



Table of Contents

Executive Summary.....	1
Introduction.....	5
Community pharmacists' challenges.....	7
Investment in education.....	7
Investment in retention and employment initiatives.....	8
Investment in career development.....	9
Mobilizing resources and retaining talent.....	10
Policy Recommendations.....	11
Annex: National experiences from PGEU members.....	13
References.....	14

Executive Summary

Community pharmacists play a key role in primary care and are the most easily accessible among all healthcare professionals. However, similar to recent developments in other healthcare fields, **the shortage of community pharmacists has become a pressing concern** with a potentially significant impact on public health, patient care, and the overall viability of healthcare systems.

The **increasing demand for pharmacy services** and for the **development of future and more advanced clinical roles**, fuelled by an **ageing population**, escalating rates of **chronic diseases**, **insufficient professionals** and **shifting healthcare requirements**, has resulted in a notable disparity between the **supply** and **retention** of qualified pharmacy professionals and the **rising need** for their expertise.

With this position paper, PGEU seeks to **raise awareness** on the **seriousness of the situation** and calls for **immediate action** to be taken by policymakers and relevant stakeholders to address this critical issue and **ensure that patients continue to benefit from the high standard of pharmacy services they currently have also in the future.**

To achieve that, PGEU highlights specific points that heavily influence this problem, and need to be considered:

- 1. Demographic shifts** as a consequence of an ageing population, coupled with a rise in chronic conditions, more complex medication regimes and more polypharmacy due to the rise in patients with multi comorbidities, have increased the demand for health services including pharmacy services, placing significant strain on existing resources and structures.
- 2. A worn-out workforce** due to retirement, burnout, career diversification and dissatisfaction with the profession, impacted and powered by the COVID-19 pandemic, which contributed to a diminishing pool of experienced community pharmacists as well as a decrease in interest in the field by students. Many countries in Europe have reported difficulties in recruiting frontline personnel, which includes pharmacists working in primary care and other pharmacy staff.
- 3. A limited educational capacity**, despite growing demand, educational institutions face constraints in expanding pharmacy programs to produce an adequate supply of graduates prepared for the reality and challenges of the profession, and struggle to keep up with the most recent trends and scientific, pedagogical and technological developments in the field.
- 4.** As the scope of practice for pharmacists continues to broaden, it requires an agile, adaptable workforce equipped with specialised skills and competencies. This underscores the importance of **investing in the education of pharmacists and the continuous education of professionals.** The provision of adequate resources and support structures for continuous professional development must facilitate the highest quality of practice, in particular digital tools that facilitate pharmacists in their daily practice to spend more time dedicated to patient care activities.
- 5.** Nevertheless, despite the evolving roles and responsibilities of community pharmacists, there remains a **shortage of both financial and personnel resources** to enable these healthcare professionals to effectively carry out new tasks. This shortfall could further intensify the shortage of pharmacists capable of performing essential and increasingly valued activities such as pharmacy services (namely medicine use reviews and other advanced medicine counselling

services, vaccination, extended prescription for chronic medications, compounding, generic or therapeutic substitution, point of care testing, medicine optimisation, and other vital advanced pharmacy services), including being an accessible gateway to the healthcare system.

- 6. A lack of governmental policies around pharmaceutical care** and the **utilisation of pharmacists' unique skill sets**, which encompasses lack of vision and strategy, leading to professional dissatisfaction and retention issues.
- 7. Remuneration models for pharmaceutical care are often complex and misunderstood.** The core role of community pharmacists is to ensure the safe supply of medicines and associated patient counselling on medication use. However, too often this core role is seen as supply activity solely, and therefore the holistic care provided is not reflected in remuneration models. With the increasing complexity of medicines and with more patients on complex medication regimens, this core role has become increasingly important. However, across most European countries, the remuneration model remains largely unchanged and is not reflective of the universal care provided by community pharmacists.



Having these key points in mind PGEU urges for:

- 1. Prioritizing intercollaborative efforts** among healthcare entities, educational institutions, associations representing healthcare students and professional associations to attract a larger pool of candidates to pursue careers in community pharmacy. It is fundamental to emphasize the need to showcase the profession next to the students and cooperate with the universities to close the gap between practice and theory as well as invest in our future professionals' education. It is necessary to stimulate sooner amongst students interprofessional education frameworks, involving associations representing healthcare students that can play a vital role on this process.
- 2. Guaranteeing that a pharmaceutical skill set is in place at a policy level**, by ensuring that within the national health services, a senior pharmacist is in place, when appropriate to the national context, to provide strategic leadership, evidence-based analysis and expert advice to the Government, broader health system, and regulatory and professional bodies, helping to shape policy and optimise the contribution of the pharmacy sector in the health service and ultimately lead to better patient outcomes.
- 3. Developing a national strategy and implementation plan for the pharmacy sector** that clearly articulates a vision and role for pharmacy within the future integrated healthcare system. There is an urgent need for strategic workforce planning for pharmacists at a national level, aligned with a national pharmaceutical strategy.
- 4. Adopting technological solutions** to automate, digitalise and alleviate certain tasks that pharmacists face, thus reducing the administrative burden and time spent in such administrative duties, freeing time for patient counselling. The core role of community pharmacists involves prescription reviews, screening for therapy problems, and patient counselling, among other responsibilities that ensure safe, effective, and legally compliant supply and dispensing of medicines. Adaptation of digital technologies can improve some tasks being manually undertaken and should be deployed, but without losing patient interactions, which is core to quality healthcare.
- 5. Investments by Governments to match the workforce planning to allow for an expanded scope of practice**, as it is not sustainable to continue expanding the work with less resources, if a high quality of care is to be maintained. To keep a high level of improved patient outcomes, pharmacists require additional resources across all practice areas to face ageing population, increasing complexity of medicine regimens and medicine shortages.
- 6. Increasing educational resources** through investing in expanding pharmacy education programs and leveraging innovative teaching methods to meet the escalating demand for skilled pharmacists effectively. It is fundamental to regularly adapt the curricula in order to integrate the changing roles of the profession to match the evolution of community pharmacy roles over time, as well as an intercollaborative approach with other healthcare professionals so to create a better-coordinated response to care for the patient. Furthermore, pharmacy

education places and curricula should not be static, and should move to match the needs of the profession, population and healthcare system.

- 7. Effective use of skills-mix strategies**, together with promoting interprofessional communication and, where appropriate, decision making.
- 8. Supporting the continuing professional development** and education to improve individual and team performance of community pharmacists and keep up with the emerging new practices in the field so as to provide the most efficient and higher quality of care to the patients.
- 9. Retention and employment strategies** to support the well-being and career advancement of community pharmacists, effectively diminishing burnout, elevating retention rates, and mitigating dissatisfaction within the profession. Moreover, enhancing the encouragement of the field could be achieved through reducing bureaucracy, alleviation of medicine shortages, establishing transparent career progression pathways, manageable workloads, and, where applicable, enhancing salaries and benefits to retain a greater pool of talent within the profession, offering working conditions that are compatible with a better work-life balance. In some European countries it is crucial to address the recurrent migration of the national talents to other countries, so as not to lose the return on the investment allocated into training and educating skilled professionals.
- 10. Recognising the indispensable role of community pharmacists** in healthcare and promoting initiatives designed to address workforce shortages and the overall investment in the community pharmacy sector. This is essential for meeting the current needs of the population, and of community pharmacists and ensuring long-term sustainability in the profession and that the best care can be provided to European citizens.

Addressing the shortage of community pharmacists demands urgent action and unified commitment from all healthcare stakeholders. Through the implementation of focused initiatives aimed at attracting, retaining, and empowering the community pharmacy workforce, we can safeguard the current access to high-quality pharmacy services and effectively adapt to the changing healthcare landscape.

PGEU believes that collaboration, innovation and active advocacy work in this matter will serve as pivotal drivers in tackling this critical challenge and fostering a resilient future for community pharmacy practice and better patient care.

Introduction

In recent years, Europe's healthcare landscape has undergone a significant transformation, catalysed by factors such as the COVID-19 pandemic, demographic shifts, technological advancements, and evolving healthcare needs of the population. As a result of these new challenges, **the contribution of community pharmacists to the sustainability of healthcare systems has been highlighted**, providing **essential services** and acting as **frontline healthcare providers** at the heart of communities. However, parallel to what has been witnessed with other classes of healthcare workers, **the shortage of community pharmacists has become a pressing concern across Europe**, with significant implications for public health, patient care, and the long-term sustainability of healthcare systems.

According to data from the World Health Organization (WHO), there is a **projected shortfall of 10 million health workers globally by 2030**, particularly pronounced in low- and lower-middle-income countries but also evident across Europe. Countries across all socioeconomic levels seek to tackle challenges related to the education, employment, retention, and performance of the healthcare workforce. WHO has highlighted through reports concerning indicators such as adverse working conditions, mental health issues, burnout, and overwhelming workload pressures that highly contribute to the dissatisfaction of the professionals and that ultimately lead them to leave the field altogether.

In Europe, the situation has been further elucidated in literature and healthcare workers in several European countries organizing protests to highlight difficult working conditions and insufficient resources, among

other complaints. In addition to the persistent staffing shortages, Europe faces challenges in adequately replacing retiring healthcare workers. Furthermore, the evolving role of pharmacists, which includes expanded responsibilities in some countries such as advanced medication therapy management, vaccination, point of care testing, screening for certain infectious diseases and their management, requires further training, specialized skills and competencies, that also has represented a burden when enough resources are not available to perform these tasks. As **countries expand the role of pharmacists in providing new services and widen their scope of practice, effective workforce planning must be considered**, in order not to overstretch the current limited resources. The shortage of community pharmacists in Europe is starting to reach concerning levels, with data from various sources highlighting the severity of this issue, whilst also affecting other pharmacy staff.

According to the WHO Framework for action on the health and care workforce in the WHO European Region 2023-2030, to retain health and care workers, especially in rural and underserved areas, urgent action is required. Furthermore, protecting healthcare workers' **mental and physical health and well-being**; enhancing their **recruitment**; optimizing their **performance**; and ensuring that there is a **supply** of health and care workers to meet future needs, is crucial to **maintain the efficacy and quality of care** that the healthcare system can provide.

Even though the EU statistics indicate an overall increase in the number of pharmacy graduates from 2010 to 2020, Europe stays behind the average with only a 3% growth compared to the 20% growth in other areas of

the globe. It is clear that the COVID-19 pandemic has exposed vulnerabilities in healthcare systems, particularly regarding human resources. **Many countries in Europe have reported difficulties in recruiting frontline personnel, which includes pharmacists working in primary care.** The repercussions of pharmacy workforce shortages on healthcare provision in Europe would be critical, given that **patients often rely on community pharmacists for timely access to medications, counselling on proper medication use, and management of chronic conditions.** As the healthcare professional most accessible to the population, and often the last one that patients have contact with before taking their medication, they are crucial to support patients in their health journey. Furthermore, **a triage role for the whole healthcare system is played by community pharmacists,** that are able to provide immediate care in limited circumstances (e.g. minor ailments) or refer to other levels of care, making use of their clinical skills. Pharmacists are an accessible gateway to the primary healthcare services. Therefore, **the shortage of pharmacists compromises the ability of pharmacies to meet patient needs effectively,** leading to longer waiting times, reduced access to services and increased pressure and dissatisfaction on the remaining pharmacy staff.

In light of these challenges, PGEU focuses on identifying effective policies and planning responses to address the shortfall of the community pharmacists' workforce across Europe as the matter has also gathered political attention. From putting the topic amongst the priorities of the Presidency of the Council of the European Union, to the recognition by the European Commission of this problem and proposal of initiatives, the issue of healthcare workforce shortages has been increasingly present in the international discussions. Nonetheless, there is a clear need to make more visible the shortage of pharmacists, as currently some European countries are already experiencing recruitment difficulties, in a trend that is expected to grow over time and expand.

This position paper aims at exploring in depth the root causes of the problem, proposes points of reflection and potential solutions to mitigate this crisis and shares some of PGEU members' experiences. Targeted interventions, policy reforms and collaborative efforts among stakeholders can ensure the sustained availability of high-quality pharmacy services and meet the evolving healthcare needs of European patients. Through collective action and innovative approaches, a resilient and sustainable future for community pharmacy practice in Europe can be built, as well as ensuring a more efficient healthcare system.



Community pharmacists' challenges

The COVID-19 Pandemic highlighted the shortcomings of the healthcare systems and pushed for the development of coordinated actions from all member states of the European Union to tackle that crisis including the raising investment on the healthcare sector. One fundamental point that should be highlighted is the increased investment in healthcare during that period. This investment increase addressed the chronic underfunding of this sector over the years - which had taken a toll on the healthcare capacity to answer to this type of emergency - and a substantial effort was needed from all member states to scale up investment and improve the services available to the communities.

At the current point, **there is a need to strategically invest in healthcare, including community pharmacy**, so that pharmacists and pharmacies are prepared and equipped with the resources and personnel to answer future crises, to deal appropriately with aging population and increased chronic disease burden, and other challenges of the primary healthcare system. The future investment should be tailored to the population's needs and the healthcare workers' demands to deliver quality and effective care.

Investment in education

A **greater investment in education is needed** to increase the number of pharmacy graduates to meet the population's health needs without straining the existing community pharmacy workforce. This can be achieved through **increasing the number of student places**. Furthermore, **pharmacy education places and curricula should not be static**, and they should move to **match the needs of the profession, population and healthcare system**.

However, some issues need to be addressed so as to provide a skilled and capable workforce. First, **there is a need to tackle the current skill mismatch caused by the insufficient alignment between basic education and continuous or lifelong education** which ultimately makes it harder to meet the evolving population's needs. It is fundamental to **implement a core curricula that is focused on patient care and in the development of clinical skills that are a foundation for the primary care work of community pharmacists as healthcare professionals**. This point is critical

to encouraging future pharmacists to pursue a career in community pharmacy as there will be the prospect of continuous education and development in this field. It would also be pivotal to improve the academic capacity of the institutions, and the intercollaborative training, building on the education proximity with other healthcare providers. **Leveraging interprofessional education** will aim to provide a better coordinated response from the healthcare system in the future, fostering skills-mix and coordinated practice.

More importantly, it is necessary **to reform and innovate the pharmaceutical curricula**, providing competency-based learning tools, introducing innovative and new practices in the field, which encompasses digitalization and training opportunities that create a purposeful education and training pathway. To achieve this, the development of standards and guidelines at European and member state levels could be a potential point to actively advocate for curricula adaptation and development.

In some countries, the recurrent migration of their national talent to other countries after graduation (brain drain) has become a concern and it is currently transforming into a trend among many European countries. Therefore, so as not to lose the return on the investment allocated into training and educating skilled professionals, **investment should be also allocated into making the profession more attractive and engaging in the long term.**

Investment in retention and employment initiatives

Retention and employment strategies must be implemented to support the career advancement and well-being of community pharmacists. Nonetheless, it is important to **clarify** the distinction that exists amongst countries between **problems of retention of pharmacists** rather than a **supply** issue.

Even though there is a clear need to endorse the current workforce with more resources, institutions should not ignore the needs of the existing workforce. Therefore, the current employment conditions need to be addressed and better working conditions provided to mitigate the reported lack of mental health support, burnout, and overwhelming workload pressures (e.g. the increasing amount of medicine shortages), that highly contribute to the dissatisfaction of the professionals. Reducing bureaucracy and non-pharmaceutical tasks as well as tackling medicine shortages is essential to alleviate the workload in community pharmacies. **Appropriate remuneration of the existing workforce**, together with **career prospections** and **professional development** plans are some of the best investments that can be made to solidify the pharmacy workforce.

Additionally, **recognition of the career and the value of community pharmacists** through the attribution of benefits and salary raises should also be considered when justified. A system of **career progression** for the profession should be implemented so it keeps the **workforce motivated** to invest in their career within the community pharmacy field as well as retain recent graduates who see the potential of a career in community pharmacy. When correctly applied, these incentives are fundamental to create new jobs and improve



retainment, particularly in **rural areas**, thus supporting the allocation and work conditions of pharmacists in these areas and improving the services provided to the population. Finally, developing **new working models** to better meet the demands of different generations of professionals is desirable, prioritizing a better **work-life balance**.

Countries need to strengthen intersectoral governance mechanisms in order to properly coordinate the funding, development, mobilization and retention of an effective healthcare workforce, including community pharmacists. Additionally, intersectoral collaboration and investment in relationships among key elements of the sector could be crucial to building more effective funding strategies, that answer better to the demands of patients and professionals.

Investment in career development

Coupled with the protection of the existing workforce, it is essential to also **support professional career development** based on the patients' needs and foreseeing an integrated health service with clear and identifiable elements of collaboration among healthcare providers.

As the scope of practice for pharmacists continues to broaden, it requires a workforce equipped with specialised skills and competencies. This underscores, as previously mentioned, the **importance of investing and expanding education capacities** and **regularly reviewing the pharmaceutical curricula**. This encompasses the need for **national workforce planning** and a **governmental strategy** or **policy for the pharmacy sector**.

There is also a critical need to **keep investing in ongoing education for professionals** and the provision of **adequate resources** and support structures to facilitate the highest quality of practice. These entails, in particular, **digital tools that allow pharmacists to better perform their duties in their daily practice**.

Ultimately, continuing professional development can be used to improve individual and team performance and keep community pharmacists updated on emerging practices such as medicine use reviews and other advanced medicine counselling services, vaccination, extended prescription for chronic medications, compounding, generic and therapeutic substitution, point of care testing, medicines optimisation, screening and referral, and other advanced pharmacy services.



Mobilizing resources and retaining talent

Policymakers should have an active role in securing and mobilizing enough resources, retaining talent as well as motivating pharmacists and other healthcare workers to better perform and be aware of the developments that can be made to improve their practice.

International organizations and governments should work together to increase the available funding from external and domestic sources to develop the pharmacists' workforce. Ultimately, it is key to advocate for optimized funds and/or funding strategies through innovative approaches and policies within the health sector, to achieve all the changes and investments needed in education, retention of the current workforce, and career development. **Effective engagement among all stakeholders is crucial** to prioritizing the areas that need to be addressed first and

formulating strategies for investment in mid- and long-term.

Policymakers must promote initiatives to address workforce shortages and ensure long-term sustainability in the pharmacy profession. Transparency, data collection, analysis and consequent planning are essential to produce solutions to address this matter and prepare the workforce of the future.

Furthermore, European and national stakeholders, policymakers and lawmakers should **maintain the workforce shortages topic high in the political agenda**, thus averting a future crisis.

Finally, governments, supported by pharmacists' organisations, should promote the development and implementation of **designated plans for pharmaceutical care, to facilitate better workforce planning** across both primary and secondary levels of care.



Policy Recommendations

PGEU recognizes the urgency of the community pharmacists' workforce shortage and retention in some European countries and calls for:

Prioritizing collaborative efforts

Institutions must prioritize intercollaborative efforts among relevant stakeholders, educational institutions and professional associations to **attract a larger pool of candidates to pursue careers in community pharmacy** and to ensure that there are **progressions within these careers** and collaboration among healthcare providers.

Implementing retention and employment strategies

To support the well-being and career advancement of community pharmacists, **retention and employment strategies** must be enacted. This includes **establishing transparent career progression pathways, reducing bureaucracy and non-pharmaceutical tasks, tackling medicine shortages, ensuring manageable workloads, and enhancing salaries and benefits to retain talent** within the profession. By prioritizing pharmacist well-being, burnout can be mitigated, retention rates are elevated, and a sustainable workforce is ensured.

Early adoption of technological solutions

Successful integration of technological solutions on the daily practice of community pharmacy is fundamental to automate, digitalize and alleviate certain administrative tasks that pharmacists face. The use of **Artificial predictive models** and **tailored softwares** are examples of tools that are **useful** and **helpful** to

decrease the administrative burden for healthcare professionals. The successful utilization of robotics for receiving and storing medicines in community pharmacies has been proved to make consultations with patients more efficient, diminishing medication errors and overall making a more efficient pharmacy practice. Technological solutions can be beneficial in **reducing bureaucracy in pharmacy and addressing medicine shortages**, areas with a significant impact on pharmacy workload.

Effective use of skills-mix strategies

All healthcare professionals should be provided conditions to work to their full scope of practice, utilizing their skills to the full extent. As countries struggle with issues in relation to healthcare workforce, policies should ensure that all healthcare professionals are allowed and facilitated to practice to their full scope, evolving from traditional models of care that need to be disrupted.

Expanding the role of pharmacists has been shown during the COVID-19 pandemic, namely through the contribution to COVID-19 testing and vaccination campaigns, prescription renewals, and other pandemic responses. However temporary actions, countries should assess whether these strategies should become a more permanent feature of their health service delivery models, contributing to a more resilient and flexible workforce in the future. The experience reveals that when these services were integrated with other healthcare

professionals, it contributed to the resilience of the healthcare system.

Expanding educational resources and showcasing the pharmacy career

Investing in expanding pharmacy education programs and leveraging innovative teaching methods are crucial steps in meeting the escalating demand for cutting-edge pharmacists. Furthermore, regularly reviewing the curricula to integrate the evolving roles of the profession is essential to ensure that pharmacists are equipped with the necessary skills to meet the changing healthcare landscape. Bridging the gap between theory and practical training will ensure that academia responds quickly, adapting curricula to the pharmacy practice, thus better equipping pharmacists to today's challenges.

By actively showcasing the profession to students, building a bridge between theory and practice through university cooperation, the early interest in community pharmacy careers can be cultivated, thus addressing workforce shortages at their roots.

Preparing the workforce transition and transformation

Building up a resilient pharmacy workforce involves pharmacists engaging in continuous education, namely in the digital and green transition. Supporting pharmacists' continuous professional development and continuous education, through investment in training and integration of those skills in practice, is crucial for the sustainability of pharmacies as healthcare units. Pharmacists play a key role in the triage and management of the population's needs that do not require a medical consultation, thus relieving congestion in emergency departments and

doctors' surgeries, in inter-professional collaboration and in personalised medicine.

Recognizing the key role of community pharmacists in healthcare

Recognizing the indispensable role of community pharmacists in healthcare provision, including through appropriate remuneration of pharmacy services. Policymakers must promote initiatives to address workforce shortages and ensure long-term sustainability in the community pharmacy profession. Stakeholders must advocate for supportive policies, that can create an enabling environment for community pharmacy practice while addressing the needs of pharmacists and patients alike. Addressing the shortfall of community pharmacists requires action and unified commitment from all healthcare stakeholders. Through focused initiatives aimed at attracting, retaining, empowering and valuing the community pharmacy workforce, it would be possible to secure ongoing access to higher-quality pharmacy services and effectively adapt to the changing healthcare landscape.

Collaboration and solidarity at European and national levels can contribute to building a stronger and more sustainable community pharmacy sector, that meets the needs of patients.

Annex: National experiences from PGEU members



Belgium: How to make the pharmacist's profession more attractive

[Click Here](#)



Estonia: Navigating through a shortage of pharmacists

[Click Here](#)



France: A Roadmap to anticipate demographic trends

[Click Here](#)



Germany: A campaign for young people

[Click Here](#)



Ireland: Strategic Workforce Planning as a basis to counteract shortages of professionals

[Click Here](#)



Italy: New pharmacy services driving the need for more pharmacists

[Click Here](#)



The Netherlands: Engagement with stakeholders and deriving evidence from practice

[Click Here](#)



Portugal: Retaining, attracting, and developing professionals in community pharmacy

[Click Here](#)



Spain: Exploring ways to make the profession more visible

[Click Here](#)



Switzerland: Actions to develop the role of pharmacists in primary care

[Click Here](#)

References

Health and care workforce in Europe: time to act. Copenhagen: WHO Regional Office for Europe; 2022.

Moving from health workforce crisis to health workforce success: the time to act is now. Azzopardi-Muscat, Natasha et al. *The Lancet Regional Health – Europe*, Volume 35, 100765

Downey E, Fokeladeh HS, Catton H. What the COVID-19 pandemic has exposed: the findings of five global health workforce professions. Geneva: World Health Organization; 2023 (Human Resources for Health Observer Series No. 28).

McPake B, Dayal P, Zimmermann J, Williams G. What steps can improve and promote investment in the health and care workforce? Enhancing efficiency of spending and rethinking domestic and international financing, World Health Organization. Regional Office for Europe.

Caffrey M, Tancred T, Falkenbach M, Raven J. What can intersectoral governance do to strengthen the health and care workforce?: Structures and mechanisms to improve the education, employment and retention of health and care workers, World Health Organization. Regional Office for Europe.

Ziemann M, Chen C, Forman R, Sagan A, Pittman P. Global Health Workforce responses to address the COVID-19 pandemic: What policies and practices to recruit, retain, reskill, and support health workers during the COVID-19 pandemic should inform future workforce development?, World Health Organization. Regional Office for Europe.

Matthias W, Goffin T. Tackling the health workforce crisis: towards a European health workforce strategy. *A Europe that cares, prepares, protects - Eurohealth — Vol.29 | No.3 | 2023*

Claudia B. Maier, Skill-mix innovation, effectiveness and implementation : improving primary and chronic care. European observatory on health systems and policies

OECD (2023), *Ready for the Next Crisis? Investing in Health System Resilience*, OECD Health Policy Studies, OECD Publishing, Paris,

Muscat, Natasha Azzopardi et al. Embracing pharmacists' roles in health-care delivery, *The Lancet Regional Health – Europe*, Volume 0, Issue 0, 101088

About Us

The Pharmaceutical Group of the European Union (PGEU) is the association representing community pharmacists in 33 European countries. In Europe over 400.000 community pharmacists provide services throughout a network of more than 160.000 pharmacies, to an estimated 46 million European citizens daily.



PGEU

*European Community
Pharmacists*

Rue du Luxembourg 19, 1000 Brussels, Belgium

T: +32 (0)2 238 08 18

Email: pharmacy@pgeu.eu

www.pgeu.eu

