leveraging Self-Care, the government will be able to empower people to take control of healthcare at an individual level, rather than to place a strain on national resources. Such a tool becomes especially powerful during stress test times, as is the case with the ongoing immune system virus outbreak.

This paper looks at the impact that Self-Care could have on Vietnam as the country continues on the journey toward UHC. We review global Self-Care best practices and combines the options therein with a Vietnam-specific opportunity sizing to indicate the scale of Self-Care related benefits. The paper then explores how Vietnam can use existing policy initiatives, like the "Sức khỏe" program, to realize the benefits described. Ultimately the ambition, as with many such social reform initiatives, is to foster greater collaboration between the public and private sectors.

Sincerely,



Dr. Mason L. Cobb, MD, FACS
President
Victoria Healthcare
International Clinic



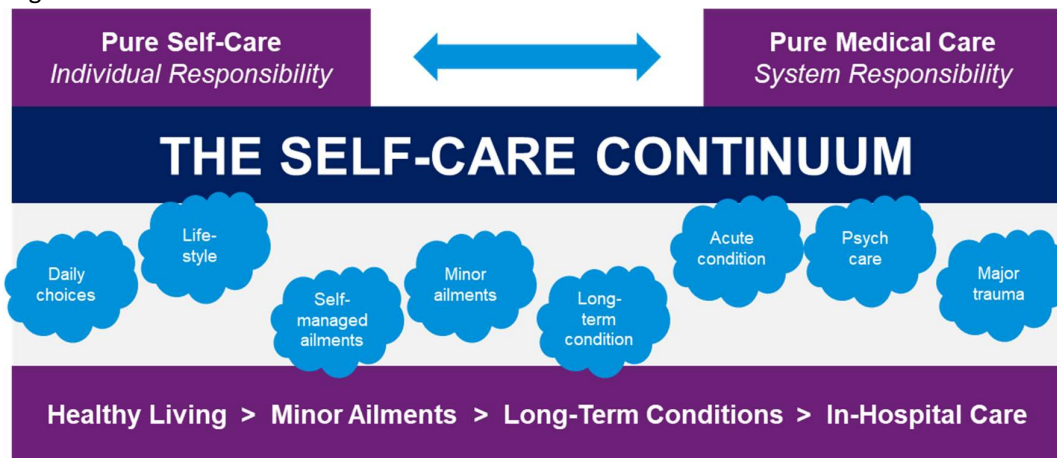
3 INTRODUCTION

Our study had one goal in mind: to leverage a multi-stakeholder approach for uncovering the creative mechanics that will be required to achieve Vietnam's UHC 2030 ambitions.

Universal Health Coverage (UHC) does not exist in isolation. It is instead an enabler for countries like Vietnam to power broader “4.0” socioeconomic objectives such as reducing poverty and unemployment rates, improving productivity, and creating a more educated population [2]. We see this mindset ring true during the stress test moments, such as the ongoing virus pandemic.

The perspectives explained throughout this paper are that adopting Self-Care policies is a critical mechanism for Vietnam to reach its ambition of national health and related economic goals. Self-Care is not necessarily new. Globally, Self-Care has a defined meaning that allows countries such as Australia and Japan [3] to incorporate it as a core pillar within the overall health system. The diagram below shows the spectrum of how far Self-Care can reach:

Figure 1. The Self-Care continuum



Source: The Pharmaceutical Journal, 2019 [21]

However, the wide variety of terminologies and implementation methods used for Self-Care, and its general lack of formality, might lead to the concept being underutilized in Vietnam.

As a key part of Self-Care, many countries have demonstrated that greater access to Over-The-Counter (OTC) medication can improve public health and provide better options, convenience, and access to care, which is correlated to a positive economic benefit as well. In the United States for example, the availability of OTC products is estimated to derive USD 146 billion in annual savings to the health system. Through our analysis in the paper, we have identified that Vietnam may see potential economic benefits of implementing Self-Care by raising health literacy and expanding access to cost-effective care. We estimate up to USD 4.2 billion in annual economic outcomes unlocked, and recurring savings of up to USD 0.6 billion in avoidable treatment costs.

To achieve the above in the current context, we reviewed actions that Vietnam leadership can take to encourage the public to adopt a healthier lifestyle and to improve the use of cost-effective care, such as OTC medication, for the self-management of minor conditions.



Through our analysis, we firstly investigated the cost of conditions in terms of Disability-Adjusted Life Years (DALYs)¹, and then considered what Self-Care behavioral interventions have empirical links to the desired health outcomes.

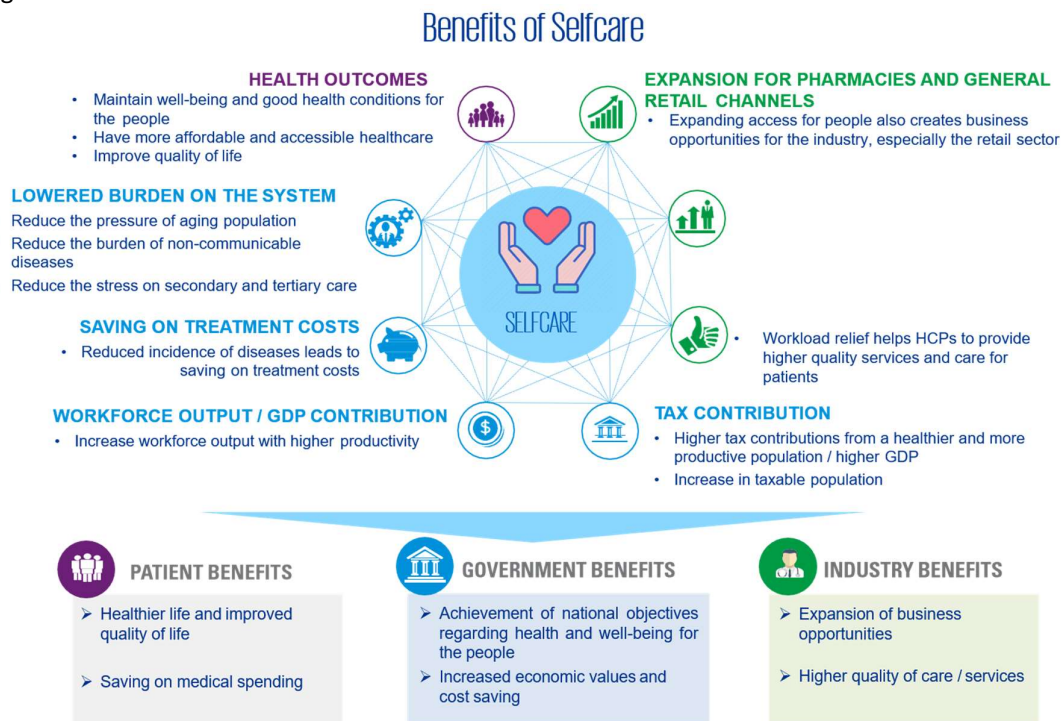
The selected Self-Care behavioral interventions mostly reflect preventive or less-invasive measures, such as adopting a healthier lifestyle, consuming a well-balanced diet, and treatments of minor ailments and early interventions through the use of medications like OTC. These interventions alleviate or forestall potentially costly conditions from becoming extreme.

“Disability-Adjusted Life Years (DALYs) quantify the burden of disease from mortality and morbidity. One DALY can be thought of as one lost year of ‘healthy’ life. The sum of these DALYs across the population, or the burden of disease, can be thought of as a measurement of the gap between current health status and an ideal health situation where the entire population lives to an advanced age, free of disease and disability.”

World Health Organization

The positive financial outcomes of Self-Care are critically important but are by no means the only benefits. As the diagram below indicates, Self-Care can lead to a wide range of contributions toward health quality, cost reduction, labor productivity, pharmacy ramp-up, microbusiness, and even taxation. These impacts span across patients, government, and industry:

Figure 2. Benefits of Self-Care



Source: KPMG analysis

Nevertheless Vietnam, sitting in middle-income status with bold ambitions over the coming years, faces a number of challenges that are ripe for but could inhibit the Self-Care opportunity. Some illustrative statistics as follows, that we expand upon further in the paper:

- Two million people in poverty ^[4] due to healthcare Out-Of-Pocket Expenditures (OOPE)
- Unhealthy behavior equates to 19 million years of disability-adjusted life lost
- Hospitals consume 50% of medical visits and 95% of national insurance expenditure
- Lifestyle diseases constitute 75% of the burden, 80% of cases for which are preventable ^[5]

In Vietnam, the concept of Self-Care already exists and we recognize the government-sponsored initiatives that can be built around. In 2019 Vietnam launched “Sức khỏe Việt Nam”, a national campaign to promote healthy living (details of which can be found in the diagram below). The aim of the program is strongly aligned with those we advocate for here around Self-Care. To be successful, Sức khỏe Việt Nam requires collaboration across government departments and with experienced private sector constituents given the multi-faceted nature of Self-Care.









Figure 3. Vietnam’s “Sức khỏe Việt Nam” national campaign to promote healthy living



Source: KPMG analysis

We took this one step further by cross-mapping the Sức khỏe Việt Nam program activities against the aforementioned Self-Care value levers. The result is that there are a number of areas for further discussion by which the private sector can augment the Self-Care topic and improve the chance for a successful socioeconomic outcome for the country:

Figure 4. Self-Care value levers across stakeholders

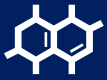
VALUE OF HEALTHCARE	STAKEHOLDERS					
	PATIENT – WIN Health benefits		GOVERNMENT – WIN National objectives achievement		INDUSTRY – WIN Expanded business opportunities	
 HEALTH OUTCOMES	N.H.P. Improve status and health conditions	N.H.P. Prevent disease and increase life expectancy	N.H.P. Improve status and health conditions	N.H.P. Prevent disease and increase life expectancy		
 LOWERED BURDEN ON THE SYSTEM			N.H.P. Lower the burden of disease			
 SAVING ON TREATMENT COSTS	N.H.P. Lower the burden of disease		N.H.P. Lower the burden of disease			
 WORKFORCE OUTPUT / GDP CONTRIBUTION			N.H.P. Gap for discussion			
 TAX CONTRIBUTION			N.H.P. Gap for discussion			
 HIGHER QUALITY OF CARE / SERVICES	N.H.P. Care and management of people's health conditions in the community				N.H.P. Care and management of people's health conditions in the community	
 GREATER DEMAND FOR HIGHER MARGIN ACTIVITIES					N.H.P. Early detection and management of non-communicable diseases	
 EXPANSION FOR PHARMACIES AND GENERAL RETAIL CHANNELS	N.H.P. Care and management of people's health conditions in the community				N.H.P. Care and management of people's health conditions in the community	

Source: KPMG analysis

We provide a detailed recommendations checklist at the conclusion of the paper, including from a policy perspective so as to equip Vietnam leadership with the necessary tools for action. These recommendations are based on global best practice, contextualized to Vietnam.

“We appreciate the achievements of Vietnam over the past decades and look forward to supporting the next wave of ambition – realizing affordable UHC while providing a future-proofed and sustainable system that serves as a long-term economic driver.”

- Dr. Mason L. Cobb, MD, FACS, President of Victoria Healthcare International Clinic



4 The Missing Ingredient for Vietnam UHC

Vietnam has been a frontrunner for years as it pertains to healthcare systems in ASEAN. Through the Law of Social Insurance in 2008 ^[6] and more recently the expansion of the same signed in 2018, already nearly 90% of the population (or 84 million people) have some level of coverage. A summary of regional standings is as follows:

Figure 5. Summary of healthcare regional standings

Health Expenditure as a % of GDP								
Selected ASEAN Countries				Developed Countries				
Malaysia	Singapore	Indonesia	Vietnam	Philippines	Thailand	Canada	Germany	UK
3.8%	4.5%	3.1%	5.7%	4.4%	3.7%	10.5%	11.1%	9.8%

Life Expectancy								
Selected ASEAN Countries				Developed Countries				
Malaysia	Singapore	Indonesia	Vietnam	Philippines	Thailand	Canada	Germany	UK
76	83	71	75	71	77	82	81	81

Source: The World Bank

Yet, as the above exemplifies, Vietnam's desire to achieve a "4.0" vision for human capital development may require additional investment. At less than the OECD-recommended 10% of GDP spent on healthcare and with a life expectancy that lags behind the developed markets, population health and wellbeing could become a bottleneck for Vietnam to move into a higher-income status. According to KPMG's experience in healthcare reform efforts across public and private sectors globally, every year of average life expectancy gained by a population equates to an incremental 4% contribution toward GDP.

As a developing country, Vietnam faces many of the demography-driven health financing challenges as its peers. For example, OOPe on healthcare equate to 45% of the total ^[7] (versus the WHO-recommended target of 20% ^[8]), and nearly half of outpatient visits are occurring in the hospital. Such inefficient structures potentially waste the budget already made available for healthcare and put individual households into financial distress. Let us dig a bit deeper into some of these challenges ahead for Vietnam.

Demography will continue to pressure the health system

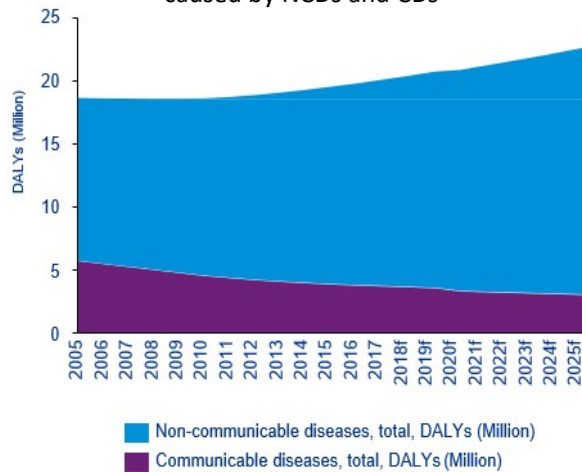
Vietnam's demographic advantages, which have served it well over the past twenty years of reform and opening, dissipate as the population grows old. The country will officially be a "silver society" within the next decade, during which the percentage of those aged 65+ doubles. ^[9]

To compound the above, the advent of lifestyle-related disease in Vietnam is becoming apparent. Over the past five years, Vietnam has seen one of the most significant rises in obesity ^[10] across ASEAN. In a study by the Vietnam National Institute of Nutrition, 29% of primary school students were found to be overweight ^[11]. Another study by Stanford University found Vietnam to be among the least physically active countries in the world. Daily smokers constitute nearly 20% of the population ^[12]. And not helping are the seasonal attacks to immune systems; viruses which can be self-manageable but tend to cause health and economic harm beyond expectation.

It is noted that Vietnam leaders have taken a stand. In 2019, the country launched “Sức khỏe Việt Nam”, the national health campaign ^[13] encouraging individuals to get more active and to participate in early interventional screening for common Non-Communicable Diseases (NCDs) such as hypertension, diabetes, and stroke. The campaign kicked off with the participation of the Prime Minister and many prominent figures in Vietnam. The Vietnam Center for Disease Control (VNCD) under the MOH is directly responsible for the coordination and implementation of Sức khỏe, along with the support from other ministries, localities, and social organizations at all levels. The plan sets out a series of objectives, ten areas of health priorities, and 28 targeted tasks to accomplish over the next decade(s). We provided a summary diagram of Sức khỏe Việt Nam on page 6 of this document.

Sức khỏe Việt Nam is a good start toward Self-Care, but we believe more value can be unlocked. As it stands, the Disability-Adjusted Life Years (DALYs) caused by NCDs in Vietnam are expected to expand at a Compound Annual Growth Rate (CAGR) of 2.1% until 2025 ^[3], which in absolute terms will equate to 19 million years' worth of life lost. NCDs already account for nearly 75% of the total burden of disease in Vietnam.

Figure 6. Disability-Adjusted Life Years (DALYs) caused by NCDs and CDs



Source: BMI database, World Health Organization

On a positive note, the World Health Organization (WHO) estimates that 80% of chronic disease is preventable. Vietnam should, therefore, be able to stem the growth of NCD-related burden by expanding the National Health Insurance scheme to cover some essential preventative services such as tobacco cessation and nutritional counseling. Additionally, expanding access to OTC medications as a front-line intervention for minor ailments and the self-management of chronic conditions can serve as a relief on the system.

An assessment of the top six diseases by DALYs impact in Vietnam reveals an economic cost that ranges between USD 2.5 billion to potentially as high as USD 4.2 billion. If this trend continues at the current pace, the economic loss could reach nearly USD 6 billion by 2025. Policies designed to encourage and expand access to Self-Care are effective in reducing costs to national healthcare systems and show promise for Vietnam as well.

Access to care infrastructure remains strained and constrained

Over the last decade, Vietnam has built much-needed health infrastructure and is commendably expanding primary care access. It should be noted that Vietnam ranks highest among ASEAN nations for hospital beds to population ratio (2.6 per 1,000 people).

Across the country, there are more than 227 public hospitals, 93 private hospitals, 6,671 clinics, and 57,000 pharmacies ^[3]. Yet once again, we start to see the cracks when digging a bit deeper. There are only 0.5 doctors per 1,000 people, which is among the lowest in ASEAN. The median density of practicing pharmacists is 3.35, well below the 5.0 global target. And perhaps most challenging for the country is the variability in the geographic spread of need versus capacity:

Figure 7. Healthcare infrastructure across Vietnam

Key Categories	Hanoi	Hai Phong	Da Nang	HCMC	Can Tho
# public hospitals	86	26	21	71	23
# private hospitals	26	5	8	52	2
# clinics	1,496	342	281	4,291	261
# beds in public hospitals	21,740	6,804	6,260	33,604	5,965
# beds in private hospitals	1,228	374	1,395	3,900	320
Ratio of beds per 10,000	24.6	42.5	79.2	44.4	48.6

Key Categories	Hanoi	Hai Phong	Da Nang	HCMC	Can Tho
# doctors	9,366	1,870	1,898	15,613	2,279
# physicians	4,229	704	1,898	3,755	623
# nurses	12,198	4,124	1,770	30,922	3,262
# midwives	2,569	525	463	4,256	481
Ratio of doctors per 10,000	13.3	8.3	17.4	18.0	17.7

Source: KPMG analysis

Hospitals currently represent 50% of total healthcare visits and 95% of national insurance spending. Hospitals in Vietnam are also where most of the diagnoses are made, and medications prescribed. Unless new models of care are explored, overreliance on the hospital system in Vietnam will exhaust available funding. Unfortunately, the signs point toward a widening gap – the CAGR of inpatient visits since 2013 has doubled versus outpatient visits with an average Length Of Stay (LOS) at 6.7 days (the second highest in ASEAN).

The cost burden of healthcare is keeping people in poverty

A hallmark of a country's economic maturity is its ability to raise the population out of poverty. This effort is driven in large part by the implementation and optimization of UHC programs. Despite the nearly 90% coverage of UHC in Vietnam ^[3], OOPE remains at 45%. If not careful, such an unsustainable base could reverse economic productivity. In the Philippines, for example, which is also undergoing UHC transformation and where OOPE remains 54%, it is estimated that 1.5 million families have fallen back into poverty since 2012 as a result of healthcare expenditures.

Figure 8. OOPE percentage of current health expenditures

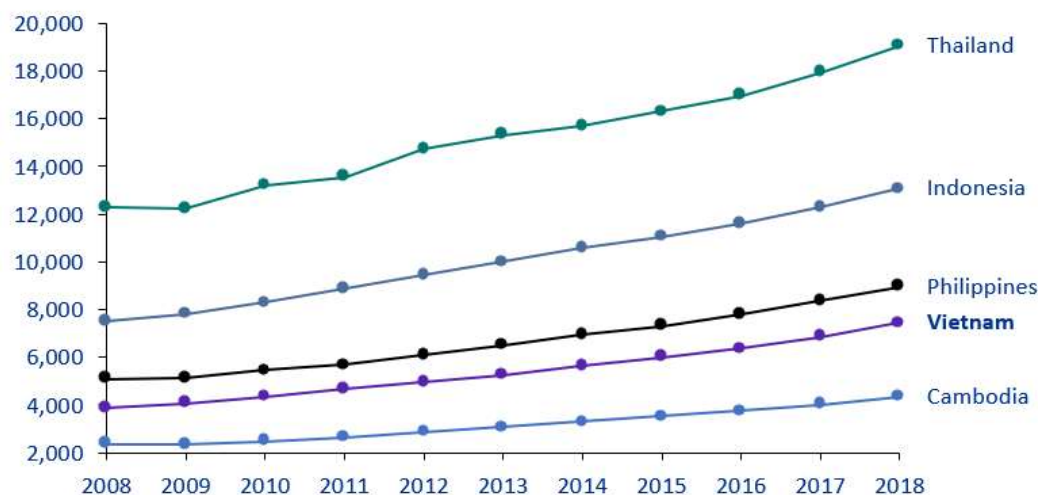
OOPEs % of Current Health Expenditures								
Selected ASEAN Countries					Developed Countries			
Malaysia	Singapore	Indonesia	Vietnam	Philippines	Thailand	Canada	Germany	UK
38%	31%	37%	45%	54%	12%	15%	12%	15%

Source: The World Bank

On a broader economic front, Vietnam's GDP per capita remains relatively low as compared to neighboring ASEAN countries. This, in turn, has a direct effect on purchasing power parity:

Figure 9. Comparison of GDP per capita, PPP (Current International \$)

GDP Per Capita, PPP (Current International \$)



Source: The World Bank

Approximately one in five Vietnamese families spend more than 10% of their income on health-related matters; another 10% of families spend more than 25% ^[14]. According to the Vietnam Public Expenditure Review, 2.5% of households, or about two million people, remain under the poverty line due to catastrophic healthcare expenditures ^[4]. Vietnam must seek to improve the cost-effectiveness of its care delivery system.

Despite UHC efforts, the system is built on an unsustainable base

At a UHC index of 75 as compared to an average of 67 across ASEAN ^[18], the “Vietnam 4.0” program is already positioned to be able to lean on a healthy, productive population. But there remains one missing ingredient, Self-Care, that must be addressed in order for Vietnam to go from good to great. Healthcare expenditures in Vietnam are forecasted to reach a 12.5% CAGR over the next few years, equivalent to USD 22.7 billion in absolute terms ^[15]. And as the demography trends outline, the pressure only stands to rise. It is estimated that more than 60% of Vietnamese with common NCDs still go undiagnosed ^[16].

Figure 10. Healthcare financing landscape in Vietnam

Sustainable Financing		Universal Health Coverage	
Current health expenditure as a % of GDP 5.7%	Out-of-pocket expenditure as a % of current health expenditure 45%	Life expectancy 75 years	UHC Service Coverage Index (SCI) 75

Source: KPMG analysis



“Unless you’re Bill Gates, you’re just one serious illness away from bankruptcy.”

- David Himmelstein, American Journal of Public Health

According to the recent publication by KPMG, Sanofi, and the EU-ASEAN Business Council on sustainable healthcare financing for ASEAN ^[17], there are two main drivers of fundraising that tend to operate in silos. On the one hand, tax collection in the region remains below the 15%-of-GDP target set by the IMF for sustainable growth; in Vietnam, the rate is 13%. On the other hand, national insurance contribution schemes are also challenged by a largely informal

workforce, which across ASEAN constitutes nearly 80% of the total. Due to the aging populations and shrinking demographic dividend, these two traditional fundraising mechanisms are only becoming more squeezed.

There is hope in ASEAN for countries like Vietnam to more effectively utilize both tax-funded and bespoke national insurance contribution packages. However, as outlined in some detail in the sustainability paper, more creativity will be required to future-proof healthcare financing in order to deliver on the promised economic returns.



“The foundation of Self-Care is knowledge of one’s health status and medical conditions. Reliable diagnostics and health screenings are a powerful tool for community health education, which enable well-informed and effective treatment. Diag is proud to support the government’s commitment to Self-Care and a healthier Vietnam.”

- Sam Perl, CEO, Diag



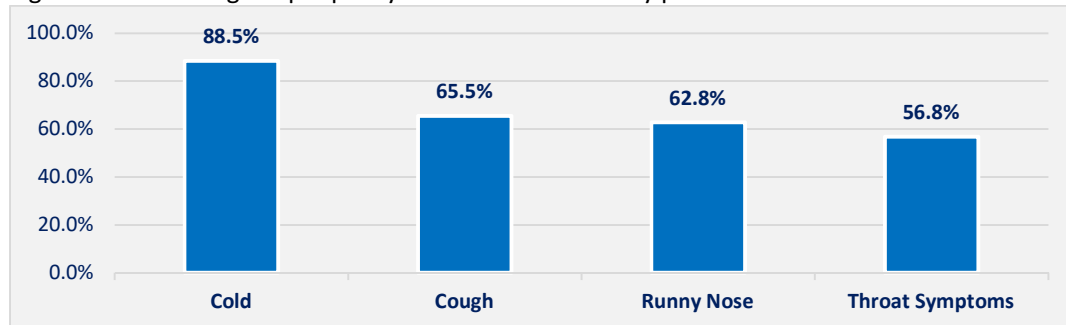
5 Self-Care Defined, and the Recipe for Robust UHC

Self-Care is already a mature concept in many countries

Worldwide, there is consensus that a greater emphasis on prevention and health promotion can help systems to cope with the rising demography pressures and, therefore, challenged funding models. Now the consensus adds a newly-recognized lever: Self-Care.

Not only does Self-Care serve to drive improvements in health outcomes through earlier and more cost-effective intervention, it can also provide a superior patient satisfaction experience by allowing people to take charge of themselves. Evidence has shown, for example, that up to 90% of chronic disease management ought to come directly from the person themselves. And, in reality, Self-Care is happening all around us. The chart below outlines the percentage of people by condition who already practice Self-Care in Vietnam:

Figure 11. Percentage of people by condition who already practice Self-Care in Vietnam



Source: Nicholas Hall's OTC Insight – Asia Pacific, 2019 [19]

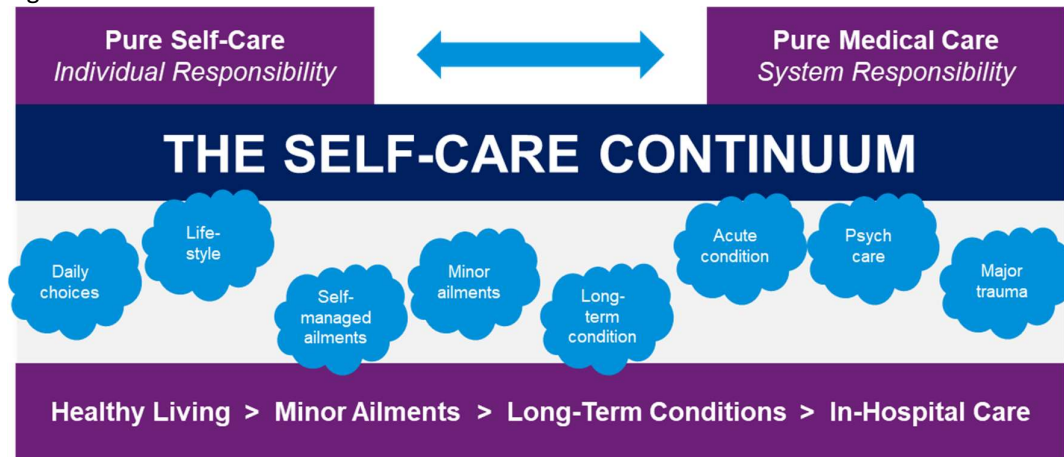
Self-Care is essentially the practice of allowing individuals to manage their wellness, minor acute issues, and ongoing chronic disease. The concept applies to both physical and mental health. Under the right set of protocols, Self-Care leads to reduced stress on the secondary and tertiary care system, thereby improving efficiencies as well as resulting in substantial cost savings.



“Self-Care is the ability of individuals, families, and communities to promote health, prevent disease, maintain health, and to cope with illness and disability with or without the support of a healthcare provider^[20]”

World Health Organization


Figure 1. The Self-Care continuum



Source: The Pharmaceutical Journal, 2019 [21]

The Appendix of this paper includes snapshots of how other countries are tackling the Self-Care topic. Safe to say, Self-Care is here to stay and already showing a strong impact. In the United States, every \$1 spent on OTC medication (instead of a prescription) saves the healthcare system more than \$7. In Europe, moving 5% of prescription medication to OTC status is estimated to save the healthcare system more than EUR 16 billion annually. In Brazil, it is estimated that USD 601 million could be saved annually by avoiding unnecessary doctor visits for minor ailments.

Fundamentally Self-Care has three underlying mechanisms, explained further here:

 <p>Knowledge & Literacy</p>	<ul style="list-style-type: none"> ✓ Access to reliable information for decision-making, while also limiting the noise and false sources (e.g. social media advice) ✓ Raise awareness of symptoms and emotions to empower independent wellbeing, especially for lower-income families ✓ Balance convenience of Self-Care channels (e.g., pharmacy, e-commerce) with quality protocols to deliver the outcomes
 <p>Prevention & Intervention</p>	<ul style="list-style-type: none"> ✓ Focus on safety – healthier diet, immune system supplements support like vitamins and calcium, reduced self-harm (e.g. tobacco) ✓ Invest in population-wide health screening programs, even if detection rates are low (can use data & analytics for targeting) ✓ Raise immunization levels to international standard – in most cases, above 90% and using a life-course continuum
 <p>Self-Treatment</p>	<ul style="list-style-type: none"> ✓ Incorporate Self-Care as a pillar within UHC programs ✓ Beyond wellness, explore Self-Care for simple acute and chronic conditions, thereby minimizing secondary and tertiary facility use ✓ Take a pathway approach – areas such as joint and digestive health are ripe for OTC support, especially with aging populations

A Self-Care pilot in China provided focused education to 1,000 people with hypertension, diabetes, and other high-burden chronic diseases; within six months, improvement in self-management, outcomes, and, most importantly, reduced hospitalizations, were observed ^[22]. In Vietnam in 2017, on the contrary, there was a case of a 22-year-old man in the Northern provinces who died after overdosing on paracetamol in an attempt to self-treat a fever ^[23]. Self-Care has excellent potential but only if properly managed as a formal program for the country. In one survey, more than half of medical practitioners believe the slow uptake of Self-Care is directly related to the lack of knowledge and advice on the matter. Education, aligned with “Vietnam 4.0”, is critical.

If of further interest to Vietnam leadership, there are already numerous international bodies dedicated to the Self-Care topic: WHO, Global Self-Care Federation, International Self-Care Foundation, Association of European Self-Care Industry, Asia-Pacific Self-Medication Industry.

A healthier, productive population realizes the UHC potential

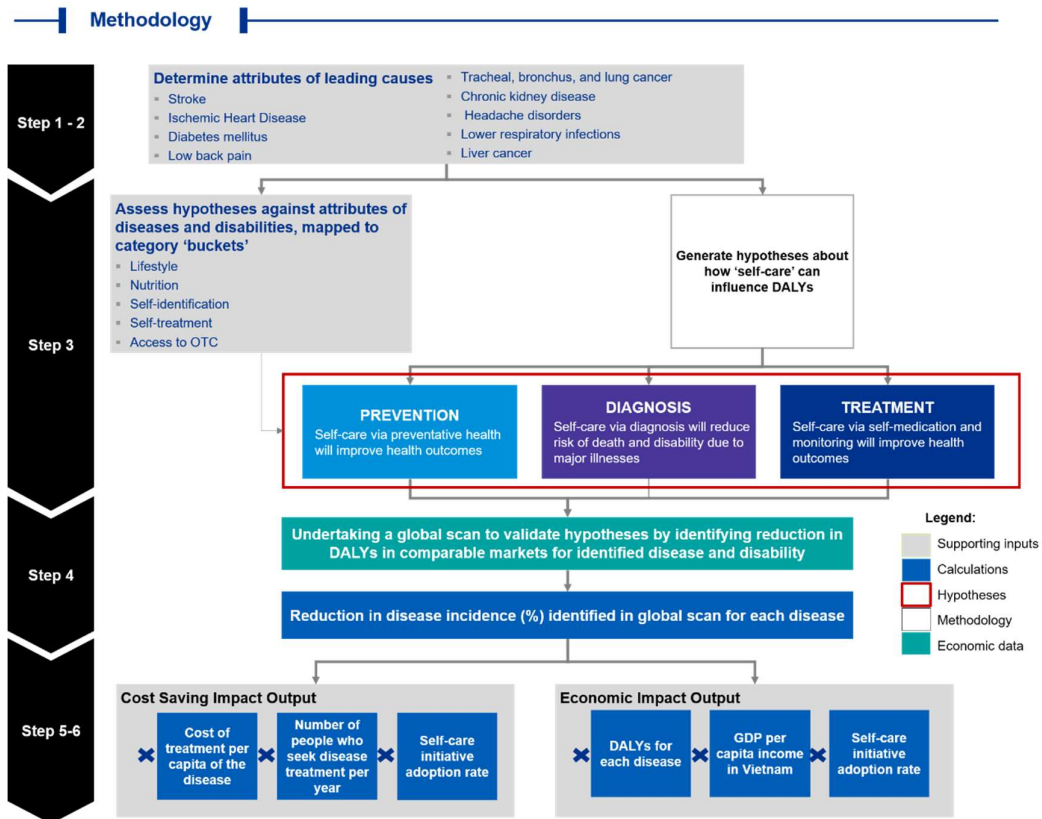
We start now to dig deeper into the specifics for Vietnam, and to leverage bespoke analysis conducted to paint the Self-Care justification picture. As alluded earlier, a significant challenge Vietnam faces in the next ten years is the unsustainable base on which the health system is built. Self-Care seeks to solve the dilemma – a healthier population is a more productive population, which is a taxable population. Let us avoid the opposite scenario, which would be disastrous and likely prohibit “Vietnam 4.0” from becoming a reality.

To explain our line of methodology, there are a few fundamental tenets when looking at the economic levers associated with Self-Care:

- Prevention and earlier intervention are less expensive in aggregate than treatment;
- Related to the above, overuse of expensive therapies contributes to cost burden implications;
- Increasing the number of productive days of individuals stimulates GDP growth;
- Wellbeing and self-management reduce the impact of medical cost and absenteeism; and
- Self-Care could be regarded as a first-line intervention going forward.

Using the above tenets and an understanding of the Vietnam demography trends, we can derive the opportunity cost of Self-Care as well as the economic benefits through a series of calculation steps described in the following diagram:

Figure 12. Methodology of Self-Care opportunity cost and economic benefits for Vietnam



Source: KPMG analysis

The methodology and steps are explained further here:



Methodology of Self-Care Economic Values and Cost-Savings Calculation for Vietnam

Steps 1-2: Determine the list of top diseases that contribute most toward total DALYs.

Step 3: Consolidate a fixed list of preventive Self-Care behavioral attributes, such as:

- Reducing high blood pressure
- Reducing high plasma glucose
- Reducing exposure to air pollution
- Ensuring a balanced diet
- Reducing tobacco consumption
- Reducing alcohol consumption
- Exercising to maintain physical and mental wellbeing

Step 4: For each of the top diseases determined in Step 1, conduct a global literature review to identify quantified links between behavioral attribute modifications and disease incidence or burden reduction.

Steps 5-6: Multiply % of incidence or burden reduction of each identified disease (from Step 4) with (1) the GDP per capita, or (2) the annual total treatment cost of each condition. This calculation yields the estimation if Self-Care were applied, respectively: (1) the economic loss that otherwise could have been saved for each condition, or (2) the treatment cost savings of each condition. Finally, summing together all the economic losses and cost savings of each condition yields the total economic impact. This process is then repeated for several scenarios in order to create a range based on empirical Self-Care adoption rates.

For example, in the case of Vietnam, stroke is currently the leading cause of premature death and disability, representing a leading candidate for Self-Care intervention through individual empowerment of blood pressure control, healthy diet, and proper nutrition. Similarly, diabetes has increased five-fold in Vietnam, and even in Type 2 scenarios can be effectively managed with adequate guidance ^[24]. Let's see how the calculation results turn out in the next section.

Annual economic benefit of Self-Care in Vietnam is estimated to be more than USD 4 billion

Peer-reviewed research has shown that people engaged in Self-Care save 25% on their medical bills. In aggregate and as alluded to previously, this leads to sizeable ROI for governments that actively drive Self-Care. For example, increased OTC availability of cough medication is expected to save global health systems USD 30 billion over the next ten years [22]. For most countries, such figures could represent up to 10% savings of total healthcare expenditures.

Figure 13. Common ailments

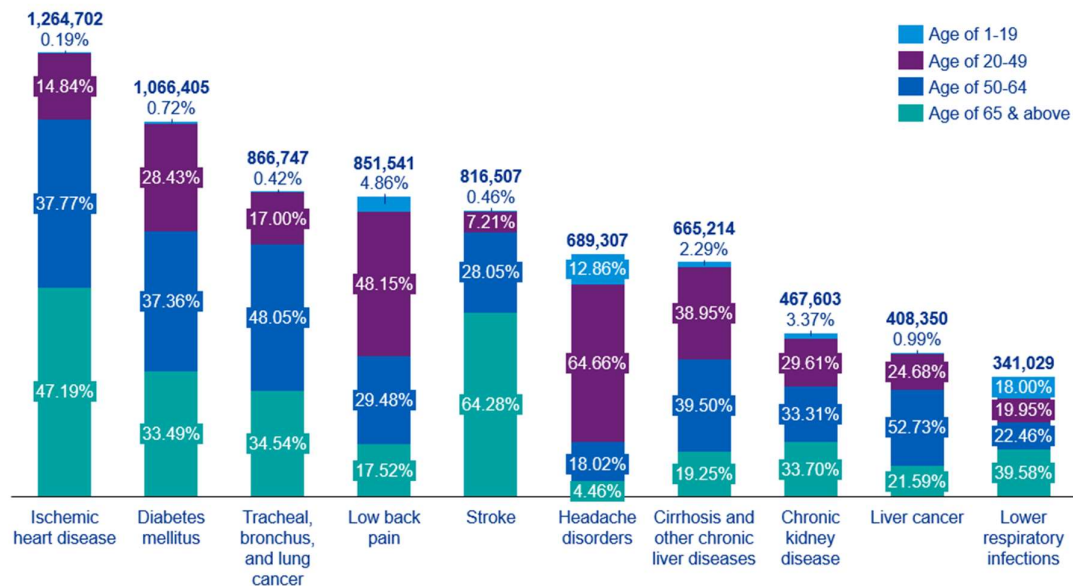
Condition
Back Pain
Nasal Congestion
Constipation
Migraine
Cough
Acne
Sprains and Strains
Headache
Sore Throat
Diarrhoea

At left are the ten ailments that typically account for 75% of doctor consultations. In per capita expenditure terms, these common ailments represent a five-fold differentiation spread between being treated in inpatient versus outpatient settings. For the same diseases, a push toward Self-Care has proven to lead to a 20% reduction in hospital visits.

When applied to the Vietnam context we observe a similar set of conditions that are driving up the prevalence ratings, and thereby health system costs, of DALYs:

Figure 14. List of top diseases that contribute most to the totally DALYs of Vietnam

Step 1-2: Determine the list of top diseases that contribute most to the total DALYs of Vietnam



Source: Institute for Health Metrics and Evaluation

Examining the DALYs by each disease, we are able to calculate (via the described methodology) how Self-Care could positively impact some of Vietnam's most costly medical conditions. These assumptions were validated by comparing Vietnam's situation to longitudinal studies conducted in peer markets that assessed the application of Self-Care and the associated reduction in disease burden. For each of the measured medical conditions, we identified Self-Care behavioral attributes that are correlated with disease reduction. These same behavioral attributes are reflected in our recommendation checklist later.

Below are the critical Self-Care behavioral attributes (as per peer country validations) that drive high cost savings against the selected subset of the common Vietnam disease conditions:

Figure 15. Critical Self-Care behavioral attributes of common Vietnam disease conditions

Step 4: Global scan on incidence reduction of preventive self-care attributes

Condition	Self-care cycle	Attribute	Incidence reduction (%) if self-care is applied
Ischemic stroke	Prevention	Reducing high blood pressure ¹	12%
	Prevention	Reducing tobacco consumption ²	16%
Tracheal, bronchus, and lung cancer	Prevention	Enhancing a balanced diet ³	25%
Diabetes mellitus	Prevention	Maintaining physical and mental well-being ⁴	53%
Ischemic heart diseases	Prevention	Reducing tobacco consumption ²	16%
Chronic kidney	Prevention	Enhancing a balanced diet ³	30%
Low back pain	Prevention	All of analyzed attributes	Not documented

Description

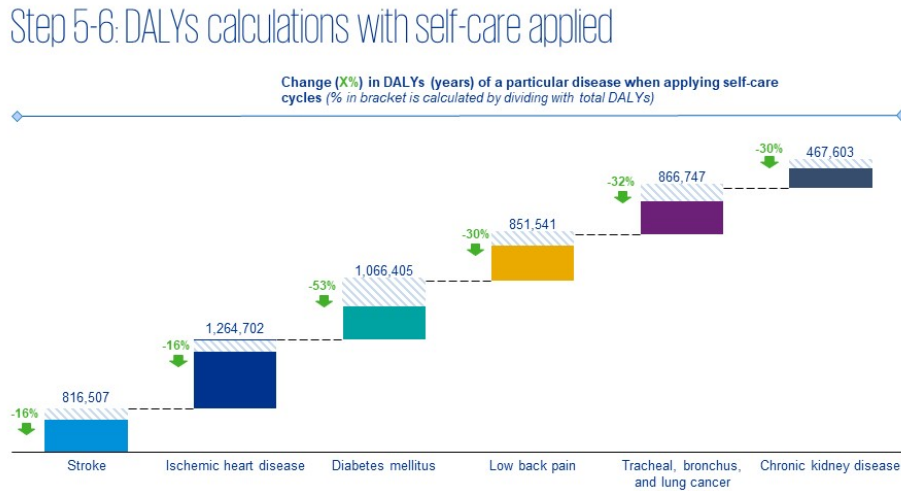
1. Reducing and maintaining a healthy blood pressure range (120/80mmHg and up to 139/89mmHg)
2. Stop, or ideally do not start, smoking
3. Eating within ones recommended caloric intake, and all recommended macronutrients
4. Reducing to and maintaining a healthy Body Mass Index (BMI) (18.5 to 24.9)

Source: KPMG analysis

Once the underlying behavioral attributes per condition are understood and assessed, we can look at the disease states in aggregate. If Self-Care were to be implemented, the impact of reduced DALYs due to the behavioral attributes becomes clear.

In some scenarios, the impact of Self-Care could reach 50% reduction in DALYs for Vietnam.

Figure 16. Impact of Self-Care in DALYs for Vietnam

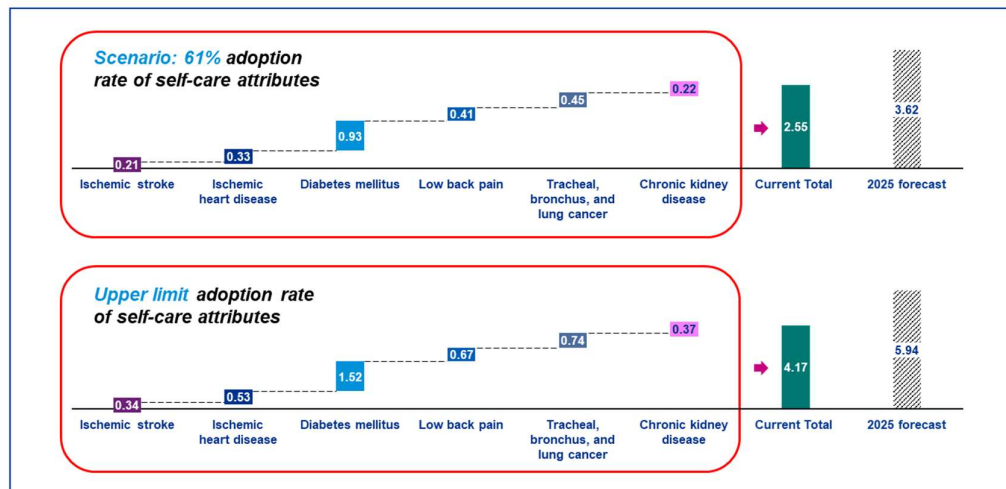


Source: IHME Global Health Data Exchange, World Health Organization, KPMG analysis

Ultimately and perhaps most importantly, we determined the corresponding prospective savings to the Vietnam health system through greater use of Self-Care. According to our analysis, if Vietnam were to apply policies that drive Self-Care adoption rates comparable to other global markets, the country could save between USD 2.5 billion to USD 4.2 billion annually. Extending this calculation to 2025, the economic impact is estimated to be upwards of USD 6 billion.

Figure 17. Improved productivity generated with active Self-Care

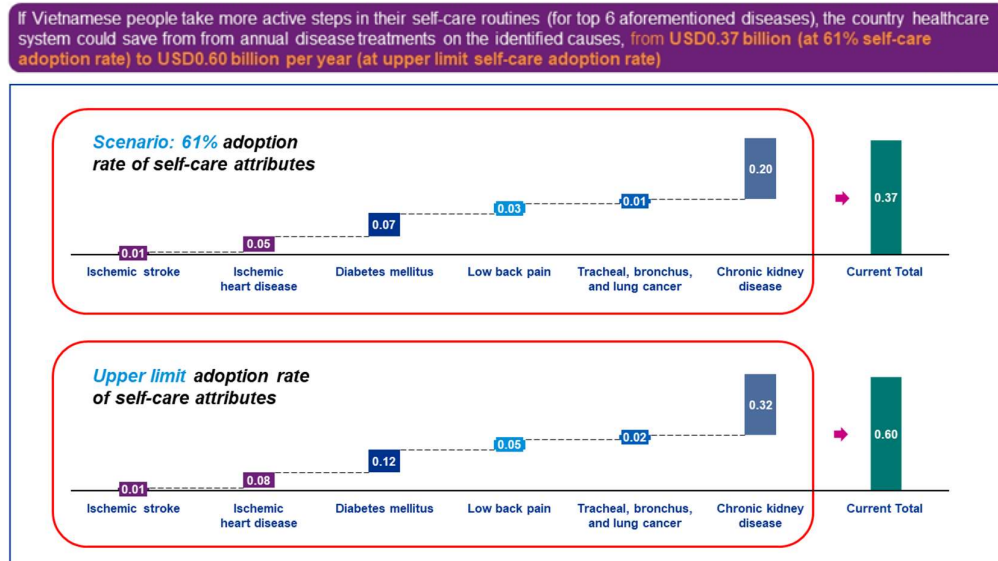
If Vietnamese people take more active steps in their self-care routines (for top 6 aforementioned diseases), the country could generate an improvement of productivity from USD2.5 billion (at 61% self-care adoption rate) to USD4.2 billion (at upper limit self-care adoption rate) in 2018



Source: KPMG Analysis

In some cases, as the chart below shows, there may be disease states with low DALYs impact yet a disproportionately high cost to the system due to expensive treatments in the current pathway. In such circumstances, Self-Care is once again well-positioned to be of support for Vietnam.

Figure 18. Potential savings from annual disease treatment (on identified causes) with active Self-Care



Source: KPMG Analysis

There can be a variety of knock-on indirect cost savings for Vietnam too

Though not the focus of this paper's analysis, the positive impact of Self-Care is measured in a variety of ways around the world. We provide country examples in Appendix snapshots, and a long list here of potential additional attributes for Vietnam to consider further exploring.

Figure 19. Self-Care measurements (Long list)

Self-Care Measurements (Long List)					
Productivity	Prevention	Affordability	Access	Technology	Awareness & Literacy
<ul style="list-style-type: none"> Absenteeism Competitiveness Lack of time for GPs and pharmacist Hospitalization of conditions preventable with self-care Shortage of healthcare professionals Services by the government to decrease delay in Self-Care Convenience (time saved) by individual 	<ul style="list-style-type: none"> Healthy meals Exercise intensity Consumption of dietary supplements Meditation Complementary preventive regime 	<ul style="list-style-type: none"> Price sensitivity Healthcare cost effectiveness Financial savings for economy due to reduction in healthcare treatment costs Cost saved by individuals on doctors visits (that can be treated with Self-Care) GDP spend on total recurrent health spending Cost associated with poor health literacy 	<ul style="list-style-type: none"> Availability of OTC medication Availability of self diagnosis and symptom assessment tools 	<ul style="list-style-type: none"> Data governance, security for electronic patient record Wearable device and apps Digital health monitors Fitness equipment 	<ul style="list-style-type: none"> Availability of experts with experience to serve people Accessibility of training institutes and companies Frequency of awareness activities and availability of materials (e.g. public seminars, information sharing, leaflet, health education) Number of Self-Care groups Other resources – Self-Care books, apps, weight loss programs

Source: KPMG analysis

Existing infrastructure, practices can be augmented

As mentioned, Vietnamese already engage in Self-Care regularly, including through the use of traditional and social media medicine. In urban areas as many as 76% of Vietnamese practice Self-Care, and around 60% in rural regions ^[25]. However, such informal activities not only fail to maximize the potential of Self-Care, they can also cause detriment if handled inadequately ^[26]. Incorrect drug selection, drug resistance, adverse effects or interactions, misdiagnosis, and delays in proper medical care are all real risks ^[27].

Fortunately, there are a few quick levers to Vietnam's advantage. For example, Vietnamese living in urban areas are gradually developing better habits of going to regular health check-ups, driven by incentives in national and employer insurance schemes. Such screenings, while a cost, are one of the most excellent tools for public health intervention. Vietnam must ensure the same level of proactive commitment is given to all regions of the country, including perhaps by more novel digital health tooling for remote locations. Vietnam leadership has already committed to reaching a 20% reduction in premature mortalities due to NCDs.

Following the self-management path, in Vietnam there is a two-factor decision tree for people to help themselves – traditional healing or OTC medicines. For example, with the common cold, traditional healing may entail consuming a mixture of rice gruel and onion^[26]. Whereas modern interventions could include OTC products like Bisolvon, which are already available in Vietnam and with evidence-based outcomes to back it up. The importance of education and awareness is critical, especially during stress test times such as immune system virus outbreaks.



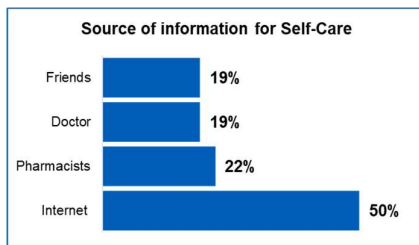
In terms of lifestyle choices, Vietnamese are increasingly self-aware about digestive and nutritional health. Vietnamese quite commonly take health-enhancing supplements, an industry that is experiencing a 10.6% CAGR. Once again, Self-Care is not necessarily about introducing a new concept but rather formalizing and ensuring the safety of existing channels.

Healthcare literacy and access must be improved

Population health leads to productivity, which leads to the wealth of people and country^[28]. The same argument for the intertwining of health and economy can also be made for health and education. Effective Self-Care requires education and literacy as a fundamental base.

One example is the growing concern around the use of antibiotics, an overprescribing factor of which is estimated to claim 10 million lives per year globally by 2050^[29]. A lack of doctors and pharmacists creates misconceptions around “cure-all” therapies. Even in the formal medical channels, insufficient healthcare workforce size and capacity makes staying on top of best practices very difficult. In the United Kingdom, a national “Self-Care Week” is organized each year. Likewise in Japan, where on-pack OTC messaging is allowable, a ten-fold enrichment increase in population education about Self-Care is estimated to lead to savings of nearly USD 1 billion for the health system. Public and private sectors can collaborate on awareness campaigns, though in many countries such programs and advertisements are outright banned. In Vietnam, the format for medical advertising has not changed for 20 years.

Figure 20. Internet is a commonly used channel for information

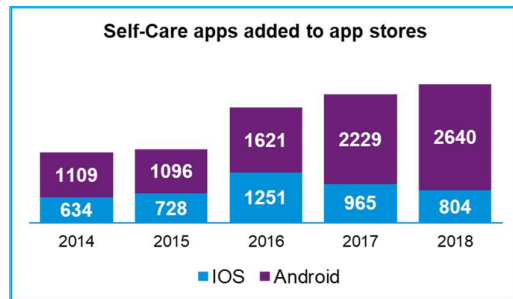


Source: Sanofi Self-Care Be Your Best 2019

Another dynamic that links the use of the existing infrastructure with healthcare literacy is the trend toward digital tools, for the newer generations but as well with the elderly too. In one survey, 57% of people would rather self-manage a minor ailment than deal with the inconvenience of seeing a doctor. And in the same survey, 87% of doctors actually prefer that patients self-manage such illnesses. In terms of information-gathering, the Internet is already quickly becoming the go-to source.

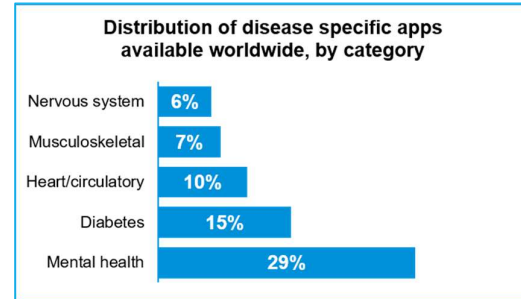
There are already more than 100,00 mobile apps oriented around healthcare. A breakdown of such apps by disease area and as it pertains to Self-Care looks as follows, which aligns closely with our analysis of behavioral attribute opportunities for Vietnam based on maximized cost savings. Australia, for example, has committed USD 20 million toward Self-Care of chronic disease and is incorporating Self-Care education into the MyHealthRecord national EHR program.

Figure 21. Self-Care apps added to app stores



Source: Sanofi Self-Care Be Your Best Report 2019, SCRU, Information-age

Figure 22. Distribution of disease specific apps available worldwide, by category



Health literacy must be tailored to the population subsegments by age, language, and geographic region. Websites like hellobasici.com and suckhoedoisong.vn in Vietnam have seen traffic increase significantly, indicating the growing interest for individual empowerment.



6 Recommendations Table for Vietnam

This paper attempts to shed light on the current health system challenges facing Vietnam on its ambition toward “4.0” and UHC, as well as a solution that lies in Self-Care along with the mechanics therein. Perhaps the issues are well-known; however, their collated and selected grouping in the paper creates a path for which the ROI of an effective Self-Care policy is clearer.

Rather than to underutilize Self-Care for Vietnam, a practice that is already undertaken informally by many in the population, we recommend country leadership to explore the targeted pathways with high DALYs and high cost in order to intervene with a smarter financing model that will also deliver improved health outcomes. The private sector, experienced with Self-Care initiatives happening around the world, stand ready and willing to help.

The following is a recommendations table of Self-Care policy levers for Vietnam, mapped to the integration of the ongoing Sức khỏe Việt Nam national campaign:

Category 1: Raise Literacy & Awareness of Self-Care	
1.1	<p><input type="checkbox"/> Drive awareness through health promotion campaigns:</p> <p>Widen population outreach efforts to include messaging on public transport, pharmacy placemats, social media, and other forms of digital engagement.</p> <ul style="list-style-type: none"> ✓ Push consumer health education over various communication vehicles to help people to properly understand and to implement Self-Care ✓ Work with private sector to ramp up Sức khỏe Việt Nam strategy: <ul style="list-style-type: none"> ▪ Control advertising of and levy taxation toward self-harm areas such as cigarettes, alcohol, carbonated soft drinks, among others ▪ Manage advertising, especially toward children, of food such as processed and additive products ▪ Open advertising for evidenced-based behavioral attribute drivers, including OTC therapies and immune system supplements
1.2	<p><input type="checkbox"/> Gamify healthy lifestyle choices:</p> <p>Public health fitness programs such as free activity parks, bike-to-work incentives, step tracking, and even healthcare apps can become points-based with rewards.</p> <ul style="list-style-type: none"> ✓ Adopt Electronic Health Record (EHR) technology more aggressively to create a base for encouraging people to manage their protected data and to communicate with MOH about bespoke needs, initiatives, and feedback by target group, age, preference, jurisdiction ✓ Promote good habits such as intake of health supplements as a natural gateway for prevention and immune system education (which lays the foundation for the more complex aspects of Self-Care in later phases) ✓ Work with private sector to ramp-up Sức khỏe Việt Nam strategy: <ul style="list-style-type: none"> ▪ Organize community mobilization activities tailored toward population subgroups, such as instructions for daily physical activity habits ▪ Address the same through the school system, ensuring the physical space, facilities, and equipment for health activities aligns to regulation ▪ Maintain physical regimen in the workplace, such as at the beginning and middle of each day; avoid sedentary lifestyle, achieving at least 60 minutes of physical activity per day
1.3	<p><input type="checkbox"/> Clarify how self-assessment works:</p> <p>Encourage avoidance of doctor visits for minor ailments and provide people with tools for decision-making. For self-medication, ensure adequate adherence and side effect monitoring.</p> <ul style="list-style-type: none"> ✓ Use the EHR (mentioned above) to influence the population to take more preventative measures, such as sending daily health tips via the smartphone so as to reduce the need for doctor appointments ✓ Work with private sector to ramp-up Sức khỏe Việt Nam strategy: <ul style="list-style-type: none"> ▪ Provide information in various formats to guide people to self-monitor ▪ Allow self-checks of blood pressure, hypertension, blood sugar to serve as a form of early detection for the common disease areas ▪ Advise people on behavioral changes, such as medication adherence and Self-Care at home as directed by the doctor

Category 2: Expand Access to Self-Care Tools & Platforms

- 2.1 **Modernize the classification categories:**
- There are already many products not considered "high risk" that could be made more available to people under the form of transferring from pharmacy – only area to general product area within pharmacies under the presence and guidance of pharmacists.
- ✓ Consider reclassifying a portion of prescription medications that are proven to be low-risk and treat them as conditional OTCs
 - ✓ Ensure pharmacists and consumers are exchanging the necessary information before the purchase of OTC medications
 - ✓ Accelerate path to market of new products that fall under low-risk category

- 2.2 **Open more channels of access:**
- Empower pharmacies as a form of primary care for OTC medication, but also look beyond toward other convenience routes such as grocery stores and even preparing for the growing e-commerce trend.
- ✓ Allow approved OTC medications (such as health supplements and evidence-based ailment treatments) to be sold in pharmacies as a seamless environment of "shopping to take care of one's self"
 - ✓ Use the above to train people on a Self-Care lifestyle, which has now become common practice in the developed countries
 - ✓ Pilot the allowance of OTC medications to be sold online, improving the ease and removing geographical barriers of Self-Care adoption

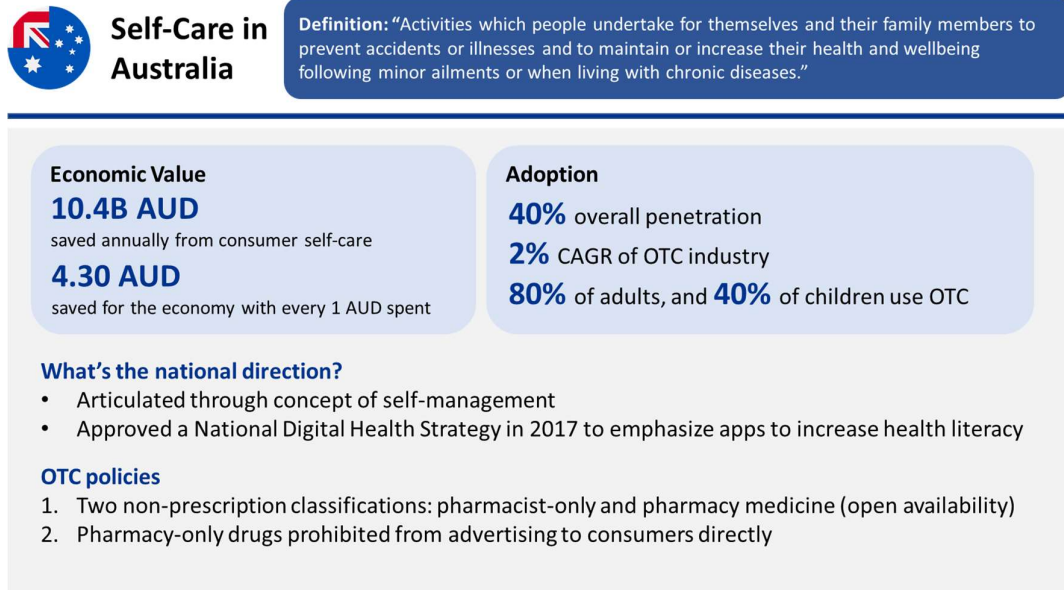
- 2.3 **Control risk and streamline regulation:**
- Monitor all of the above through strong measures.
- ✓ Leverage global review frameworks to collect data and accelerate applications
 - ✓ Streamline new medication approval and renewal to reach parity with other Asian markets, while enhancing transparency of the process

Individual Empowerment



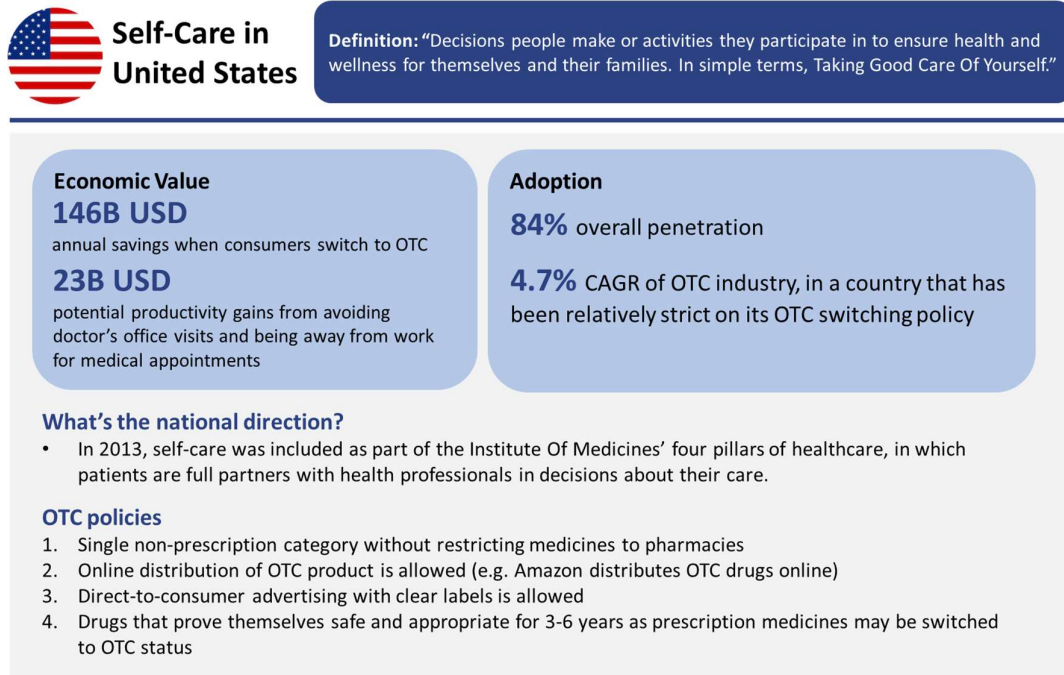
7 Appendix 1: Comparator Country Snapshots

Figure 23. Self-Care in Australia



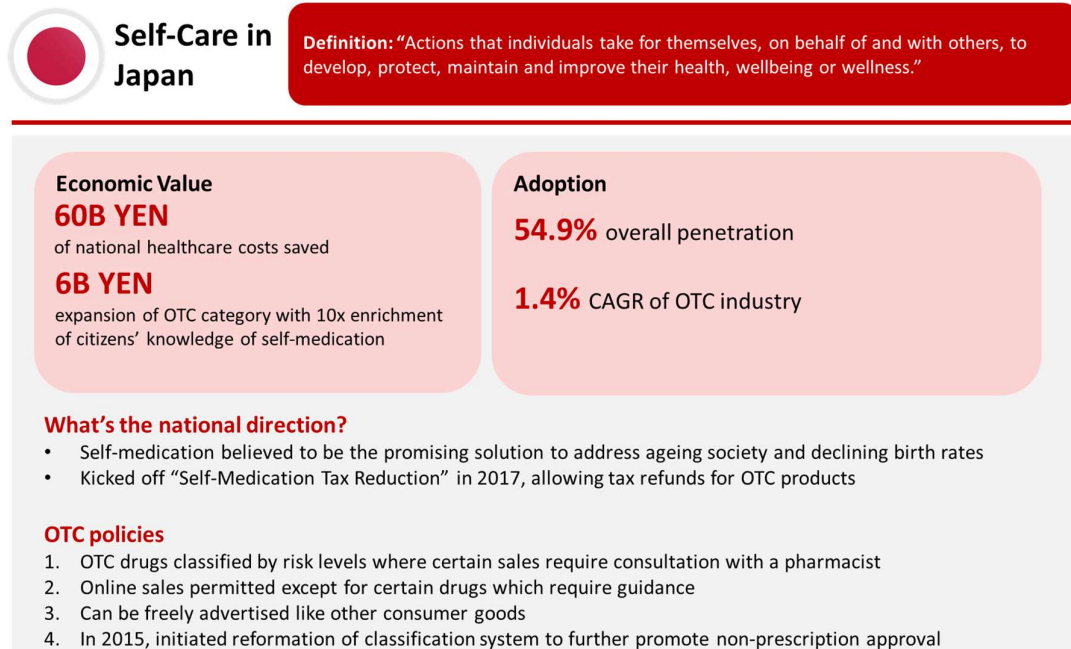
Source: The State of Self-Care in Australia, Bayer Self-Care policy paper 2018, Self-Care use patterns in the UK, US, Australia and Japan, Statista: Australia OTC Pharmaceutical Market, 2019, Therapeutic Goods Administration

Figure 24. Self-Care in United States



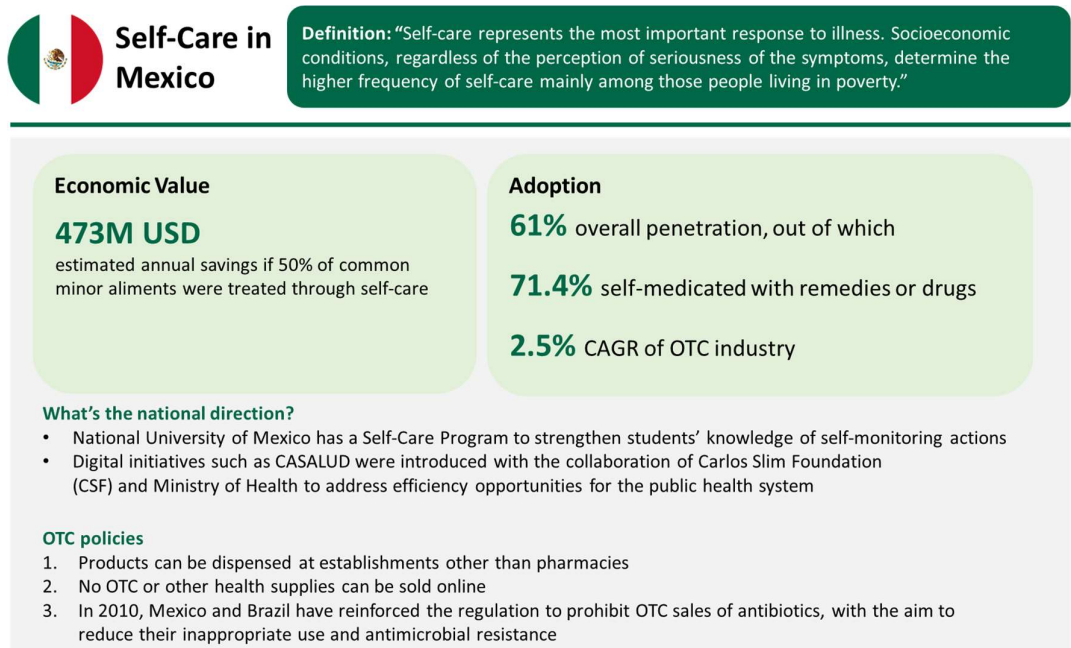
Source: CHPA, IRI 2018 Self-Care Study, Prescription to over-the-counter switches in the United States (2016), Statista

Figure 25. Self-Care in Japan



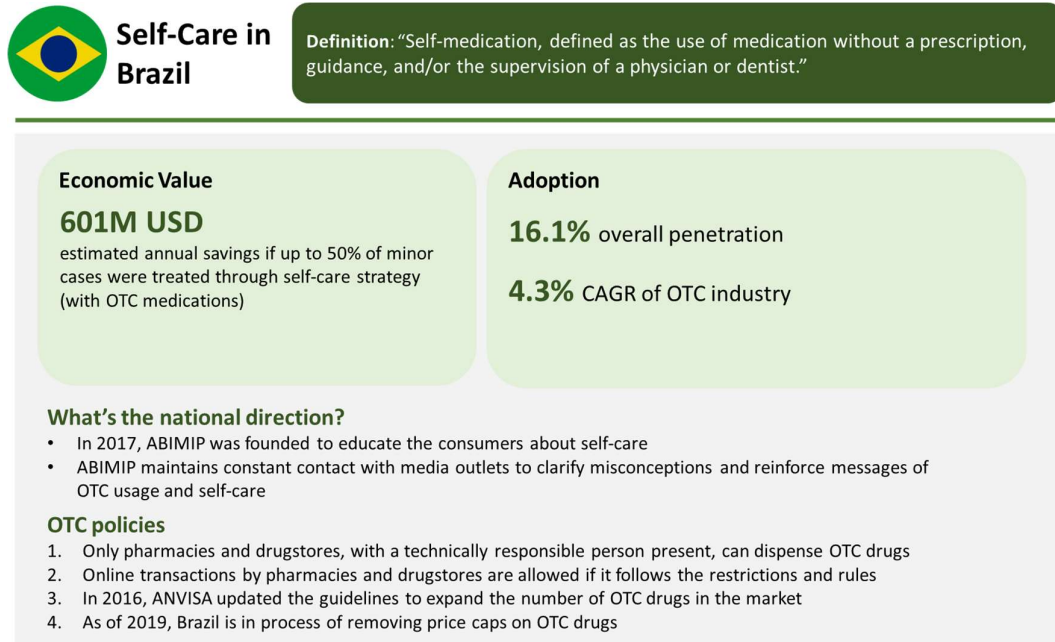
Source: Reasons for the preference of clinic visits to self-medication by common cold patients in Japan (2017), Self-Care use patterns in the UK, US, Australia and Japan (2015), The Japan Times, Thomson Reuters PRACTICAL LAW, Medicine reclassification processes and regulations for proper use of over-the-counter Self-Care medicines in Japan

Figure 26. Self-Care in Mexico



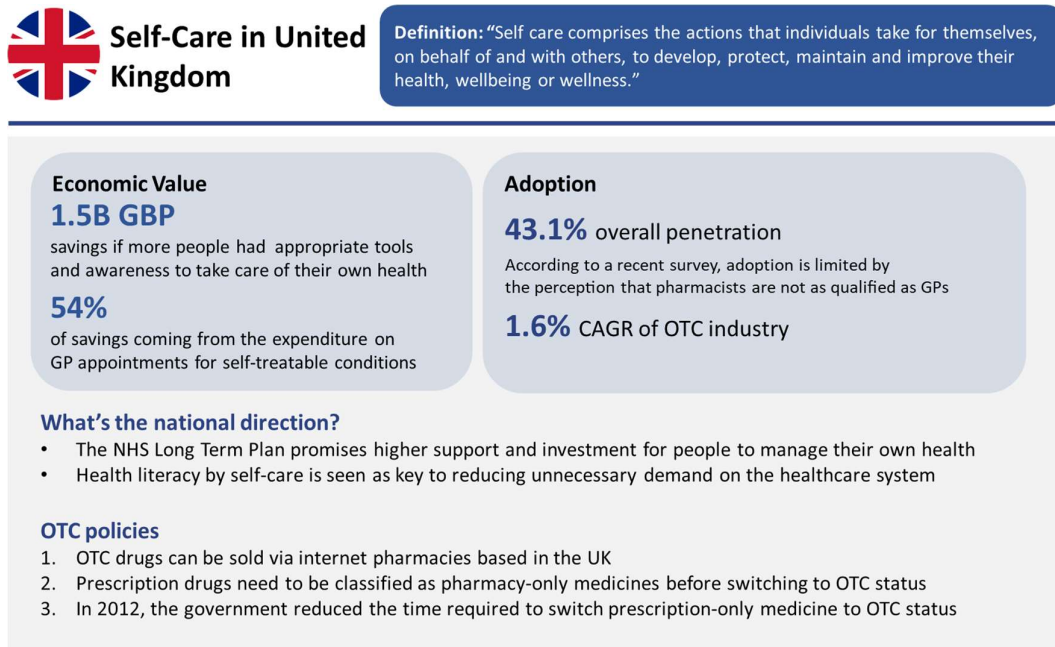
Source: infoilar El Valor Económico del Autocuidado de la Salud, Value and potential economic savings in the health Budget of Mexico due to OTC Self-Care (2018), Programa Universitario de Autocuidado para la Salud, CASALUD: A suite of digital health services for the prevention and management of NCDs

Figure 27. Self-Care in Brazil



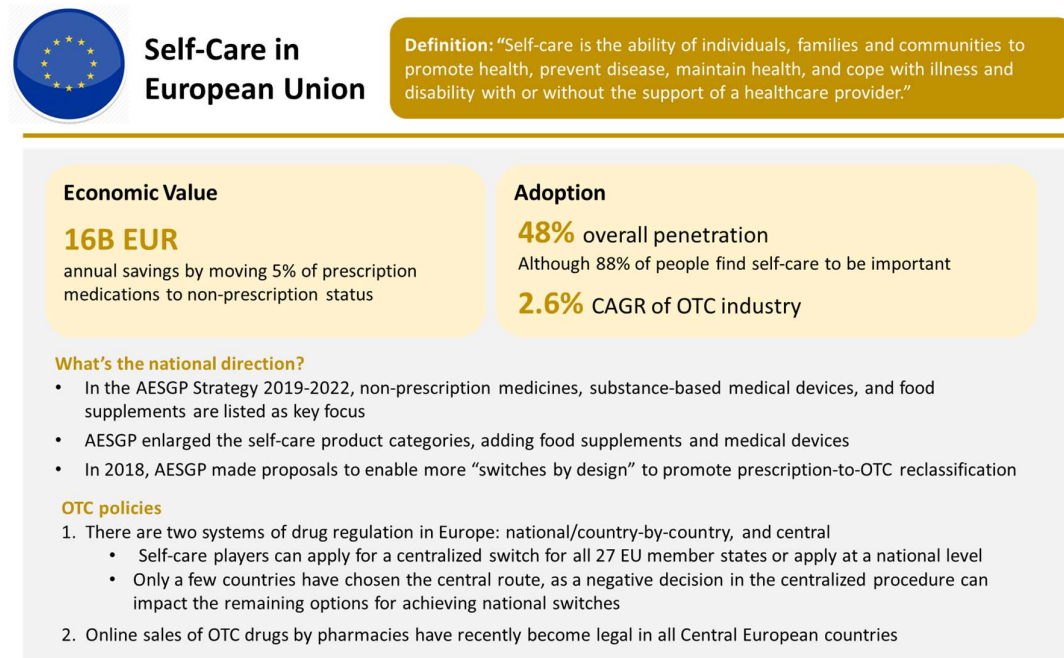
Source: inoifar El Valor Económico del Autocuidado de la Salud, Prevalence of self-medication in Brazil and associated factors, EMIS, ABIMIP reforça seu papel educativo com a imprensa

Figure 28. Self-Care in United Kingdom



Source: A Self-Care white paper: Supporting the delivery of the NHS Long Term Plan (PAGB), Self-Care use patterns in the UK, US, Australia and Japan, Statista, Self-Care forum, Widening Consumer Access to Medicines through Switching Medicines to Non-Prescription: A Six Country Comparison (2014), PharmaTimes

Figure 29. Self-Care in European Union



Source: AESGP Annual Report 2019, diapharm PMR, The Epposi Barameter: Consumer Perceptions of Self-Care in Europe (2013), Statista



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This whitepaper is funded by Sanofi

The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavour to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.



9 Appendix 3: Citations

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