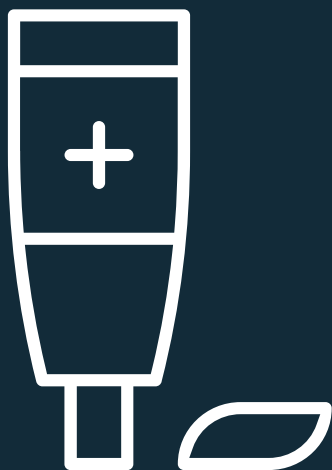


# THE HEALTH- ECONOMIC BENEFITS OF SELF-CARE IN EUROPE

A POTENTIAL TO RETHINK ITS POSITION  
IN THE HEALTHCARE SYSTEM





# ABOUT THIS REPORT

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This report aims to provide a fact-based overview of the current position of self-care in Europe and its potential to take on an increasingly important role in European healthcare systems. The report has been based on research conducted by Vintura and sponsored by GSK. The research was done between May and September 2020 where insights from a literature study and desk research were combined with in-depth interviews with relevant stakeholders from national, European and global organisations. This study's scope covers European countries with a particular focus on Germany, Italy and the United Kingdom. For the literature search, specific search terms were used (e.g. self-care, self-monitoring, self-management, non-prescription) to identify relevant literature in different search engines and databases. The search was focussed on European data, containing mostly articles from the last 10 years. Both scientific articles and white papers/reports

were included. The interviews conducted were with stakeholders from the three European countries in scope, representing different types of organisations including governmental, non-profit and trade associations. To emphasise an academic signature, the study has been developed using input from multiple working sessions with academics (including Professor Lieven Annemans) to discuss the outcomes. In the context of this report, the pharmacy is considered part of the healthcare system.

This report was written by Lisette van Eijck, Laura Restrepo and Bas Amesz (Vintura). The findings and views expressed in this report are based on the research conducted by Vintura and do not necessarily reflect the views of the sponsor.

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# INTRODUCTION

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Healthcare systems in Europe are facing an incredible challenge. Several factors are making it more and more difficult to control the rising costs of healthcare. Investing in health is important but it is equally important that the growth rate of healthcare expenditure is sustainable. Changes in demographics, particularly an ageing population, increase the demand for care services. Additionally, the recent advances in costly innovative therapies drive the need for larger health budgets. Healthcare systems need to transform. A stronger focus on prevention and on individuals managing their own health could help relieve the pressure currently experienced by healthcare systems.

Self-care, defined by the WHO as *“the ability of individuals, families and communities to promote health, prevent disease, maintain health, and cope with illness and disability with or without the support of a healthcare provider”*, can play an important role in alleviating the pressure on healthcare systems and can improve health outcomes through the empowerment of individuals. The recent COVID-19 outbreak has accelerated the role of self-care, highlighting its potential for the future. With a larger focus on self-care, a breakthrough in the way we organise healthcare could be on its way.

## CHAPTER 1

# ENABLERS

SEVERAL ENABLERS SHOW THAT SELF-CARE IS A VITAL PART OF HEALTH AND LIKELY TO INCREASE IN IMPORTANCE

Driven by a growing interest in personal well-being, easier access to information and advances in digital technologies, individuals in Europe grow increasingly eager to take control of their own health. A recent survey including 1901 individuals from 10 European countries shows the vast majority of the population (around 8 out

of 10 individuals) recognise that it is their responsibility to manage their own health and are willing to do so (Figure 1).<sup>1</sup> Citizens recognise the multiple benefits of engaging in self-care, such as improved health outcomes and quality of life, improved disease prevention, better disease management and more independence.<sup>1</sup>

Figure 1

Individuals sense of responsibility to manage their own health



8 OUT OF 10 INDIVIDUALS ACCEPT THAT IT IS THEIR RESPONSIBILITY TO MANAGE THEIR OWN HEALTH AND ARE WILLING TO DO SO

Apart from an eagerness to self-care, research also shows that individuals follow a well-defined path to address health needs (Figure 2), allowing policy makers to use education to increase engagement in self-care.<sup>2</sup> Once an individual identifies the need to address a specific health concern, a deliberate decision-making process is followed, where multiple information sources are considered before making a final decision. Information sources include advice from healthcare professionals, friends and family or past experiences.

Throughout 2019 and 2020, the COVID-19 outbreak has only accentuated the value of self-care and its important role for healthcare systems. With healthcare systems under unprecedented pressure, individuals have been put in the spotlight and given greater responsibility in taking care of their own health. Visiting the doctor or a hospital's Emergency Department (hereafter: ED) for minor self-treatable conditions is not considered a possibility anymore, when focus needs to be on those with serious healthcare needs.

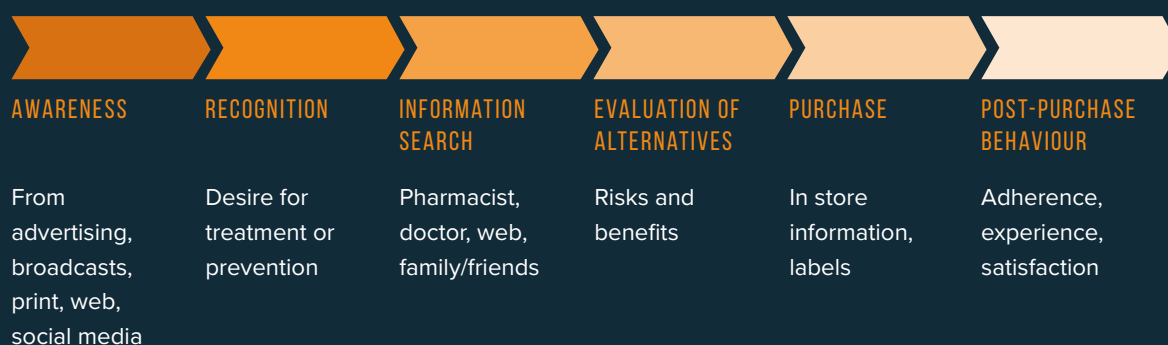
**“During the global COVID-19 pandemic, the role of self-care in supporting the resilience of health systems has become more apparent than ever.”**

AESGP on the Value of self-care

**“In this time of COVID-19, people and policy makers are realising how important self-care is. We see this as an opportunity because now is the time for self-care”**

Interview with representative from Global Self-Care Federation

Figure 2  
The individual's decision-making process



## CHAPTER 2

# BARRIERS

### CURRENT BARRIERS COULD CHALLENGE THE INCREASING IMPORTANCE OF SELF-CARE AMONG CITIZENS IN EUROPE

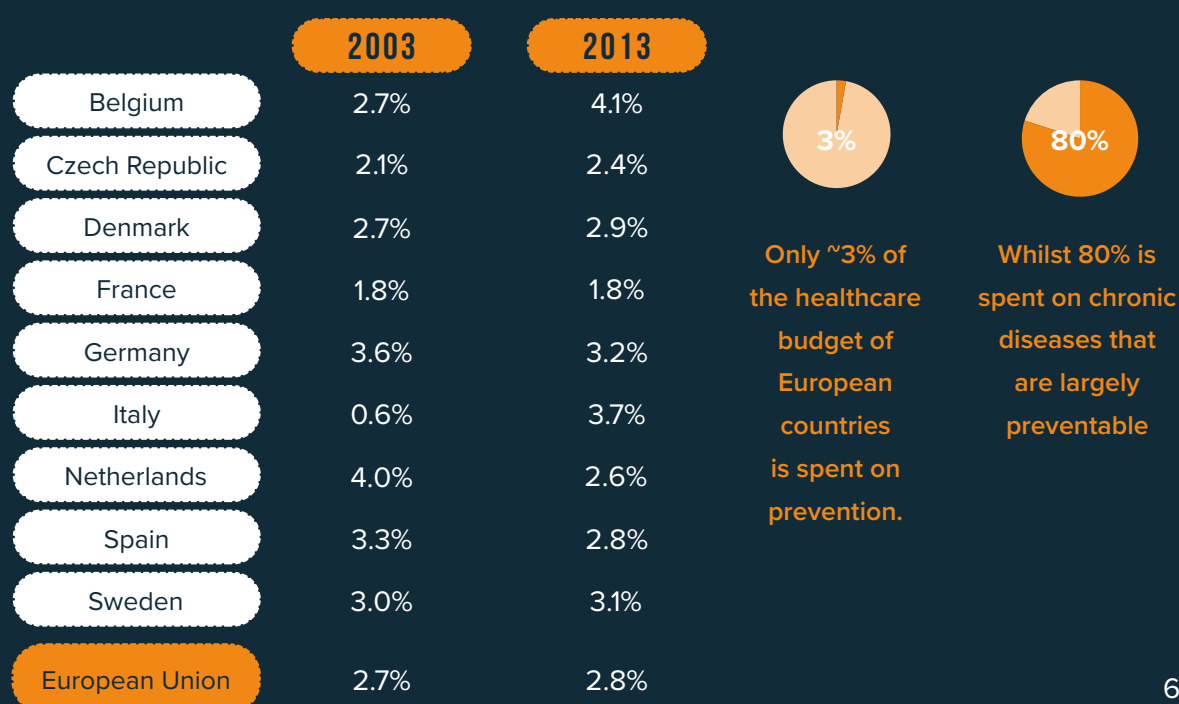
The barriers that limit the position of self-care and the engagement of individuals include a limited focus on prevention, a lack of health literacy, the current structure of healthcare systems and a lack of harmonisation of different healthcare systems across Europe.

#### LIMITED FOCUS ON PREVENTION

European countries currently spend approximately 80% of their total healthcare budget on chronic diseases that can be considered to be largely preventable.<sup>3</sup> These diseases share the same behavioural risk factors, including smoking, alcohol consumption, unhealthy diets and physical inactivity. Despite these risk factors being largely preventable if European citizens would follow a healthier lifestyle, only 3% of the total healthcare budget of European countries is spent on prevention (Figure 3).<sup>3</sup> This is a remarkable paradox, considering the fact that prevention is estimated to produce a high return on investment through improved health outcomes, higher productivity and employability, and reduced costs of treatment<sup>3</sup>. If more focus and emphasis would be put on prevention, it would lead more individuals to self-care for preventative reasons.

Figure 3

Public expenditure on prevention as a % of health expenditure<sup>4</sup>



## HEALTH LITERACY

One of the largest barriers to self-care is the lack of health literacy.<sup>5,6</sup> Even on the European continent, which is considered to be one of the most developed continents in the world, nearly half of the adult population shows limited health literacy.<sup>6</sup> 12.4% of the total population even had the lowest level (Figure 5). The lack of health literacy is also reflected in European citizens' low levels of confidence in managing their own health: a survey revealed that only 2 in 10 European citizens feel very confident to do so (Figure 4).<sup>1</sup>

Figure 4

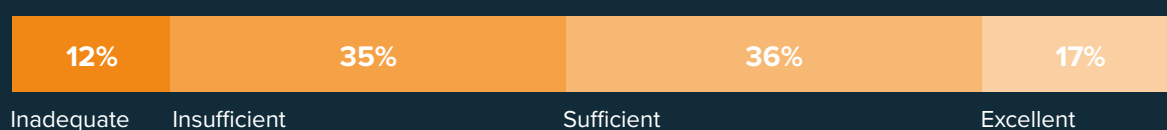
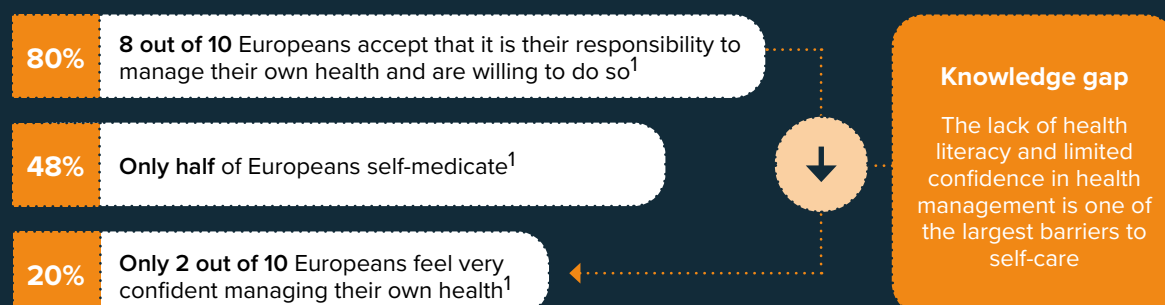
General health Literacy in Europe<sup>6</sup>

Figure 5

Lack of health literacy<sup>1</sup>

## CURRENT STRUCTURE OF NATIONAL HEALTHCARE SYSTEMS

The healthcare systems across Europe are currently set up in such a way that there is often no ownership or guidance on self-care, as it seems to fall between prevention and professional treatment. An important factor to keep in mind is that self-care does not mean the absence of healthcare professional (HCP) involvement and collaboration. For self-care to grow and be a vital part of the healthcare

system, opportunities to interact effectively with HCPs are needed (see also step 3 in Figure 2).<sup>5</sup> Pharmacists are a good example of HCPs that could have a more prominent role in self-care. In many European countries, however, there are still opportunities to involve pharmacists further in patient care. A good example of pharmacists' involvement in care is seen in The Netherlands, where Dutch pharmacists work closely with doctors to advance patient care.<sup>7</sup>

## DISHARMONISED AND INCONSISTENT HEALTHCARE SYSTEMS IN EUROPE REGARDING OVER-THE-COUNTER PRODUCTS

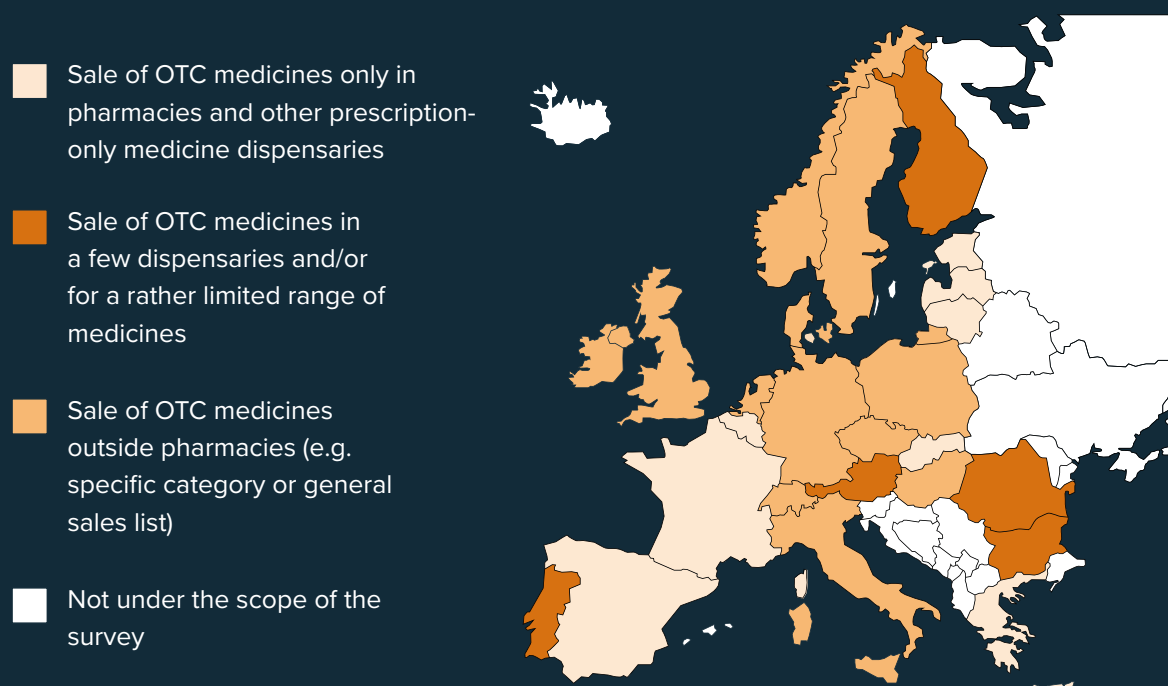
Access to non-prescription or over-the-counter (hereafter: OTC) medicines is an important enabler for self-care, however, national healthcare systems, regulations and customs around OTC products differ greatly within Europe.<sup>8,9</sup> This results in unequal access to OTC products for EU nationals across the different European countries. Differences can be found in relation to indications, treatment population, dose, strength, contraindications and pack sizes.<sup>8,10</sup> Further, there are large differences in distribution channels, advertisement regulation and reimbursement and pricing (see Figure 6).<sup>9-11</sup>

Despite the existence of a centralised procedure for OTC market authorisation in Europe, only a handful of non-prescription medicines have followed this centralised process.<sup>9</sup> It is still more common to follow a national authorisation approach. The differences across Europe can largely be attributed to cultural and political differences.<sup>8,9</sup>

At the end of this report, we present 3 country pages showing some of the differences in the way self-care is positioned in three different European countries: Italy, Germany and the UK. When it comes to self-care there is often a tension between confidence and control. Despite having general directives on a European level, our examples show that there are wide differences between countries.

Figure 6

Sale of OTC medicines outside pharmacies in 28 European countries<sup>9</sup>





## CHAPTER 3

# POSITIVE HEALTH-ECONOMIC OUTCOMES

SELF-CARE CAN BRING POSITIVE HEALTH AND ECONOMIC OUTCOMES AND HELP ALLEVIATE THE PRESSURE ON EUROPEAN HEALTHCARE SYSTEMS

Positive health-economic outcomes include improved outcomes for a range of different conditions (e.g. in self-treatable and chronic conditions but also in reducing serious illnesses) and alleviating the pressure on healthcare systems

### HEALTH BENEFITS

Enabling people to manage their own health and well-being through self-care can bring important health benefits. These benefits can be observed in several ways. Firstly, through improved outcomes in management of self-health. Secondly, when treating minor ailments. Thirdly, benefits can be found in managing chronic conditions. Finally, there are potential benefits in reducing serious illnesses.<sup>12</sup>



**SELF-CARE  
MANAGEMENT**



**TREATMENT OF  
MINOR AILMENTS**



**MANAGEMENT OF  
CHRONIC CONDITIONS**



**REDUCTION OF  
SERIOUS ILLNESSES**



### Self-care management

Several studies have shown that self-care has the potential to improve health outcomes. A clear example of implementing self-care in our daily lives is proper oral health. There is ample evidence showing that good habits such as toothbrushing at least two times per day with toothpaste containing appropriate concentrations of fluoride can reduce the incidence of dental conditions such as caries and periodontal disease.<sup>13-15</sup>



### **Treatment of minor ailments**

Self-care is also important for the treatment of minor ailments. A recent study shows that the occasional use of medicines available over-the-counter for the self-management of pain can lower work impairment and hospitalisations.<sup>12,16</sup>



### **Management of chronic conditions**

Medicines available over-the-counter are also becoming increasingly important for the management of chronic conditions such as osteoarthritis.<sup>17,18</sup> Osteoarthritis is the fastest growing cause of disability worldwide affecting more than 40 million Europeans in 2014 and 303 million people worldwide in 2017.<sup>19,20</sup> Adequate pain management is a cornerstone in the management of this condition.<sup>17-18</sup> Medicines available over-the-counter offer an important support for pain relief.



### **Reduction of serious illnesses**

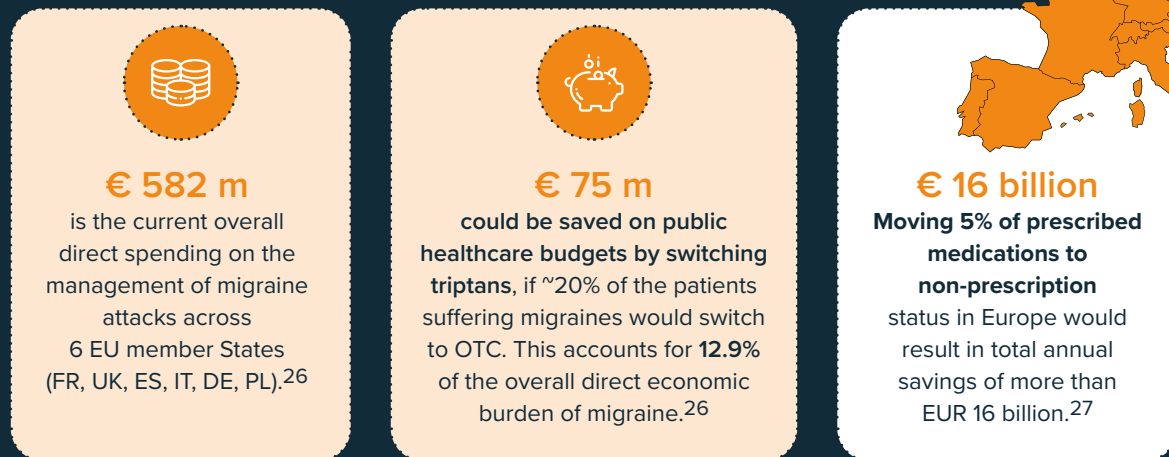
Several studies have shown that self-care has the potential to reduce the occurrence of serious illnesses and life-threatening events. For example, the appropriate use of statins has been associated with a reduced risk of heart disease and stroke.<sup>21,22</sup> Some level of evidence has also emerged for other complementary therapies such as red yeast rice as a potential lipid lowering agent that can potentially reduce the risk of coronary heart disease and stroke.<sup>12, 23-25</sup>

## **ALLEVIATING THE PRESSURE OF HEALTHCARE SYSTEMS**

In addition to improving health outcomes, self-care can help alleviate the increasing pressure of healthcare systems in Europe. One way to reduce the financial burden of European healthcare systems is by switching certain medicines from prescription to non-prescription, as long as it is considered safe and access to all citizens is not compromised. Having medicines available over-the-counter can improve access to effective treatment, increase patient autonomy and reduce costs to third-party payers.<sup>12</sup> Switching medicines from prescription to non-prescription can bring significant cost savings at both healthcare system level and societal level. For healthcare systems, costs savings are related to medicines, GP visits, ED visits and hospitalisations (see also Figures 7 and 8).<sup>26-31</sup> Additional savings for society are, for example, savings related to work absence for individuals and caregivers.<sup>28</sup>

Figure 7

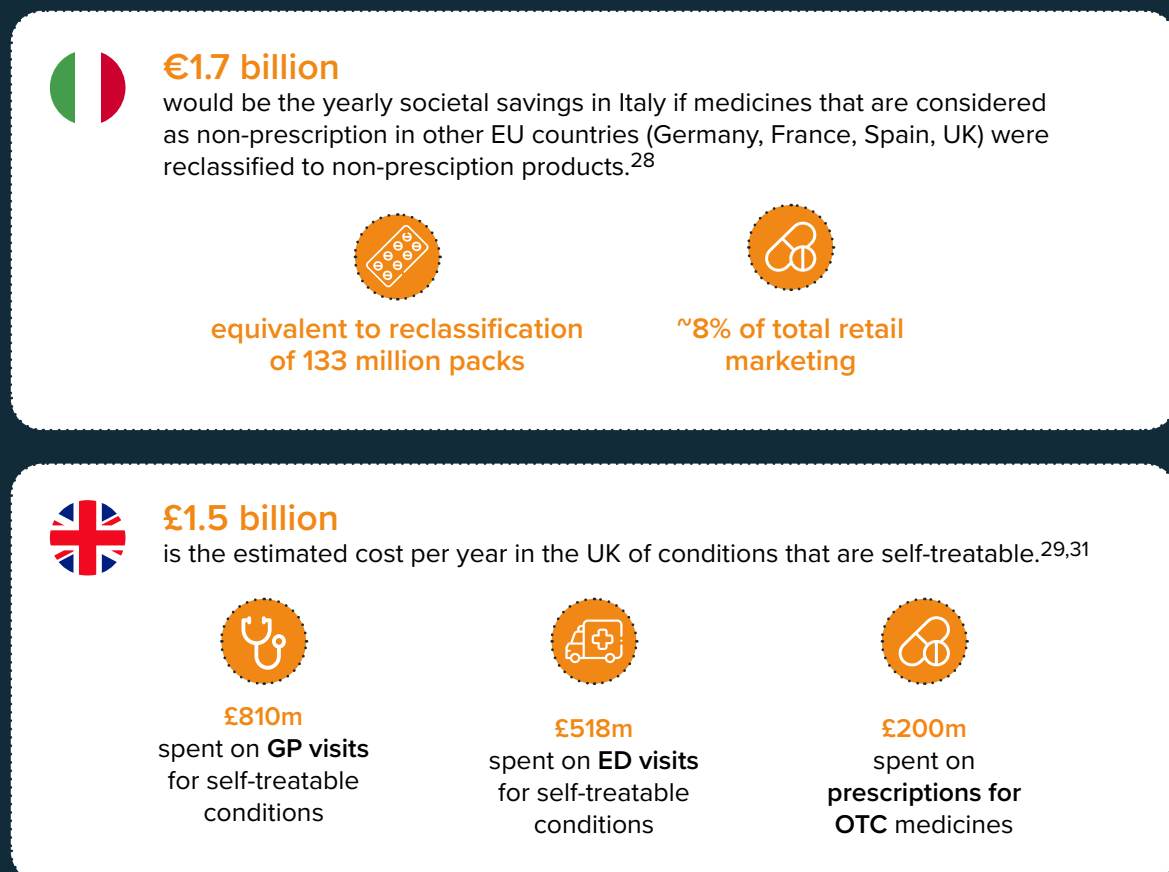
Potential cost-savings from switching medicines to non-prescription status



Besides cost savings, self-care has the potential to contribute to better resource allocation in healthcare systems. In the UK for example, the average waiting time to get an appointment with the general practitioner (GP) is 13 days, whilst 18 million GP visits every year are for conditions that are self-treatable.<sup>29,32</sup>

Figure 8

Potential cost-savings in Italy and the UK<sup>28,29,31</sup>



## CHAPTER 4

# NEGATIVE HEALTH-ECONOMIC OUTCOMES

### WITHOUT PROPER EDUCATION AND THE INVOLVEMENT OF HEALTHCARE PROFESSIONALS, SELF-CARE POTENTIALLY LEADS TO NEGATIVE HEALTH-ECONOMIC OUTCOMES

There are several ways in which self-care could lead to negative health-economic outcomes if not used the right way. These include an inappropriate use of OTC medicines, potential interactions with prescriptions medicines and misuse of antibiotics.

#### INAPPROPRIATE USE OF OTC MEDICATION

Without proper education and guidance, self-care practices can lead to negative health outcomes. One example is the misuse of medicines such as analgesics and sedatives. While these medicines are intended for short-term use, for occasional treatment of minor ailments, it has been reported that some individuals use them repeatedly for extended periods of time and without proper supervision of healthcare professionals.<sup>33</sup> Whilst analgesics are important for the self-management of pain when used occasionally, repeated use of analgesics has been associated with adverse effects such as Medication Overuse Headaches (MOH).<sup>33</sup>

#### INTERACTIONS WITH PRESCRIPTION MEDICINES

With self-care and the number of OTC products increasing, it has become increasingly difficult for HCPs to assess a patient's usage of self-care products. This can result in misdiagnosis and increased risk of harmful interactions between self-care products and prescription medicines, particularly if individuals are not aware of possible consequences. There is a need

for HCPs to be informed about the intake of OTC products and possible interactions with prescription medicines.<sup>34</sup>

#### INAPPROPRIATE USE OF ANTIBIOTICS

High prevalence of self-medication with antibiotics has repeatedly been found in Southern and Eastern European countries that also report high levels of antibiotic resistance.<sup>35</sup> Inappropriate use of antibiotics is often related to illegal dispensation of antibiotics and availability of excess “leftover” antibiotics. This is an example of how inappropriate self-medication can have serious consequences not only for the individual but also for the general health environment.<sup>35,36</sup>

Education and proper guidance are key to enable individuals to self-care in a safe way. As mentioned in chapter 3, health literacy is one of the main barriers to self-care. Guidance from healthcare professionals, such as pharmacists, can also play a key role enabling self-care. Pharmacists can provide proper advice on the use of medicines and can refer to medical care when considered necessary.

### UNEQUAL ACCESS TO OTC PRODUCTS

When creating self-care policies, potential inequalities in terms of access to OTC products need to be avoided when switching from prescription to OTC. Whilst switches can empower individuals to better manage their health, socio-economical aspects should also be considered when making decisions on this. If a switch from prescription to non-prescription removes

a medicine from the reimbursement list, those with low ability to pay for the product might be affected by the decision.<sup>37</sup> This particularly holds if the price of the product as OTC is considerably higher than the prescription charge or if the medicine needs to be taken often. In several European countries the reimbursement of OTC medicines is possible under special circumstances, for example, when used for chronic conditions.<sup>8</sup>

## CHAPTER 5

# THE POTENTIAL OF SELF-CARE

RESEARCH INDICATES THAT SELF-CARE CAN TAKE A GREATER ROLE IN THE HEALTHCARE SYSTEM AND OPTIMISE ITS POSITION

There are several steps to be taken that could increase the role of self-care whilst preventing potential negative health outcomes. These include the positioning of pharmacists, a continued focus on safety and improving education and guidance. Further research would be useful to know if this holds true within all European countries

### PHARMACISTS ARE WELL POSITIONED TO FACILITATE SELF-CARE

There is an opportunity for pharmacists to take on a greater role in health monitoring and self-care management. The combination of location and accessibility means that most individuals have ready access to a pharmacy in Europe, where

health professional advice is available on demand.<sup>38,39</sup> Pharmacies are the most widely distributed healthcare facility in Europe (Figure 9).<sup>38</sup> In addition, pharmacists could play an important role in the transition from prescription to pharmacy-only medication. Their expertise could also be used to bring safe testing closer to the patient's physical environment (point-of-care testing).<sup>40</sup> However, the perception and trust in pharmacists varies across European countries.<sup>41-43</sup> Educating citizens on the expertise and skills of pharmacists could result in a closer connection between pharmacists and citizens in terms of self-care management and monitoring.

Figure 9

Pharmacies are the most widely distributed healthcare facility in Europe<sup>38,39</sup>



There are  
**160.000**  
community  
pharmacies in the  
EU



**58%**  
of citizens have  
a community  
pharmacy within  
5 minutes



**46 million**  
people visit  
the community  
pharmacy  
network in Europe  
every day

## SAFETY AT THE CORE – CONTINUED FOCUS ON SAFETY

Both prescription and non-prescription medicines follow the same regulatory framework for market authorisation, which ensures that citizens in Europe have access to safe and effective products of high quality (Figure 8).<sup>8,44</sup> Robust evidence is required to demonstrate that a medicine can be used safely and appropriately without medical supervision before it can be classified as non-prescription. Medicines need to demonstrate an acceptable safety profile and should be easy to use correctly. In addition, they need to be for a condition that can be self-diagnosed by the individual.<sup>8,41,44</sup> Safety is the key factor when (re)classifying a medicine as non-prescription.

Figure 10



## IMPROVING EDUCATION AND GUIDANCE/INVOLVEMENT OF HCPS

Whilst educating individuals is important for a proper engagement on self-care, educating doctors is equally as important. However, in Europe the training that many doctors and nurses receive around self-care is variable.<sup>5</sup> Clear guidelines and education are important to guide them on how to support patient's engagement in self-care and to create awareness on the role of self-care in healthcare systems and potential interactions of self-care products with prescription medicines.

A good example of this is the Greater Manchester self-care training, where over 200 healthcare professionals have completed self-care training in North Manchester since 2013. Of the participants, 93% reported increased confidence in enabling self-care as a result of the training.<sup>29</sup>

Another example of guidance to GPs, is the use of the green prescription form or “Grüne Rezept” in Germany.<sup>29</sup> The green prescription form was introduced after non-prescription

**GRÜNE REZEPT**

in 2004, Germany introduced a green prescription form (next to the traditional pink form), meant to be used by doctors for the recommendation of over-the-counter medicines. Sometimes the form is also used to prescribe behavioural changes.

medicines were removed from the German statutory reimbursement scheme. To facilitate the change, doctors were provided with a green prescription form, where non-prescription medicines can be prescribed to patients, who then purchase them directly. With this form, doctors still have a tool to prescribe medicines to patients. The same is also possible for preventative purposes, such as exercise referral schemes.

### DIGITAL TECHNOLOGIES WILL BECOME AN INCREASINGLY IMPORTANT SELF-CARE ENABLER

In recent years, we have seen the fast growth of digital technologies. In 2017, there were 325,000 health applications (hereafter: apps) available worldwide, with 78,000 new apps added in 2017 alone.<sup>45</sup> With these apps, individuals can actively monitor their own health. There is an increase in evidence that health apps could have a positive impact on diet monitoring, physical activity or medication adherence.<sup>46</sup> Another potential area for digital technologies is education. Web portals and apps with clear and accurate information can help individuals feel more confident about self-managing minor ailments. Additionally, interactive solutions such as gamification can help individuals gain more knowledge on self-care and improve health literacy.

### EXAMPLES

In countries like Belgium and France, different initiatives have been launched to involve pharmacists more proactively in self-care.<sup>47</sup>



#### IN FRANCE

the “Dossier Pharmaceutique” is a medical record (for prescription and OTC) that is managed and can be assessed by community pharmacists to help prevent drug-drug interactions, medicine abuse, improve adherence, etc.<sup>47</sup>



#### IN BELGIUM

the Association of Pharmacists make use of a webservice integrated into the dispensing software that alerts when a medication is subject to additional monitoring.<sup>47</sup>



# CONCLUSIONS

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There is great potential for self-care to take a more important role in our healthcare systems in Europe. Self-care can improve health outcomes and empower individuals to take an active role in the management of their own health. Additionally, it can help self-care alleviate the increasing pressure on our healthcare systems, both reducing financial burden and improving the utilisation of healthcare resources. An example of improved resource utilisation is the involvement of the pharmacist as an enabler of self-care. Pharmacists are well-positioned to provide advice and support the management of minor ailments through self-care.

Whilst self-care can play an important role in the sustainability of future-proof healthcare systems, it needs to be done right. One key aspect is equal access. Self-care policies should take into

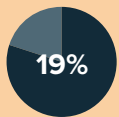
consideration socio-economical aspects to avoid unequal access to self-care products. Education is another important aspect for proper use of self-care. There is room for improvement in health literacy in Europe, which has been identified as one of the major barriers to self-care. Digital technologies could help improve access to accurate information and can engage individuals in understanding their own health in a better way. Education for healthcare professionals is also important. With the right education and guidance, healthcare professionals can feel more confident helping individuals engage in self-care.

This year, COVID-19 has accentuated the value of self-care and its important role for healthcare systems. With the built-up momentum, this is a good time to further support the role of self-care.



# GERMANY

## THE POSITION OF SELF-CARE IN GERMANY<sup>10, 41, 50</sup>



VAT for OTC medication

Reimbursement of OTC medicines is **only in special circumstances**



**€6727M**

Total sales of OTC products per year 2017



**134**

Number of ingredients OTC



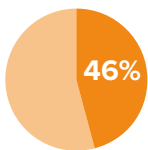
**€60 PER YEAR**

Expenditure per capita on OTC



Germany is the largest market in Europe for non-prescription medicine with a long tradition of reclassification

Self-medication is considered a central pillar of the current and future healthcare



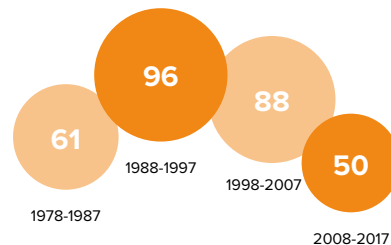
46% of German adults use non-prescription medicine in a week



>50% of all packages dispensed in pharmacies are OTC medicine

Germany is one of the frontrunners for switches, however a decline has been observed in the last few years.

Switches in Germany 1978 - 2017





# ITALY

## THE POSITION OF SELF-CARE IN ITALY<sup>28, 53, 54</sup>



VAT for OTC medication

Reimbursement of OTC medicines is **not possible**



**€3020M**

Total sales of OTC products per year 2017



**118**

Number of ingredients OTC



**€30.6 PER YEAR**

Expenditure per capita on OTC

**The average expenditure per capita in Italy is below the European average of €48 per year.**



A recent survey showed that only **1 in 3 Italians** took non-prescription medicine during the previous months.

In the past few years, the Italian non-prescription market has gone through a series of changes that increase access to OTC and awareness:

- From mono-channel to multi-channel
- Increased number of pharmacies
- Freedom to advertise all non-prescription medicines

Multiple campaigns are currently used to increase awareness on self-care:



Sticker on non-prescription products to generate awareness



School educational campaigns for kids >8y and their families



Social media platform dedicated to health information



# UK

## THE POSITION OF SELF-CARE IN THE UK<sup>29, 51, 52</sup>



VAT for OTC medication

Reimbursement of OTC medicines is **only in special circumstances**



**€2411M**

Total sales of OTC products per year 2017



**146**

Number of ingredients OTC



**€46.6 PER YEAR**

Expenditure per capita on OTC

The UK has long encouraged self-care. Self-care is seen as an important way to reduce pressure on the NHS.

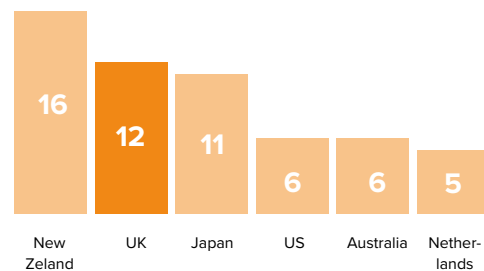
With a long tradition of switching medicines from prescription to OTC.



The UK is one of the countries with a relatively larger number of ingredients available OTC in Europe.

The UK is one of the first countries to have statins and triptans available OTC. The UK is internationally recognized as a progressive country in terms of switches.

Progressive medicine switches 2003-2013



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