



Sector Analysis Report 2023

Showcasing the best of community pharmacy from around the world

© World Pharmacy Council, November 2023 worldpharmacycouncil.org

The primary sources of information and data in this publication were responses from WPC member organisations to the WPC Sector Analysis Survey conducted in September and October 2023. Other references are cited.

COPYRIGHT RESERVED

Reproduction of this publication in whole or in part is prohibited

© November 2023

World Pharmacy Council

WPC Membership

WPC member organisations have access to an extended version of the Sector Analysis Report.

The Pharmacy Guild of Australia
Danmarks Apotekerforening (Denmark)
Federal Union of German Associations of
Pharmacists (Germany)
Irish Pharmacy Union
Pharmacy Guild of New Zealand
Associação Nacional de Farmácias (Portugal)
Consejo General de Colegios Oficiales de
Farmaceuticos España (Spain)
Community Pharmacy England
and National Pharmacy Association (UK)
National Community Pharmacists Association
(USA)



The mission of the World Pharmacy
Council is to build international
recognition of community
pharmacy, its role, policies and
value, and to influence, promote and
secure acceptance of community
pharmacy as an important and
integral part of health systems.

www.worldpharmacycouncil.org

FOREWORD



In the rapidly evolving landscape of global healthcare, community pharmacies stand at the forefront, facing both challenges and opportunities that often transcend borders. This Sector Analysis Report 2023 details the current state of community pharmacies across WPC nations and beyond, and it is evident that while the sector plays a pivotal role in our healthcare systems it can and should be enabled to do much more.

The surge in global inflation, coupled with pharmacy workforce shortages and other issues, has cast a shadow on the viability of core

funding models. Governments and funders are called upon to act decisively to secure the future of community pharmacies. Expanding the role of community pharmacists - for example in managing long-term chronic conditions, addressing drug shortages, improving adherence to medicines, enhancing triage and treatment for common acute conditions, and in public health and prevention - will serve to make healthcare systems more efficient, more effective, more sustainable and more resilient to shocks. The commendable performance of community pharmacies during the COVID-19 pandemic underscores the potential to provide expanded and essential services.

Despite many challenges, community pharmacies have proven their adaptability and ability to innovate. The Global Showcase featured in this report highlights examples from around the world that show the transformative power of community pharmacy services and initiatives. From groundbreaking advancements in authorised scope of practice, successful common ailments programs, new uses of technology and data, and initiatives improving the health and social wellbeing of local communities, the showcase unveils a dynamic present and an exciting future for community pharmacy.

It is imperative for forward-thinking governments, health administrators, and other decision makers to recognize the value of community pharmacies in enhancing healthcare systems. The report outlines key priorities, funding structures, and policy insights from WPC countries, providing a comprehensive overview of the sector's global landscape.

As we navigate the complexities of healthcare, it is clear that the potential of community pharmacies remains largely untapped. The achievements and innovations presented in this report should be used to inspire governments and funders to invest in the future of community pharmacy. By doing so, we can ensure not only the viability of the sector but, most importantly, also unlock its full potential to contribute to more accessible, efficient and resilient healthcare systems for the benefit of patients and communities worldwide.

Douglas Hoey President, World Pharmacy Council

Table of Contents

FOREWORD	3
INTRODUCTION: Chief Economist's Overview	6
SECTION 1: Summary of community pharmacy in each WPC country (WPC MEMBE	
ONLY*)	9
SECTION 2: WPC Member Priorities (WPC MEMBERS ONLY*)	10
SECTION 3: GLOBAL SHOWCASE: The Best of Community Pharmacy	12
SHOWCASE 1: Pharmacy Scope of Practice	12
SHOWCASE 2: Primary Care Services	14
SHOWCASE 3: Public Health and Safety	18
SHOWCASE 4: Accessibility and Medicine Affordability	20
SHOWCASE 5: Technology, Innovation & Digital Health	23
SHOWCASE 6: Pharmacy Network Quality & Consistency	26
SHOWCASE 7: Pharmaceutical Supply Chain	29
SECTION 4: Pharmacy Services & Scope (WPC MEMBERS ONLY*)	33
SECTION 5: Public Health & Prevention (WPC MEMBERS ONLY*)	34
Appendix 1: Health System Statistics (WPC MEMBERS ONLY*)	35
Appendix 2: POSITION STATEMENT: Community pharmacy is key to more resilient	
healthcare systems	36

ABOUT THIS REPORT

This is the sixth annual World Pharmacy Council Sector Analysis Report. The report provides an overview of community pharmacy practice, regulation, trends, opportunities, research and statistics focused primarily on the nine WPC member countries as at November 2023 - Australia, Denmark, Germany, Ireland, New Zealand, Portugal, Spain, United Kingdom and United States of America. References to other OECD countries are also included.

Author/editor

Stephen Armstrong (e: stephen.armstrong@worldpharmacycouncil.org) is the World Pharmacy Council's Chief Economist. Stephen has more than 25 years' experience monitoring and analysing international community pharmacy. He was formerly Chief Economist at The Pharmacy Guild of Australia and is now the Guild's Economic Advisor.

The WPC Chief Economist wishes to acknowledge and thank the people listed below and their colleagues from WPC member and non-member organisations for answering questions and providing material used in this report:

- Lisa Todd, Erica Vowles, Priyanshi Vats, Jessica Seeto (The Pharmacy Guild of Australia)
- Heather Mohr (Neighbourhood Pharmacy Association of Canada)
- Flemming Randløv (Association of Danish Pharmacies)
- Vivian Beaupoil, Jens Gobrecht (Federal Union of German Associations of Pharmacists)
- Clare Fitzell (Irish Pharmacy Union)
- Andrew Gaudin (Pharmacy Guild of New Zealand)
- Manuel Talhinhas (ANF, National Association of Pharmacies, Portugal)
- Carolina Martínez-Berganza García, Juan Ignacio Alfaro García-Belenguer (General Pharmaceutical Council of Spain)
- Gareth Jones (National Pharmacy Association, UK)
- Alastair Buxton (Pharmaceutical Services Negotiating Committee, UK)
- Brooklyn Morgan (National Community Pharmacists Association, USA)

Currency conversion

Where figures in this report are stated in US Dollars, they have been converted from the local currency using the average exchange rate for the 365 days ending 30 June 2023. Note that this is a different method to that used in previous Sector Analysis reports, which used the World Bank's published Purchasing Power Parities (PPPs, see previous reports for more information). The exchange rates used are listed in the table below. For reference and comparison, PPPs (inverted) are also shown in the table below. Exchange rates sourced from ofx.com. PPPs can be viewed at http://data.worldbank.org/indicator/PA.NUS.PPP (accessed 3 October 2023).

	Exchange rate to USD (as used for this report)	PPP 2022 (relative to USA) (for reference only)
Australia (AUD)	0.673	0.704
Canada (CAD)	0.747	0.813
Denmark (DKK)	0.141	0.156
Germany (EUR)	1.048	1.370
Ireland (EUR)	1.048	1.282
New Zealand (NZD)	0.616	0.685
Portugal (EUR)	1.048	1.786
Spain (EUR)	1.048	1.639
United Kingdom (GBP)	1.205	1.471
United States of America (USD)	1.000	1.000

INTRODUCTION: Chief Economist's Overview



There are remarkable similarities across WPC countries in the challenges and opportunities being faced by community pharmacies. The recent surge in **global inflation**, at the same time as widespread pharmacy **workforce shortages**, has made maintaining **viable core funding models** the most significant common challenge. There has been a surge in

pharmacy closures, most evident across the USA and England, and these have been shown to be having a disproportionate impact on underprivileged socio-economic areas.

Core funding concerns have also been a high priority for other WPC members, with pharmacy strikes in Germany and an early funding negotiation brought on in Australia.

Finding resolutions to these issues is fundamental to the future of the sector, and creating a more secure funding platform is also a key to unlocking community pharmacy's potential to add greater value to healthcare systems. Community pharmacists and their national representatives continue to seek more opportunities to provide a greater range of services to their patients, and, in doing so, diversify their income streams.

Following the outstanding performance of community pharmacies in filling large gaps in the health system during the COVID-19 pandemic, patients and funders now more fully understand the potential for **new and expanded pharmacy services**. Authorising and funding a broader scope of services through each country's established and easily accessible network of pharmacies simply makes economic sense. It creates more **efficient, resilient healthcare systems**. This is especially important when patients cannot readily access other capacity-constrained sectors healthcare providers and with the high cost of alternative overflow venues such as hospital emergency care. Some progress is being made, as documented in this report, however the underutilisation of community pharmacy in primary care and public health roles continues.

Community pharmacists and their representative organisations are clearly highly supportive of taking on expanded roles, as long as they are financially viable. However, it is important to remember that dispensing, along with advice-led provision of over-the-counter medicines, are the core activities of community pharmacy and are likely to remain that way for the foreseeable future. This is clear from statistics related to the proportion of pharmacy revenue that is presently derived from non-dispensing services. As shown in Section 1.1 of this report, even with recent advances including the rapid rise in community pharmacy vaccination services, in most countries this proportion is **less than 2%**.

Although new and expanded roles for community pharmacy can add great value to healthcare systems, the sector cannot base its prospects of future viability *solely* on growth from the small base of non-dispensing services. This is why core funding model remains the key concern in most countries.

Opportunities abound for greater use of the highly accessible national networks of community pharmacies. Data collected for this report shows that, across the nine current WPC member countries, there are around **five billion annual visits to almost 120,000 community pharmacies**. In most countries, pharmacies are the **most frequented healthcare destination** and community pharmacists are one of, if not the most, **trusted** professions.

Research in several countries, and long-standing experience in others (such as **Canada**), has demonstrated the value and potential value of expanding the range of community pharmacy services. Most recently, throughout the COVID-19 pandemic, community pharmacy has shown its exceptional ability to respond to major health system challenges by ensuring continuity of treatment when other healthcare professionals were unavailable, and providing primary care and public health services that had previously only been provided through non-pharmacy outlets. The most prominent of these has been vaccination services. In the **USA**, **New Zealand** and parts of **Canada**, pharmacies are now the **number one location for immunisation**. In many other countries they are a close second, with public support and trust in the convenience and safety of this service now certain. The pandemic has been a trigger for significant expansion in the range of vaccines administered by community pharmacists (and, in some countries, by other qualified pharmacy staff), beyond influenza and COVID-19 into shingles, pneumococcal disease, pertussis, childhood vaccination programs for measles, mumps and rubella, and in some cases travel vaccines.

There are many other shining examples of community pharmacy services and activities. The feature section of this year's Sector Analysis report is the *Global Showcase: The Best of Community Pharmacy*. This includes major initiatives such as the world leading, exemplar advancements in authorised **scope of practice in Canada**, highly successful common ailments programs such as **Pharmacy First Scotland**, and progress in relation to **pharmacist prescribing**. It also includes smaller initiatives that are no less impressive. For example, Ireland's award-winning **Safe Pharmacy** domestic abuse support service, USA's **Ready, Set, PrEP** HIV prevention program, and Spain's **JunTOS initiative** to improve medication adherence in organ transplant patients.

The Showcase highlights **advanced use of technologies** such as robotics in Denmark and pharmacogenomic testing in the Netherlands, test-and-treat program for acute infectious diseases in the USA, as well as integrated patient health records in the UK and innovative pharmacy use of digital healthcare solutions in Portugal.

It also features some of the most significant policies and funding arrangements around the world. This includes unique supply chain approaches such as the wholesaler **Community Service Obligation** arrangement in Australia and Denmark's dynamic drug pricing system, as well as an improved approach to pharmacy service fees in New Zealand. This feature section also covers policies vital to ensuring **universal patient accessibility** to community pharmacies, particularly in countries with large and widely spread rural populations such as Australia and Spain, and the greater **affordability of prescription medicines** for patients due to zero copayments in Scotland, Wales, Northern Ireland and now New Zealand.

Notwithstanding its many challenges, this **Global Showcase** demonstrates a dynamic present and the opportunity for a vibrant future for community pharmacy and its patients,

with substantial, wide-ranging benefits for health systems, economies and society. Forward-thinking governments, health administrators and pharmacy leaders should take a lead from those countries and jurisdictions that have implemented these innovative and highly valuable services and initiatives.

Other components of Sector Analysis Report 2023 include:

- a summary of community pharmacy **funding structure**, **policy and operations** in each WPC country, including **comparator statistics**.
- an outline of **key priorities** for WPC member organisations;
- a summary of recent updates in authorised scope of practice and funded services in WPC countries. This includes, for the first time, a side-by-side, **international** comparison of authorised scope of practice;
- a section focusing on community pharmacy **Public Health & Prevention** services, an area where community pharmacy's potential remains largely untapped; and
- a compendium of OECD health system statistics relevant to community pharmacy.

Throughout the report you will also find select highlights and developments from **beyond the WPC membership** and spotlights on recent significant **research and evidence** related to community pharmacy from around the world.

Last year's Sector Analysis Report included a section detailing issues and policies relating to the **pharmacy workforce**. Many of these issues remain of major concern for WPC member organisations (as discussed in Section 2). While there is not a separate section workforce in this year's report, readers with an interest in that area are encouraged to refer back to the 2022 report.

Another theme of the 2022 report was community pharmacy's contribution - and potential - in relation to the **resilience of healthcare systems**, which is a priority area of interest for the OECD and national governments following the pandemic. In October 2023 the WPC released a position statement: <u>Community Pharmacy is key to more resilient healthcare systems</u>. The position statement is included as Appendix 2 to this report.



SECTION 1: Summary of community pharmacy in each WPC country

SECTION 2:WPC Member Priorities



CRITICAL ISSUE OVERVIEW

Pharmacy closures

When a local pharmacy closes, its patients are forced to find an alternative one that meets their health needs. Often, the first pharmacies to close are in the most deprived areas, which have greater need and fewer alternatives.



UK

The number of community pharmacies in Great Britain has decreased for the fifth consecutive year. Between March 2022 and October 2023 there was a net loss of 295 pharmacies.

Closures in recent times have been led by the largest pharmacy groups. LloydsPharmacy, which operated over 1,300 pharmacies as of March 2022, has now exited the market completely, including the closure of all 237 branches in Sainsbury's supermarkets. Boots — the largest multiple with over 2,000 branches — announced in June 2023 that 300 of its pharmacies would close over the next year..

While some pharmacies are changing hands, many are closing permanently. Every integrated care board (ICB) area in England has experienced a fall in the number of community pharmacies per capita over the past five years. Many independent pharmacies are surviving by reducing opening hours and reducing value-adding services, such as home deliveries.

CAUSES OF CLOSURES:

- Long term underfunding (insufficient NHS investment in pharmacy).
- Minimum opening hours requirements.
- Stress and workload.



USA

As in the UK, pharmacy closures in the USA are also being dominated by large chains. Rite Aid, CVS and Walgreens have announced plans to collectively close more than 1,500 stores. Notably, the first neighbourhoods to lose their pharmacies have tended to be predominantly Black, Latinx and low-income.

"According to our estimates, about one in four neighbourhoods are pharmacy deserts. These closures are disproportionately affecting communities that need pharmacies most", according to Dima Qato, an associate professor at the University of Southern California who studies pharmacy access and health equity.

CAUSES OF CLOSURES:

- · Poor working conditions and wages in chainstore pharmacies.
- Increased competition.
- Lawsuits related to the opioid epidemic.



The number of pharmacies in Germany has declined every year since 2008. In 2022, there were only 68 new pharmacies compared to 461 closures.

GERMANY

CAUSES OF CLOSURES:

- Conditions brought about by health policy, including payments that have not kept pace with inflation.
- Older, retiring owners cannot find younger buyers for their businesses.
- Bureaucratic pressures and the increased amount of time spent on problems such as drug shortages.

SECTION 3:

GLOBAL SHOWCASE: The Best of

Community Pharmacy

This GLOBAL SHOWCASE section presents best examples of community pharmacy services, programs, innovations and policies from around the world. While there is a focus on WPC member countries, it also highlights standout examples from non-member countries.

SHOWCASE 1: Pharmacy Scope of Practice

#1: Scope of Practice & Funded Services - ALBERTA, CANADA



Alberta is the fourth largest province in Canada (by population)¹. Alberta is renowned as a world leader in pharmacist practice, as significant advancements in authorisation have been in place for about 15 years². The additional professional services in Alberta have an agreed purpose to "improve patient access to health professionals, increase efficiencies in health care delivery, provide incentives for patient focused pharmacy care in the community,

and increase the capacity of the health care system overall by better utilizing our health professionals."³

Importantly, funding arrangements for most of these community pharmacy services have been in place for more than 10 years⁴.

Payments are available to community pharmacies under the public (government) scheme - the Alberta Health Care Insurance Plan - for the following services⁵:

- Prescription Renewal
- Adaptation of a Prescription
- Alteration of an Insulin Order
- Administration of a Product by Injection
- Prescribing at Initial Access
- Prescribing to Manage Ongoing Therapy
- Prescribing in an Emergency

12

¹ https://www.alberta.ca/population-statistics

² https://www.newswire.ca/news-releases/celebrating-10-years-of-pharmacist-enabled-clinical-care-in-alberta-885646382.html

³ https://kings-printer.alberta.ca/Documents/MinOrders/2022/Health/2022 606 Health.pdf

⁴ https://www.ab.bluecross.ca/pdfs/pharmacy-benefacts/346-compensation-for-pharmacy-services.pdf

⁵ Ibid.

SECTION 3:

GLOBAL SHOWCASE: The Best of Community Pharmacy

- Ensuring Continuity of Care in the Event of a Declaration of a State of Emergency or Declaration of a State of Local Emergency
- Refusal to Fill a Prescription
- Assessment for a Trial Prescription
- Administration of a Publicly Funded Vaccine
- Comprehensive Annual Care Plan (CACP)
- Standard Medication Management Assessment (SMMA) and follow-up
- Pharmacy-based Asymptomatic COVID-19 Testing Program⁶

Other Canadian provinces, while not yet reaching the breadth of Alberta's arrangements, have learnt from the Alberta experience and continue to roll out significant advancements. Of particular note is Ontario's recent expansion in authority for pharmacists to administer a wide range of substances via injection and inhalation⁷. From 1 July 2023 the injectables have included about 50 drugs, from anticoagulants, antiparkinsonian medication, hormone replacement therapy and monoclonal antibodies such as osteoporosis drug denosumab, to Ozempic® (semaglutide) and vitamin B12 shots. As in Alberta, the changes have been implemented to make healthcare more accessible and more manageable for patients.

#2: Pharmacist Independent Prescribing - UNITED KINGDOM



From September 2026 all newly qualified pharmacists will be independent prescribers on the day of their registration. This will present an opportunity for new funded services from community pharmacies incorporating independent prescribing as the new workforce enters the profession⁸.

The General Pharmaceutical Council (the pharmacy regulator in Great Britain) has implemented new standards for the initial

education and training of pharmacists so that they can take a much greater role in providing clinical care to patients⁹. The changes incorporate the skills, knowledge and attributes for prescribing, to enable pharmacists to independently prescribe.

Additionally, Health Education England has been offering up to 3,000 independent prescribing courses from Autumn 2022 to end of March 2024 for community pharmacists¹⁰.

Other changes to pharmacist education put a focus on public health, health inequalities, genomics, antimicrobial resistance and clinical reasoning¹¹.

⁶ https://www.ab.bluecross.ca/pdfs/82320-870.pdf

⁷ https://www.ocpinfo.com/regulations-standards/practice-policies-guidelines/injection/

⁸ https://www.england.nhs.uk/primary-care/pharmacy/pharmacy-integration-fund/independent-prescribing/

⁹ https://www.pharmacyregulation.org/education/standards-pharmacy-education/faq-reforms-initial-education-and-training-pharmacists

¹⁰ https://www.hee.nhs.uk/our-work/pharmacy/independent-prescribing

¹¹ https://www.hee.nhs.uk/our-work/pharmacy/transforming-pharmacy-education-training/initial-education-training-pharmacists-reform-programme/indicative-curricula

SHOWCASE 2: Primary Care Services

#3: Common Ailments Schemes - UNITED KINGDOM & CANADA



Community pharmacies are being recognised in many countries as a first port of call for advice and treatment for minor health issues and common clinical conditions. Some countries have established formal schemes encouraging patients to visit pharmacies first. These schemes reduce unnecessary visits to doctors and emergency departments - allowing those healthcare resources to be used in managing cases that are more urgent and require higher level clinical oversight. The result is a more efficient and

resilient health system, with faster accessibility to treatment for all patients.

Leading examples of structured common ailment schemes include Pharmacy First in Scotland and, in Canada, Ontario's recently expanded program.



NHS Pharmacy First Scotland was launched in July 2020, in the early months of the COVID-19 pandemic. It allows community pharmacies to give people expert help for treating conditions such as sore throats, earache and cold sores, along with common clinical conditions such as urinary tract infections (UTIs). Pharmacy teams offers advice, treatment or referral to other healthcare teams if required¹².

In Scotland, a country with a population of 5.4 million people, more than 1.2 million people accessed the Pharmacy First service at least once in the 12 months to March 2022¹³. In more than 85% of patient contacts, the pharmacist was able to dispense an item to treat the condition. Just 4% of the consultations resulted in a referral to another healthcare practitioner, which shows that the program has successfully reduced unnecessary visits to doctors.

Use of Pharmacy First Scotland can be seen across all age groups and all levels of deprivation in the population. Forty-five percent of patients lived in the two most deprived quintiles.

¹² https://www.nhsinform.scot/campaigns/nhs-pharmacy-first-scotland

¹³ https://publichealthscotland.scot/publications/nhs-pharmacy-first-scotland/nhs-pharmacy-first-scotland/

#4: New Medicine Service and Hypertension Case Finding Service - ENGLAND

Launched in 2011, the <u>New Medicine Service</u> (NMS) is a program funded through England's National Health Service (NHS) to help tackle the harm caused by medication non-adherence, which includes poor health-related quality of life, increased hospitalisations, and premature mortality¹⁴. The NMS supports patients when they are prescribed a new medication for specific long-term conditions.

When a patient receives a new prescription, their community pharmacist provides initial advice and guidance to the patient at the time of dispensing. A follow up consultation will be provided around 14 days after the medicine has been dispensed. In this structured consultation, the patient's use of their new medicine is discussed, any issues are identified and further advice is provided by the pharmacist, as necessary, e.g. on the management of side effects. A further follow-up consultation is provided around one month after the medicine was dispensed. The NMS allows pharmacists to provide personalized support, addressing any concerns or questions the patient may have. This one-on-one interaction helps patients feel more confident about their new medication regimen.

The NMS encourages collaboration between pharmacists and other healthcare professionals, such as general practitioners and nurses, to ensure holistic patient care.

In 2021-22, over two million patients were supported by the NMS¹⁵.

As part of the Community Pharmacy Contractual Framework (CPCF) for 2019/20 to 2023/24, a commitment was made to agree on an expansion of NMS coverage and subsequently the service was significantly expanded from 1 September 2021 to now cover:

- Asthma and COPD
- Diabetes (Type 2)
- Hypertension
- Hypercholesterolaemia
- Osteoporosis
- Gout
- Glaucoma
- Epilepsy
- Parkinson's disease
- Urinary incontinence/retention
- Heart failure
- Acute coronary syndrome
- Stroke/transient ischaemic attack
- Coronary heart disease

¹⁴ https://www.nhsbsa.nhs.uk/pharmacies-gp-practices-and-appliance-contractors/dispensing-contractors-information/nhs-community-pharmacy-new-medicine-service-nms-expansion-pilot-inclusion-depression-therapeutic

 $^{^{15}\,\}underline{\text{https://cpe.org.uk/wp-content/uploads/2022/08/National-services-provided-by-CPs-infographic-final.pdf}$

SECTION 3:

GLOBAL SHOWCASE: The Best of Community Pharmacy

- Atrial fibrillation
- Long term risks of venous thromboembolism/embolism

There is also an ongoing pilot examining the inclusion of antidepressants in the NMS¹⁶.



Introduced more recently, the <u>Hypertension Case-Finding Service</u> has been nationally commissioned by the NHS since 1st October 2021, with almost 10,000 pharmacies registered to provide this service. The service has two stages - the first is identifying people at risk of hypertension and offering them blood pressure measurement (a 'clinic check'). The second stage, where clinically indicated, is offering ambulatory blood pressure monitoring (ABPM). The blood

pressure test results will then be shared with the patient's GP to inform a potential diagnosis of hypertension.

#5: New Reimbursed Community Pharmacy Services - GERMANY

In October 2020, the German Bundestag passed the Pharmacy Strengthening Act. This included a clause that requires health insurance companies to provide pharmacies with €150 million per year (USD \$157m) for the provision of pharmaceutical services, targeting improvements in the safety and effectiveness of drug therapy¹⁷. The services that have been agreed as part of the new arrangements are:

- Extended medication advice for patients with poly medication
- Pharmaceutical care of patients after organ transplants
- Pharmaceutical care of patients receiving oral antitumor therapy
- Standardized risk assessment for high blood pressure patients who are taking at least one antihypertensive medication
- Standardized instruction in the correct use of medication and practice of inhalation technique for patients from the <u>age</u> of six

The standardized risk assessments may be carried out by the entire pharmaceutical staff, and in the case of the standardized risk assessment for high blood pressure this includes pharmacists during their internship. Additional qualifications are required for extended medication advice for polymedication as well as pharmaceutical care after organ transplantation or during oral antitumor therapy.

¹⁶ https://www.nhsbsa.nhs.uk/pharmacies-gp-practices-and-appliance-contractors/dispensing-contractors-information/nhs-community-pharmacy-new-medicine-service-nms-expansion-pilot-inclusion-depression-therapeutic

¹⁷ https://www.pharmazeutische-zeitung.de/alles-wichtige-zu-den-pharmazeutischen-dienstleistungen-133851/ (German)

#6: JunTOS initiative to improve medication adherence for solid organ transplant patients - SPAIN



The Spanish organ transplant system is a clear global leader. Spain tops the international rankings with 5,383 transplants performed in 2022 alone, a rate of 113 transplants per million inhabitants¹⁸. Low medication adherence rates to immunosuppressive treatments has been identified as the main cause of transplanted organ rejection. The estimated proportion of transplant recipients who are treatment non-compliant ranges from 20% to 54%. In other words, up to one in

two patients may abandon their medication. The JunTOS project, a new joint initiative between the General Pharmaceutical Council of Spain and the Spanish Society of Hospital Pharmacy, aims to:

- improve the use of immunosuppressive medication in solid organ transplant patients;
- increase adherence rates to immunosuppressive treatment; and
- improve training, professional practice and care coordination among community and hospital pharmacists.



More information on JunTOS can be found through a <u>Patients Infographic in English</u> and at <u>a dedicated</u> <u>website</u>.

#7: Test & Treat - USA

In March 2022, the US government launched a nationwide Test-to-Treat initiative to help people quickly access lifesaving treatments for COVID-19 at little to no cost. The initiative is available at locations nationwide, including pharmacy-based clinics. As of July 6, 2022, state-licensed pharmacists may also prescribe the oral antiviral Paxlovid to individuals who meet certain requirements¹⁹.

Beyond COVID-19, there is growing interest in parts of the USA in pharmacist initiation of treatment based on the results of a rapid diagnostic test. Since 2021, five states - Arkansas, Colorado, Delaware, Iowa and Kansas - have introduced such authorities, joining Idaho which had similar arrangements since 2018²⁰.

For example, on July 1, 2021, all pharmacies across the US state of Iowa became eligible to provide test and treat services for individuals six years of age and older. Along with testing for influenza, streptococcus throat infection and COVID-19, pharmacies can prescribe treatment following a positive test result via the Statewide Protocols developed

¹⁸ https://www.ont.es/

¹⁹ https://aspr.hhs.gov/COVID-19/Therapeutics/updates/Pages/important-update-06July2022.aspx

²⁰ https://naspa.us/blog/resource/pharmacist-prescribing-for-strep-and-flu-test-and-treat/

by the Iowa Board of Pharmacy in collaboration with the Iowa Department of Public Health²¹.

#8: Setting of Fees for Services - NEW ZEALAND

Setting of fees for new, government-funded services can be challenging. The pricing must strike a balance between incentive, viability and value, and be consistent with the aims of the program, which often include providing increased accessibility to patients across locations and off-peak times. In New Zealand, all new services introduced since the COVID-19 pandemic have been sustainably priced by the government, and have included the provision of higher fees for services delivered on weekends and after-hours. A transparent base rate of NZD \$150 per hour (USD \$92.40) has been factored into new time-based professional pharmacy services.

SHOWCASE 3: Public Health and Safety

#9: Pharmacy's leading role in immunisation - USA



Community pharmacies were already a significant venue for administration of vaccines in the USA prior to the COVID-19 pandemic. However, it wasn't until the pandemic that its full potential was harnessed. When it announced the Federal Retail Pharmacy Partnership Strategy for COVID-19 Vaccination, the US government release stated that "with more than 90% of people in the United States living within five miles of a pharmacy, pharmacies have unique reach and ability to provide access to

COVID-19 vaccine and support broad vaccination efforts."22

Soon after launching the program it was evident that pharmacy would play a leading role, including in overcoming vaccine hesitancy and enabling vaccinations in otherwise low-serviced rural locations. As of August 2023, more than **307.4 million doses of COVID-19 vaccines** had been administered via the FRPP²³, more than through any other vaccine source.

In the period through to March 2022, pharmacist-performed COVID-19 vaccinations contributed to an overall estimated \$900 billion in health care cost savings that prevented 2.2 million deaths, 17 million hospitalizations, and 66 million infections²⁴.

Beyond COVID-19, publicly released reporting from IQVIA in January 2023 shows that overall, a large majority of vaccine administration took place in pharmacies compared to a

²¹ https://www.iarx.org/test-treat

²² https://www.naccho.org/uploads/body-

images/Retail.Pharmacy.Partnerships.Program.Summary.for.Jurisdictions.UPDATE 12.2.20.pdf

²³ https://www.cdc.gov/vaccines/covid-19/retail-pharmacy-program/index.html

 $^{^{24}\,\}underline{\text{https://www.commonwealthfund.org/blog/2022/impact-us-covid-19-vaccination-efforts-march-update}$

SECTION 3:

GLOBAL SHOWCASE: The Best of Community Pharmacy

non-pharmacy medical setting²⁵. This was across all vaccines for adults in-scope, which included COVID-19, influenza, HPV, pneumococcal, shingles and Tdap.

Early data from the Centers for Disease Control and Prevention (CDC) in relation to the 2023-24 influenza vaccination season has shown continuing acceleration in pharmacy market share²⁶. As at 7 October 2023, **65%** of the 22.8 million doses administered across pharmacies and in physician offices had been through pharmacies. This compares with 59% for the full 2022-23 season.

The data for the world's largest economy is clear - pharmacies are the future of vaccination.

#10: Safe Pharmacy domestic abuse support service - IRELAND



Safe Pharmacy, a domestic abuse support service led by the Irish Pharmacy Union (IPU), has been recognised as the best health promotion campaign by the International Pharmaceutical Federation (FIP). Safe Pharmacy involves community pharmacies providing a person who is experiencing domestic abuse with access to a phone and contact details for local support services. This enables them to make that important call, for example to a family member, local specialist domestic violence services or An

Garda Síochána (police). Pharmacies that sign up to the initiative nominate a Safe Pharmacy champion within the pharmacy.

Pharmacies are easily accessible and located in all parts of Ireland, as they are in other countries. They are a trusted part of communities with highly trained, compassionate, and discrete staff with access to a private consultation room. This makes them ideally placed to provide means to additional support such as that provided by Safe Pharmacy.

#11: Ready, Set, PrEP HIV Prevention program - USA

"Ready, Set, PrEP" is a program launched by the US Department of Health and Human



Services, in collaboration with community pharmacies, to increase access to medications which can prevent the transmission of HIV by 75% by 2025. When taken as prescribed, these medications can reduce the risk of transmitting HIV from sex by 99%. A 2020 study by the CDC revealed that only about 25% of the 1.2 million individuals in the United States for whom PrEP is indicated had been prescribed it²⁷. Since then, pharmacists in 17 states have earned various degrees of authority in providing both pre- and post-exposure prophylaxis (PrEP and

²⁵ https://www.iqvia.com/insights/the-iqvia-institute/reports-and-publications/reports/trends-in-vaccine-administration-in-the-united-states

²⁶ https://www.cdc.gov/flu/fluvaxview/ (accessed 29 October 2023)

²⁷ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9834790/#bibr2-21501319221147254

PEP) in the community setting²⁸. More recent studies have shown that just two years after a state expands their scope of practice laws to allow for pharmacist-initiated PrEP, the fill rate for these therapies increased by 110%²⁹.

SHOWCASE 4: Accessibility and Medicine Affordability

#12: Pharmacy accessibility - AUSTRALIA & SPAIN



Australia is the fourth least densely populated country in the world, after only Greenland, Mongolia and Namibia³⁰. While it has large populations in major cities, it also has significant but extremely widespread populations in regional, rural and remote areas.

Since the early 1990s, following a significant, structured microeconomic reform to reduce the number of pharmacies in Australia, there has been a system of pharmacy location rules that

determine where new community pharmacies can be established, and where existing pharmacies can relocate. As a direct result of these location rules, accessibility to community pharmacies across Australia (as measured by distance to population) is better than to other services, including medical centres (doctors), supermarkets and banks - and, crucially, this is achieved with less outlets than for these other services³¹. Despite Australia's geographical challenges, 87% of the population are within 2.5km of a pharmacy. Pharmacy locality has been optimised, and pharmacies can continue to open as areas expand and new suburbs are created.

Similar challenges exist in Spain, and they have been met with a similar solution. As a result of demographic and geographic criteria applying to the regulations on pharmacy establishment, all Spanish citizens have close access to a community pharmacy. Spain has a network of 22,220 community pharmacies distributed throughout the country and 64.5% of these community pharmacies are established in municipalities that do not belong to a provincial capital. This network provides healthcare assistance for small towns and villages in rural areas that do not have any other healthcare facilities for their citizens.

²⁸ https://www.pharmacist.com/Publications/Pharmacy-Today/Article/pharmacists-expand-access-to-prep-in-17-states

²⁹ https://www.goodrx.com/healthcare-access/research/pharmacist-prescriber-authority-hiv-prep

³⁰ https://www.globaldata.com/data-insights/macroeconomic/smallest-countries-in-the-world-by-population-density-people-per-square-kilometers/

³¹ https://www.guild.org.au/ data/assets/pdf file/0017/6173/summary-of-submission-re-competition-policy-review-draft-report.pdf



EVIDENCE SPOTLIGHT

Pharmacies are the most important store or service



An independent survey in Australia has confirmed that pharmacies are considered to be the most important type of store or service in the main street of a town or suburb. Respondents were given a list of 45 different shops and services and asked to rank them in order of importance from 1 to 45. Commenting on the results, the Shopology report stated:

"Overwhelmingly, a Pharmacy was considered to be the most important store/service for an ideal main street. Across gender, age cohorts and location, pharmacies were consistently number one."

https://theconversation.com/what-makes-an-ideal-main-street-this-is-what-shoppers-told-us-214554

#13: Access to hospital medicines through community pharmacies - PORTUGAL



As part of the Portuguese government's response to the COVID-19 pandemic, the "Operação Luz Verde" (Green Light Operation) was launched to allow access to hospital medicines through community pharmacies. The initiative was created in partnership with the NHS, doctors and pharmaceutical societies, hospitals, wholesalers, community pharmacies and patients' organisations. After the end of the State of Emergency, this new regulatory framework was

extended. As a result, hospitals established partnerships with community pharmacies to dispense specialty medicines to people with certain health conditions. This initiative has dramatically improved health outcomes through improved medication adherence.



EVIDENCE SPOTLIGHT

Improving accessibility to hospital-only medicines



During the COVID-19 first wave, the Portuguese government allowed the transfer of the dispensing of hospital-only medicines to community pharmacies. Results from published research on this initiative showed that:

- the mean adherence score to therapy improved significantly.
- annual savings were estimated at €262/person, arising from travel expenses and absenteeism reduction.
- participants reported a significant increase in satisfaction levels in all evaluated domains (pharmacist's availability, opening hours, waiting time, privacy conditions, and overall experience).

#14: Medicine affordability - NEW ZEALAND & UK



Affordability of healthcare for patients is a significant issue in many countries. Cost is recognised as a barrier to access and limits the effectiveness of any healthcare system in achieving optimal and equitable health outcomes.

Medicines affordability varies considerably across the world, including across WPC member countries. In the USA's Medicare Part D, even after reaching the "catastrophic coverage" phase of drug coverage - which is after \$7,400 in out-of-pocket costs for

covered drugs - a co-payment of 5% of the drug cost, with a minimum of \$4.15, applies for each medicine. According to a survey completed in March 2023, more than one-third of Americans say cost has prevented them from filling a prescription³².

Even in Australia, a country with a national medicines scheme since 1948, a two-tiered copayment scheme means most of the population has a standard co-payment of \$30 on the majority of listed medicines, until a cap of \$1,563.50 AUD (\$1,052 USD), after which a copayment of \$7.30 AUD (\$4.91 USD) continues to apply.

At the other end of the affordability spectrum are countries such as Scotland, Wales and Northern Ireland. Prescription medicines in all of these countries are free for all patients³³.

In New Zealand, from 1 July 2023 the \$5 (USD \$3.08) co-payment that had previously applied to original dispensing of subsidised medicines was abolished for all patients, removing the cost barrier completely and moving to a similar arrangement to the UK. Repeat dispensing had previously been free, and continues to be free under the new arrangements.

#15: Free Contraception Service - IRELAND



On September 1, 2022, in Ireland, the Minister for Health initiated a new program that offers free medication and consultations for contraception to women between the ages of 17 and 25. This initiative has since been expanded to include women aged 17 to 30 during 2023, with ongoing discussions within the Department of Health about the potential for further extensions, although no specific date has been determined at this time.

³² https://today.yougov.com/health/articles/45388-americans-have-not-filled-prescription-price-poll

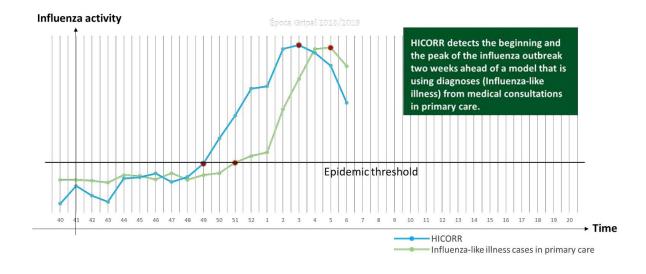
³³ Scotland: https://www.nhsinform.scot/care-support-and-rights/nhs-services/pharmacy/prescription-charges-and-exemptions/, Wales: https://www.gov.wales/free-prescriptions, Northern Ireland: https://www.nidirect.gov.uk/articles/help-health-costs

SHOWCASE 5: Technology, Innovation & Digital Health

#16: HICORR: predicting epidemics using big data - PORTUGAL

HiCorr is a surveillance system that uses pharmacy data with epidemiological models to anticipate and predict influenza and other respiratory epidemics. By analysing sales of specific OTC medications with sales that are highly correlated with the influenza-like-illness (ILI) case load, HiCorr detects the beginning, the peak and intensity of the influenza outbreak two weeks ahead of the alternative sentinel surveillance system based on medical consultations in primary health care³⁴. HiCorr is based on a national network of community pharmacies, which improves surveillance at the municipality level and anticipates the impact in health centers and hospitals, which is critical for public health authorities. HiCorr can detect different outbreaks by adjusting the set of OTC products under surveillance.

As well as national data, HiCorr also provides information about the epidemic activity at a local and regional level, which is of fundamental importance to determine responses to local outbreaks.



#17: CISMED Medicines Shortage Detection System - SPAIN

CISMED (Centre for Information Supply of Medicines) is a pharmacy-based information system, originating in Spain, that detects medicine supply issues automatically and in real time at the level of the patient, applying analytics to determine supply or shortage risks before they occur. Information collected can be used by authorities to manage shortages at national level.



In the Medicine Shortage Detection System Twinning project³⁵, Spain worked with Italy, Portugal and France to set up a mechanism for cross-border exchange of information on

³⁴ https://ecas2019.math.tecnico.ulisboa.pt/ECAS2019 SASTD.pdf

³⁵ https://digitalhealtheurope.eu/twinnings/dhe-twinning-results/cismed/

medicine supply issues. This twinning project showed that it is possible and valuable to set up a mechanism at the European level to exchange information on medicines shortages. This exchange was based on the use of ATC (Anatomical Therapeutic Chemical Classification System) coding which allows the crossing of information up to levels, even, of active ingredient, and on the agreement of certain parameters to trigger the market signals on short supplies. The project has been funded by the European Commission in the framework of the Digital Health Europe programme.

The information generated by pharmacies was shown to have enormous potential to improve the early detection of supply problems and facilitate effective international cooperation to mitigate their impact. The next step is to set up a pharmacy-based reporting system at European level, now that the feasibility of such a mechanism to share information across borders has been proven.

The General Pharmaceutical Council of Spain is currently working on a second phase of this project, with pharmaceutical organisations from Germany, Ireland, The Netherlands and Portugal. The current project - the Medicines Shortages Reporting Initiative (MedSRI) - aims to create a harmonised (pharmacy-based) reporting system for supply problems, allowing data to be compared at EU level based on common criteria. The current project is based on SNOMED CT as the international standard for classification of clinical terms for the identification of the medicines.

#18: Access to patient medical records and the electronic sharing of information with general practices - ENGLAND



All community pharmacies in England have had access to patients' NHS Summary Care Records (which contain an extract of information from their general practice medical record) for several years. This access is now being augmented with application programming interfaces (APIs) being developed between GP medical record systems and community pharmacy clinical IT systems to pull contextually relevant GP record data into pharmacy systems, when a

pharmacist or pharmacy technician is providing a clinical service to a patient.

When pharmacies provide clinical services, such as flu and COVID-19 vaccinations, their clinical IT system will automatically share a post-event message with the patient's GP practice. That message uses structured data which can be 'consumed' by the GP medical record system into the patient's record. That currently requires intervention by the GP practice team, but changes to the systems to be made in early 2024 will allow the data to be automatically inserted into the patient record, effectively allowing the community pharmacist to 'write' to the GP medical record.

All of the interoperability between pharmacy and GP IT systems is built using IT standards which have been developed for NHS England to support communication between the two professions and their IT systems.

#19: Leadership in use of robotics - DENMARK



As shown in Section 1.1 of this report, Denmark's system of pharmacy has resulted in most pharmacies having significant scale. The average prescription volume of 120,000 per year and average population per pharmacy of more than 11,000 are more than double those of most WPC members, and Denmark has the highest population to pharmacy ratio in the OECD (see Appendix 1). One outcome of this increased scale is that robotic

technologies have a stronger business use case. In 2012, around one-third of Danish pharmacies used robotic dispensing³⁶. By 2018 this had grown to around 70%³⁷, compared with 30%-40% across mainland Europe.

Robots can enhance operational efficiency and create opportunities for pharmacists and their teams to focus on value-added tasks and offering valuable pharmacy services and private consultations. The latest systems come equipped with automated loading mechanisms that scan medication box barcodes, recording their precise locations within the robot. Advanced systems also cross-reference the box's barcode with the prescription's barcode, facilitating automatic dispensing, subject to a final pharmacist's review.

#20: Leadership in Pharmacogenomics - NETHERLANDS



By examining how an individual's genetic makeup influences their response to drugs, pharmacogenomics is a powerful tool for tailoring medicine dosage and selecting the most suitable medications for individual patients. It enhances the efficiency of treatments, reduces adverse effects, and contributes to a more patient-centered, cost-effective approach to healthcare. There has been a long-standing focus on pharmacogenomics in the

Netherlands. In 2005, the Dutch Pharmacogenetics Working Group (DPWG) was established by the Royal Dutch Pharmacist's Association. It includes expert pharmacists, physicians, clinical pharmacologists, clinical chemists, epidemiologists, and toxicologists. The objectives of the DPWG³⁸ are to:

- develop pharmacogenetics-based therapeutic (dose) recommendations.
- assist prescribers and pharmacists by integrating the recommendations into computerized systems for drug prescription and automated medication surveillance.

While its use was once likely to be seen only in a hospital or specialised setting, many community pharmacies in the Netherlands are now offering pharmacogenomic testing services to patients. These tests analyze a patient's genetic profile to determine how their

https://www.gs1.org/docs/healthcare/events/231012/GS1_Healthcare_Poster_Session_Nov_2012_Den_mark.pdf

³⁶

³⁷ https://thejournalofmhealth.com/how-robots-are-changing-community-pharmacy/

³⁸ https://www.pharmgkb.org/page/dpwg, https://www.knmp.nl/dossiers/farmacogenetica

SECTION 3:

GLOBAL SHOWCASE: The Best of Community Pharmacy

body metabolizes and responds to specific medications. Genotyping of patients before starting therapy may be beneficial for the prevention of side effects and for the effectiveness of the drug, and is considered essential for the safe use of some drugs. Genotyping before or immediately after initiation of therapy may be considered for individual patients.

This information helps pharmacists and healthcare providers make more informed decisions about drug selection and dosage. By following the recommendations set down by the DPWG, pharmacogenomic data is used to assess a patient's current medication regimen, identify potential drug-gene interactions, and suggest adjustments or alternative medications to optimize therapeutic outcomes.

2021 research showed that, following testing, 17.8% of the clinical samples were recommended to avoid certain medication (based on their current medicines use), and 14.0% to have their dose adjusted³⁹.

SHOWCASE 6: Pharmacy Network Quality & Consistency

#21: Pharmacy Quality Programs - ENGLAND & AUSTRALIA



England's Pharmacy Quality Scheme (**PQS**)⁴⁰ was introduced in 2017 as part of the NHS contractual framework. It supports delivery of the NHS Long Term Plan and rewards community pharmacy owners that achieve quality criteria in the three domains of healthcare quality: clinical effectiveness, patient safety and patient experience.

Most pharmacy owners participate in the Scheme each year and it has been a way for NHS England, the Department of Health and Social Care and Community Pharmacy England to financially

incentivise activity which is not a requirement of the NHS contractual framework. There have been some impressive outcomes from the scheme including large scale changes in IT use such as 11,395 pharmacies applying for NHS email accounts to support secure communication of patient information and 10,398 pharmacies increasing their use of the Summary Care Record to support clinical care.

Patient safety has also been a big part of the scheme, which has showcased the patient safety work of the community pharmacy sector. Based on five medicines safety audits that have been carried out in PQS:

- 600,000 patients prescribed high risk medicines have been screened by pharmacy teams carrying out audits as part of PQS;
- Clinical advice has been given 385,000 times to improve medicines safety; and
- Pharmacy teams have identified 90,000 people at sufficiently high risk to require referral/clinical intervention.

The Pharmacy Quality Scheme has also been used to promote public health initiatives, which most pharmacy teams participate in. For example, for the past three years there has

³⁹ https://pubmed.ncbi.nlm.nih.gov/33673111/

⁴⁰ https://cpe.org.uk/quality-and-regulations/pharmacy-quality-scheme/

GLOBAL SHOWCASE: The Best of Community Pharmacy

been activity on antimicrobial stewardship and increasing awareness of antimicrobial awareness. This has included staff completing training and becoming <u>Antibiotic Guardians</u>, as well as antibiotic reviews with patients allowing them to have an opportunity to educate patients on the appropriate use of antibiotics. Reports on these reviews can be found on the <u>Community Pharmacy England outcomes page</u>.

Australia's Quality Care Pharmacy Program (QCPP) is a quality assurance program for



community pharmacy, and provides support and guidance on professional health services and pharmacy business operations. By increasing the number of accredited pharmacies in Australia, QCPP aims to ensure that community pharmacies provide quality professional services and customer care. QCPP has also been designed as a business tool for community pharmacies, equipping them with processes and methods for performance monitoring and continual improvement. QCPP was developed by The Pharmacy

Guild of Australia in 1997, with the first accreditation issued in 1998. 25 years later, in 2023, over 90% of pharmacies across Australia are accredited under QCPP.

Since 2011, the standards that underpin the QCPP have been recognised as the Australian Standard (85000:2011) quality management system for pharmacies in Australia⁴¹. The Guild is accredited by Standards Australia as a Standards Development Organisation, and QCPP is accredited by JAS-ANZ (Joint Accreditation System of Australia and New Zealand) as a conformity assessment body.

To ensure that pharmacies meet the Australian Standard they must undergo an external audit every two years. These audits are conducted independently and are designed to protect the integrity of the program. The assessors are trained professionals with a background in the pharmacy industry.

Random assessments (mystery shopper visits) are also used to assess the maintenance of QCPP standards in accredited pharmacies. The mystery shopper program has helped to create an impressive body of evidence to show to regulators the importance of the pharmacy medicines regulations. Data collected from the program has demonstrated the extent of pharmacy intervention in direct product request sales for Pharmacy Medicines, as well as the compliance by pharmacy staff to standards and protocols applicable to the supply of Pharmacy Medicines and Pharmacist Only Medicines.

#22: Community Pharmacy Enhanced Services Networks (CPESN) - USA



The USA's <u>Community Pharmacy Enhanced Services Network</u> (CPESN) is a Clinically Integrated Network through which pharmacy providers collectively deliver health services - and be reimbursed for those services - to improve quality of care for patients in their local communities and to lower total cost of care.

⁴¹ https://infostore.saiglobal.com/en-au/standards/as-85000-2011-99394 saig as as 267859/

SECTION 3:

GLOBAL SHOWCASE: The Best of Community Pharmacy

CPESN incorporates innovation and technology to empower its networks of pharmacies to succeed in an evolving outcomes-focused marketplace. Independent pharmacies are able to leverage local trust for new provider and payer partnerships, helping to improve the sustainability of their businesses.

Over 3,000 CPESN pharmacies across the USA are being paid through more than 170 payer/purchaser programs and 41 national contracts to provide payer-valued chronic care management, clinical trial recruitment, health risk assessments, and other services. Partnerships with employers, local physicians, Accountable Care Organisations⁴², and health systems deliver revenue streams beyond filling prescriptions.

CPESNs have also been used to make advancements in pharmacist scope of practice authorisation. For example, CPESN Utah advocacy efforts delivered Medicaid provider status for all pharmacies in that state, along with a line item budget for pharmacy services.



⁴² Accountable Care Organizations (ACOs) are groups of doctors, hospitals, and other health care providers, who come together voluntarily to give coordinated high quality care to the Medicare patients they serve.

SHOWCASE 7: Pharmaceutical Supply Chain

#23: Wholesaler Community Service Obligation - AUSTRALIA



Australia's Community Service Obligation (CSO) Funding Pool arrangements were established through the Community Pharmacy Agreement in 2006 and continue under the current Seventh Community Pharmacy Agreement (7CPA). The primary objective of the CSO is to ensure that arrangements are in place to provide all Australians with ongoing and timely access to all subsidised medicines through community pharmacies.

The funding pool is shared between eligible pharmaceutical wholesalers that commit to distributing the full range of nationally subsidised medicines to all pharmacies across Australia, mostly within 24 hours of a pharmacy order. Before the CSO came into effect, some wholesalers would sell only the highest volume items and target only the easiest regions to deliver to (typically large cities), and concentrate on bulk (not daily) deliveries. The other full-line, full-service wholesalers were left with a diminishing share of those markets and a higher proportional share of the more costly, low volume and rural/remote segments. This created particular problems given Australia's vast geographical area.

Under the CSO arrangements, eligible entities, known as CSO Distributors, receive payments from the CSO Funding Pool for meeting a range of obligations. The funding pool is additional to a wholesale mark-up, although the seed funding for the CSO was provided through a reduction in the allowable mark-up.

To receive these Payments, CSO Distributors must meet all of their obligations under their deed with the Commonwealth, including the CSO Service Standards and the CSO Compliance Requirements.

#24: Dynamic Drug Pricing - DENMARK

No two countries have the same drug pricing arrangements, and as there are many localised economic and other considerations it is impossible to say that one system is better than others. However, Denmark's unique, dynamic pricing system is worthy of special mention in this Showcase.

The main features of the Danish system include:

- competitive pricing among manufacturers/suppliers of patent-expired medicines;
- fixed prices throughout the country that change every 14 days in response to market movements;
- a free option for the pharmacies to send medicines back to the wholesaler;
- compensation for any stock loss for pharmacies if a supplier lowers its prices, when the loss exceeds DKK 500 (USD \$70.50) per product line; and
- a requirement for pharmacies to supply the cheapest medicine within a substitution group.

SECTION 3:

GLOBAL SHOWCASE: The Best of Community Pharmacy

Together, these elements result in very effective competition among manufacturers of products that are not protected by patents. At the same time, it provides good security of supply in Denmark for medicines that are in short supply across Europe or globally, as the price can be raised relatively quickly to attract stock. The product return and compensation elements provide protection for pharmacies against volatility or financial loss, while patients benefit through lower prices.



CRITICAL ISSUE OVERVIEW

Drug shortages

Drug shortages are a major global healthcare problem. Some of the main causes of drug shortages include raw material shortages, manufacturing problems, surges in demand, regulatory issues, labour shortages, transportation bottlenecks, political instability, economic factors and market dynamics. Shortages result in patients being deprived of essential medications and healthcare professionals facing difficulties in identifying and procuring substitute treatments.

Drug shortages are worsening. The 2023 Pharmacy Pressures Survey conducted by Community Pharmacy England found that 92% of pharmacies are dealing with medicine supply issues daily, an increase from 67% in the 2022 pressures survey. Even more worryingly, 87% of pharmacy staff reported that patient health is put at risk because of medicine supply issues.

A national study in Portugal in April 2019 found that 52.2% of patients experienced a drug shortage issue in the previous 12 months, 21.5% had to see a physician to change the prescription, and 5.7% declared treatment discontinuation because of the shortage.

Mitigating the impact on patients, to ensure continuity of treatment, is the number one priority of community pharmacists when dealing with shortages. In Germany, the majority 62% of pharmacy owners have reported that more than 10 % of their employees' working time is spent procuring substitute products for patients due to shortages. This places a great burden on staff and resources, with no compensation.

Some of the strategies recently implemented in WPC member countries to **reduce the frequency and impact of drug shortages** include:

- Improved monitoring and reporting of drug supplies, including innovative datadriven approaches such as the Medicines Supply Information Centre (CISMED), a system developed by the Spanish Pharmaceutical Associations and implemented in Spanish pharmacies.
- Market intervention approaches, such as:
 - In 2022 the Australian government implemented a Supply Security Guarantee under which it set a floor price for subsidised medicines in exchange for a requirement on manufacturers to maintain sufficient stocks within Australia.
 - In 2023 Portugal legislated to increase the market price of low-priced medicines.

- Temporarily reducing the quantity that can be supplied to each patient, to ensure that limited supplies can be made available to the largest number of people.
- Allowing community pharmacists to **substitute therapeutically** when a severe shortage is declared, such as the NHS Serious Shortage Protocols.

These are important steps, but more can be done by authorising pharmacists to perform at their full scope of practice so that they can more efficiently and effectively respond to shortage situations, and in doing so ensure the best possible continuity of care for patients.



Sources:

- 2023 Pharmacy Pressures Survey: https://cpe.org.uk/wp-content/uploads/2023/04/Pharmacy-Pressures-Survey-2023-Key-Findings-MP-Briefing.pdf
- April 2019 Portugal study: https://www.sciencedirect.com/science/article/abs/pii/S1544319121005665
- Germany survey information: https://www.abda.de/fileadmin/user_upload/assets/ZDF/ZDF-2023/ABDA_ZDF_2023_Brosch_english.pdf
- Australia's Supply Security Guarantee: https://www.pbs.gov.au/info/industry/pricing/medicines-supply-security-guarantee
- NHS Serious Shortage Protocols: https://www.nhsbsa.nhs.uk/pharmacies-gp-practices-and-appliance-contractors/serious-shortage-protocols-ssps

SECTION 4: Pharmacy Services & Scope

SECTION 5: Public Health & Prevention

Appendix 1: Health System Statistics



Appendix 2: POSITION STATEMENT: Community pharmacy is key to more resilient healthcare systems

September 2023

"Health system resilience is the ability of health systems not only to prepare for shocks, but also to minimise the negative consequences of such disruptions, recover as quickly as possible, and adapt by learning lessons from the experience to become better performing and more prepared."

Organisation for Economic Co-operation & Development (OECD)43

In many countries community pharmacists are the most accessible and most frequented health professional 44,45, and are conveniently located close to where people live or work 6. Globally, community pharmacists are the third largest healthcare professional group in the world after physicians and nurses 47 and between 2000 and 2019, the number of pharmacists per capita increased in all OECD countries for which time series are available by almost 40% on average 48.

Evidence from the COVID-19 pandemic response (see Appendix 1) has clearly demonstrated the importance and effectiveness of community pharmacy as an integral part of public health infrastructure. Community pharmacies and their staff have shown that they contribute to more productive and resilient health systems and integrated, streamlined, primary care teams. Preparatory measures for future shocks must include enabling community pharmacists to take a greater role as part of more agile and flexible health systems. To ensure a better performing, more prepared health system, these greater roles should not be activated only at times of system stress or shock - community

⁴³ https://www.oecd.org/health/health-systems-resilience.htm

⁴⁴ Berenbrok, Lucas A et al. "Evaluation of Frequency of Encounters With Primary Care Physicians vs Visits to Community Pharmacies Among Medicare Beneficiaries." JAMA network open vol. 3,7 e209132. 1 Jul. 2020, doi:10.1001/jamanetworkopen.2020.9132

⁴⁵ https://www.cdc.gov/pcd/issues/2020/20_0317.htm

⁴⁶ https://bmjopen.bmj.com/content/5/5/e007328

⁴⁷ https://pubmed.ncbi.nlm.nih.gov/25747809/

⁴⁸ https://www.oecd-ilibrary.org/sites/d6227663-en/index.html?itemId=/content/component/d6227663-en/index.html?itemId=/content/co

POSITION STATEMENT: Community pharmacy is key to more resilient healthcare systems

pharmacists should be authorised and funded to perform at their full scope of practice at all times.

Through the pandemic, community pharmacies all around the world demonstrated their agility and previously untapped potential. They quickly and effectively took on roles traditionally delivered elsewhere in the health system, when other medical services were either closed or stretched to their limits. In doing so, negative health outcomes were minimised for millions of patients who would have otherwise had disruptions to treatment. Pharmacies were also recognised as both an essential service provider⁴⁹ and a first point of contact in the healthcare system⁵⁰. Further, pharmacies became a core component of COVID-19 vaccination rollouts, becoming the leading provider of vaccinations in several countries, including the USA⁵¹.

Unfortunately, some of these roles have been removed or reduced as the pandemic impact has lessened, with regulators choosing to revert to the traditional, less efficient and less flexible delineation of health system functions and roles.

The pharmacy examples during the pandemic should instead become the new normal, and the starting point for further advancement toward enabling full scope of practice. National health system leaders should review experience from around the world to see how health services can be improved through broader use of community pharmacies in areas including (but not limited to) public health and prevention, management of long-term conditions, point-of-care testing, and triage and treatment for common illnesses. Some examples are presented in Appendix 2.

Trusted by patients, highly accessible, highly skilled, locally-focused and agile, community pharmacies are vital to more resilient, adaptable and high performance healthcare systems.

_

⁴⁹ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8404372/

https://www.oecd-ilibrary.org/sites/d6227663-en/index.html?itemId=/content/component/d6227663-en/index.html?itemId=/content/cont

⁵¹ https://www.cdc.gov/vaccines/covid-19/retail-pharmacy-program/index.html

Examples of community pharmacy's contribution to health system resilience during the COVID-19 pandemic

The COVID-19 pandemic exposed the fragility of the existing primary care model in most developed countries. It has also highlighted how community pharmacy can be a cornerstone of the solution to that problem, providing strength and resilience to healthcare systems.

Some of the major policy and practice changes that were triggered by the pandemic in WPC member countries (and others) have included:

- the implementation and/or extension of vaccination administration authority to include greater age ranges and more vaccine types (including, in many countries, COVID-19 vaccination).
- 2. involvement in point-of care COVID-19 antigen or antibody testing, and/or the provision of take-home test kits.
- 3. the authority to extend or adapt prescriptions to ensure continuity of treatment when access to doctors was limited.
- 4. the authority to dispense medicines previously only available through hospitals.
- 5. enabling of, and specific funding for, medicine home delivery services (especially for vulnerable or isolated people); and
- 6. social support services through pharmacies, such as protocols to help victims of domestic violence observed during lockdowns.

Example 1: Vaccination services

Utilising community pharmacies for vaccination services reduces strain on other parts of the health system infrastructure. It has also been shown to increase overall vaccination rates in the target population.

All 36 studies evaluated in a 2016 systematic review and meta-analysis found an increase in vaccine coverage when pharmacists were involved in the immunisation process⁵². This is largely due to the convenience and accessibility of pharmacies and the high level of community trust in pharmacists.

Evidence of the safety, acceptance, capability and effectiveness of community pharmacy-based vaccination services is now abundantly clear, and all governments should now enable and encourage community pharmacies as the public's principal destination for all vaccination programs for adults and children.



According to official figures from the USA's Centers for Disease Control & Prevention (CDC) as of August 18th 2023, more than 307.4 million doses of COVID-19 vaccine had been administered

⁵² Isenor, J E et al. "Impact of pharmacists as immunizers on vaccination rates: A systematic review and meta-analysis." *Vaccine* vol. 34,47 (2016): 5708-5723. doi:10.1016/j.vaccine.2016.08.085,

POSITION STATEMENT: Community pharmacy is key to more resilient healthcare systems

Pharmacy becomes the leading vaccination destination in the USA and NZ in the USA through pharmacies under the federal program, across more than 41,000 pharmacy locations⁵³.

Also, for the 2022-23 season, more American adults received their influenza vaccinations at a pharmacy (41.48 million) than any other location type including through physician medical offices (27.96 million)⁵⁴. This was also the case in 2020-21 and 2021-22.

In New Zealand, community pharmacies have become the vaccination provider chosen by the majority of the population. Data showed that pharmacy's monthly market share had grown to over 55% of all COVID-19 vaccinations during 2022⁵⁵. Community pharmacy was able to quickly develop its capacity to this point despite being the last vaccination destination to be brought on by funders in New Zealand.

Example 2: Point of care testing

The pandemic demonstrated that community pharmacies are an ideal location for point-of-care testing and for distribution of at-home test kits. Pharmacies were designated as a primary source of free tests under government programs established in many countries, including the USA⁵⁶, England⁵⁷ and Australia⁵⁸. Research in Portugal (see the box below) demonstrated how community pharmacy's involvement there achieved greatly improved accessibility and equality of access to testing.



Accessibility and equality of access are keys to an effective testing strategy

An evaluation by the Centre for Health Evaluation & Research in Portugal⁵⁹ shows how the provision of in-pharmacy rapid antigen testing in that country improved accessibility compared with alternative arrangements. As of 31 January 2022, there were 1,369 community pharmacies and 635 laboratories and other registered sites for performing tests for the diagnosis of SARS-CoV-2 in mainland Portugal covered by the national scheme. The CEFAR geo-spatial analysis showed that in a scenario without the participation of pharmacies, the average distance of each person to the closest testing place would have been 3.7 km, compared to 1.8 km with the inclusion of the participating pharmacies. Importantly, along with improved accessibility came improved

⁵³ CDC, accessed September 2023: https://www.cdc.gov/vaccines/covid-19/retail-pharmacy-program/index.html

⁵⁴ CDC, accessed June 2022: https://www.cdc.gov/flu/fluvaxview/coverage-2021estimates.htm

⁵⁵ Data and chart supplied by the Pharmacy Guild of New Zealand based on official data.

https://www.whitehouse.gov/briefing-room/statements-releases/2022/01/14/fact-sheet-the-biden-administration-to-begin-distributing-at-home-rapid-covid-19-tests-to-americans-for-free/
 https://www.gov.uk/government/news/9-in-10-pharmacies-now-offering-free-rapid-coronavirus-

covid-19-tests

⁵⁸ https://www.health.gov.au/health-alerts/covid-19/testing

⁵⁹ CEFAR Infosaude (2022), "Performance Of Rapid Antigen Test (Trag) For Professional Use For The Diagnosis Of Sars-Cov-2 In Community Pharmacies" Provided to WPC by ANF; copy available on request.

POSITION STATEMENT: Community pharmacy is key to more resilient healthcare systems equality of access. The Gini index for the distribution of access by income levels reduced from 0.42 to 0.26 with the participation of pharmacies (a reduction of about 39% in inequality).

Community pharmacy has demonstrated its ability to implement quickly

During the height of the pandemic, the UK Government had purchased stocks of lateral flow test (LFD) devices and needed a way to distribute them free-of-charge to the public, beyond using a mail order solution, which had a fixed capacity due to the workforce challenges the pandemic brought to the postal system. A national distribution service (Pharmacy Collect) was set up in a matter of days and the vast majority of pharmacies in England signed up to provide the system within two weeks. In 2021/22, pharmacies undertook 25.5 million supplies of test kits to the public. Further information can be found at https://cpe.org.uk/national-pharmacy-services/advanced-services/c-19-lateral-flow-device-distribution-service/

Beyond COVID-19 testing, there is increasing evidence of community pharmacies as an important destination for point-of-care testing for other diseases and for the effective distribution of take-home test kits. For example, community pharmacies in some countries - including WPC members Australia⁶⁰, USA and Portugal⁶¹ - are being used to distribute HIV testing kits. The USA's CDC has stated⁶²:

The accessibility of pharmacies for HIV testing presents a unique opportunity for pharmacists to contribute to the identification of undiagnosed HIV. It is estimated that 70% of rural consumers live within 15 miles of a pharmacy, and 90% of urban consumers live within 2 miles of a pharmacy. A Centers for Disease Control and Prevention (CDC)-funded feasibility study offering rapid, point-of-care testing in community pharmacies and retail clinics stated: "Pharmacies and retail clinics represent a vast, largely untapped potential for the delivery of HIV testing in settings that are more accessible and, for some people, less stigmatizing than traditional testing."

Example 3: Prescription extension & independent pharmacist prescribing

During the pandemic, many countries provided new or additional authorisation for community pharmacists to renew or extend existing prescriptions related to stable chronic conditions.

Prescription extension allows more efficient use

In Australia, as a result of the 2020 bushfire crisis and the COVID-19 pandemic, the pre-existing Continued Dispensing arrangements (which were only applicable for certain lipid-lowering drugs and oral contraceptives) were expanded to include most medicines subsidised for chronic conditions under the country's Pharmaceutical Benefits Scheme. Continued

⁶⁰ https://www1.racgp.org.au/newsgp/clinical/hiv-self-tests-to-be-sold-in-pharmacies

⁶¹ https://www.portugalresident.com/home-use-hiv-self-tests-now-available-at-pharmacies/

⁶² https://www.cdc.gov/hiv/effective-interventions/diagnose/hiv-testing-in-retail-pharmacies

POSITION STATEMENT: Community pharmacy is key to more resilient healthcare systems

of time across primary care

Dispensing is allowed where there is an immediate need for the medicine but where it is not practicable to obtain a valid PBS prescription. As a result, in the 12 months to June 2021, community pharmacists dispensed more than 498,000 items to patients who could not otherwise obtain a new prescription⁶³, compared to just 14,000 in the year to June 2019. This averted significant disruption in therapy and demonstrated the ability for pharmacists to take a closer role in managing and continuing treatments for chronic conditions on an ongoing basis. This opens up much needed capacity in general practice.

Even before the pandemic, some countries had advanced much further than this Australian example and in doing so had established more adaptability and resilience in the health system prior to the COVID-19 pandemic. A much more complete pharmacist scope of practice is in place in most provinces of Canada (see chart below).⁶⁴ While a nationally (and internationally) consistent approach is preferred, the fact that major jurisdictions such as Alberta have – for over a decade - successfully implemented full, or near full, scope of practice provides a model for others to follow.

PHARMACISTS' SCOPE OF PRACTICE IN CANADA Implemented in pending legislation, regulation or policy for implementation ON PEI Prescriptive Independently, for any Schedule 1 drug (Schedule 1 Drugs) In a collaborative practice setting/agreemen Initiate^{1,2} For minor ailments/conditions For smoking/tobacco cessation In an emergency Make therapeutic substitution Change drug dosage, formulation, Renew/extend prescription for continuity of care Injection Authority (SC or IM)^{1,4} Vaccines⁵ Influenza vaccine Labs Order and interpret lab tests Regulated pharmacy technicians Scope of activities, regulations, training requirements and/or limitations differ between jurisdictions. Please refer to the p initiate new prescription drug therapy, not including drugs covered under the Controlled Drugs and Substances Act. After another prescriber's original/existing/current prescription for drug therapy. Applies only to pharmacists with additional training, certification and/or authorisation through their regulatory authority. Authority to inject may not include all drugs or vaccines. Please refer to the jurisdictional regulations. Applies only to existing prescriptions, i.e., to provide continuity of care. Pursuant to a Ministerial Order during a public health emergency. Applies only to pharmacists working under collaborative practice agreements. For education/demonstration pursoes only. For education/demonstration purposes only. 10. Pending health system regulations for pharmacist requisitions to labs. 10. Pending regain system regulations on primination requirements of advantages of the state of

⁶³ Australian Government Department of Health, https://www.pbs.gov.au/info/statistics/expenditure-prescriptions/pbs-expenditure-and-prescriptions-report-30-june-2021 (Table 16(c)).

⁶⁴ Canadian Pharmacists Association, https://www.pharmacists.ca/advocacy/scope-of-practice/

POSITION STATEMENT: Community pharmacy is key to more resilient healthcare systems Many studies support the safety and effectiveness of allowing pharmacists to initiate treatment or to adapt existing prescriptions (such as through a change in dosage or therapeutic substitution). For example, findings support the effectiveness of direct pharmacy access to contraception and in encouraging pharmacist contraception prescribing policies and widespread implementation. 65 These findings are being acted upon in some countries and jurisdictions, such as in England where a new Pharmacy Contraception Services is being introduced (this is covered further in Section 5).

Pharmacist prescribing of COVID-19 therapeutics was also vital to the treatment of patients in the USA, especially those in lower socio-economic circumstances.

Expanded prescribing roles allow greater coverage for COVID-19 treatments

The community pharmacy response to COVID-19 in the USA has included expanded roles in prescribing and providing COVID-19 therapeutics such as Paxlovid® and monoclonal antibody subcutaneous infusions⁶⁶. Through collaboration with healthcare partners, pharmacy networks, and the federal PREP Act, pharmacists have helped provide COVID therapeutics to the most socially vulnerable patients during the Public Health Emergency.

Example 4: Public Health & Prevention

In many countries community pharmacists are the most accessible and most frequented health professional⁶⁷. As shown in the previous examples in relation to vaccination and testing, the pandemic has demonstrated the vital importance of population-wide preventive health and community pharmacy has established its pivotal place in application of effective measures to prevent and contain the spread of infection. Community pharmacies have a long history of adapting to address new health challenges.

These include participation in programs for influenza and other vaccinations, services for drug misusers, smoking cessation, sun protection and prevention of skin cancer, and many others. These are important roles as the principal local provider of public health services, but it is frequently not fully recognised, valued or adequately remunerated.

dependence treatment programs in Australia

Australia's Take Home Naloxone (THN) Program makes the medicine naloxone free and available without a prescription to people who are at risk of, or who may witness, an opioid overdose or adverse reaction. The program was initially piloted in New South Wales, South Australia and Western Australia between 1 December 2019 and 30 June 2022 before being expanded nationally from 1 July 2022.

⁶⁵ Rafie S, et al. "Patient experiences with pharmacist prescribed hormonal contraception in California independent and chain pharmacies". Journal of the American Pharmacists Association, Jan-Feb 2022, https://doi.org/10.1016/j.japh.2021.11.002,

https://www.sciencedirect.com/science/article/pii/S1544319121004635.

⁶⁶ https://ncpa.org/covid-19-therapeutics

⁶⁷ Berenbrok, Lucas A et al. "Evaluation of Frequency of Encounters With Primary Care Physicians vs Visits to Community Pharmacies Among Medicare Beneficiaries." JAMA network open vol. 3,7 e209132. 1 Jul. 2020, doi:10.1001/jamanetworkopen.2020.9132

Additionally, in the Australian state of Victoria, administration by pharmacists of long-acting injectable buprenorphine (following completion of relevant training) is allowed as part of an Opioid Treatment Program⁶⁸. This has also been trialled in the state of New South Wales and is being considered by other states.

Pharmacists are key to implementing national HIV/AIDS

strategy

The United States' National HIV/AIDS Strategy (2022-2025) emphasises the role of pharmacies in increasing access to a variety of HIV prevention and care services such as testing, initiation of pre-exposure prophylaxis (PrEP), education and medication adherence counselling, and playing a key role in the re-engagement of patients who have fallen out of care. Recent studies have demonstrated the key role that pharmacies play in delivering HIV prevention and care services to people in communities, by improving patient access and PrEP usage rates.

Example 5: Transfer of the dispensing of hospital-only medicines to community pharmacies

There is inconsistency between countries in terms of what types of medicines are restricted to being dispensed only through hospitals and what is available through the much more easily accessed community pharmacy channel. With hospital resourcing stretched and repurposed, the pandemic highlighted the inefficiencies of some of these arrangements from the point of view of both the healthcare system and patients. Evidence during the pandemic, following changes to some of these arrangements, showed benefits not only in patient satisfaction but also in adherence to medication, as described below in the Spanish and Portuguese examples.



Collaborative dispensing of hospital medicines in community pharmacy

During the pandemic, collaborative dispensing of outpatient hospital diagnostic (DHDH) medicines was implemented in six Spanish regions to maintain continuity of treatment, quality of pharmaceutical care and reduce the risk of transmission of COVID-19 infection to vulnerable patients. As of October 2022 the service has been maintained in four out of the six regions where it was introduced during the pandemic. One new region incorporated the service and another one is working to implement it.

To date, patients who have chosen this option have received nearly 200,000 medicines, all of them with the assurance that this system guarantees the presence of a pharmacist throughout the process. This service is enabling these patients - most of whom are chronically ill and immunocompromised - to obtain hospital medicines from their nearest pharmacy, thanks to the work and coordination of pharmacists working in 69 hospital pharmacy

43

⁶⁸ https://www2.health.vic.gov.au/public-health/drugs-and-poisons/pharmacotherapy/pharmacotherapy-policy-in-victoria

POSITION STATEMENT: Community pharmacy is key to more resilient healthcare systems

services, 6,059 community pharmacies and 19 pharmaceutical distribution warehouses.

In October 2021, Spain's General Pharmaceutical Council presented a report prepared with the consultancy firm HIRIS⁶⁹ on the impact in the first 6 regions where collaborative dispensing was introduced. This report revealed that:

- a high rate of patient satisfaction, and an experience that brings humanisation to their care.
- patients who are prescribed DHDH medicines also use other dispensing treatments in community pharmacy therefore, it is ideal to carry out pharmacotherapeutic monitoring in collaboration between hospital pharmacists and community pharmacists.
- 100% of respondents would prefer to continue with this new circuit for DHDH medicines and not return to the previous system of collection at the hospital.
- the most valued arguments were convenience and speed (48%), not having to go to the hospital (40%), avoiding annoying journeys (38%), proximity to the pharmacy (24%), savings in transport (22%) and extended pharmacy opening hours (20%).

Portuguese initiative generates greater patient satisfaction and savings

In Portugal, the dispensing of most outpatient specialty medicines is performed exclusively through hospital pharmacies and totally financed by the National Health Service. During the COVID-19 first wave, the government allowed the transfer of the dispensing of hospital-only medicines to community pharmacies. A study published in 2022⁷⁰ aimed to measure the value generated by the intervention of community pharmacy in the dispensing of hospital-only medicines. It found a statistically significant (P < .0001) increase in mean adherence score to therapy, annual savings of €262 per person (through reduced travel and absenteeism) and a significant increase in satisfaction levels in all evaluated domains - pharmacist's availability, opening hours, waiting time, privacy conditions, and overall experience.

For the benefit of patients and to reduce the burden on hospital resources, governments should reduce the number of medicines that are restricted to supply and/or administration through hospitals only.

https://www.sciencedirect.com/science/article/pii/S1098301522001462

⁶⁹ https://www.farmaceuticos.com/wp-content/uploads/2021/10/INFORME-HIRIS-20-07-2021.pdf

⁷⁰ Murteira R, et al. "Real-World Impact of Transferring the Dispensing of Hospital-Only Medicines to Community Pharmacies During the COVID-19 Pandemic" *Value in Health* (2022): ISSN 1098-3015,

https://doi.org/10.1016/j.jval.2022.03.004,

POSITION STATEMENT: Community pharmacy is key to more resilient healthcare systems

Where can community pharmacy add even more value in terms of system resilience?

In addition to expanding community pharmacies' roles in the areas discussed above, there is also great potential in many other areas.

Area 1: Management of Long-Term Conditions

Findings from systematic reviews and meta-analyses show that community pharmacist-led management of hypertension (as one example) significantly reduces systolic blood pressure compared with usual GP care⁷¹. Further clinical trial evidence has also demonstrated that the benefits of pharmacist intervention, including education, consultation and/or prescribing, can help to reduce blood pressure. A Canadian trial found an even larger 18.3 mmHg reduction in systolic blood pressure associated with pharmacist care and prescribing⁷². For a systolic blood pressure reduction of 18.3 mmHg, the estimated impact is 0.21 fewer cardiovascular events per person and, discounted at 5% per year, 0.3 additional life-years, 0.4 additional quality-adjusted life-years and C\$6,364 cost savings over a lifetime. Results of an American trial published in April 2021 also showed the cost-effectiveness of pharmacist-led hypertension management⁷³.

Hypertension management is only one example of the potential for community pharmacists to take a much greater role in management of long-term chronic conditions, freeing up other health system resources.

Area 2: Minimising the impact on patients of drug shortages

Drug shortages are an ongoing global crisis. The associate director of the US Food and Drug Association's (FDA's) Resilient Supply Chain Program recently stated that "shortages and supply chain issues don't just happen during a public health emergency...we've seen these before COVID, and we're continuing to see these moving into the future. Many of the issues we're facing are becoming much more complex and more systemic."⁷⁴

Community pharmacies are at the end of the supply chain. They are constantly faced with trying to navigate drug shortages to ensure patient treatment is not compromised, or any adverse health outcomes can be minimised. However, due to stringent rules and regulations around altering a prescription in many jurisdictions around the world, pharmacists are often limited in their ability to respond effectively and efficiently.

⁷¹ By between -6.1mmHg (95% confidence interval [CI] -8.4 to -3.8) and -7.2mmHg (95% CI -5.8 to -8.7) - https://pharmaceutical-journal.com/article/research/effective-detection-and-management-of-hypertension-through-community-pharmacy-in-england

⁷² Tsuyuki RT, Houle SK, Charrois TL, et al. "Randomized trial of the effect of pharmacist prescribing on improving blood pressure in the community: the Alberta Clinical Trial in Optimizing Hypertension (RxACTION)" Circulation 2015;132(2):93-100.

⁷³ Schultz BG, et al. Cost-Effectiveness Analysis of a Pharmacist-Led Medication Therapy Management Program: Hypertension Management. Value In Health April 2021 https://doi.org/10.1016/j.jval.2020.10.008,

https://www.sciencedirect.com/science/article/pii/S109830152034451X

⁷⁴ https://www.cidrap.umn.edu/resilient-drug-supply/drug-shortages-have-worsened-and-may-only-increase-future-experts-say

POSITION STATEMENT: Community pharmacy is key to more resilient healthcare systems The Australian Government - and some others - have implemented changes to allow community pharmacists to substitute specific medicines that are deemed to be in serious shortage, without prior approval from the prescribing doctor.

Allowing flexibility for pharmacists to function at full scope of practice, by substituting a medicine in shortage with an appropriate alternative, allows patients to receive medicines from their pharmacist without delay. This not only reduces the risk of adverse health outcomes that may arise from any disruption of treatment, but also reduces the burden that drug shortages can place on prescribers.

Area 3: Addressing medication non-adherence

The high prevalence of medication non-adherence is associated with increased morbidity and mortality, disease progression and increased utilisation of healthcare resources and accompanying expenditure. *OECD Health Working Paper No. 105*, published in 2018, concluded that investing in medication adherence not only improves health outcomes but also increases health system efficiency⁷⁵. It also reported that "the problem of poor adherence has rarely been explicitly included in national health policy agendas". Community pharmacists, as the medicines experts, are in the best position to address this problem.



The OECD's 2018 Working Paper described several pharmacy-delivered programs aimed at addressing non-adherence, including England's New Medicine Service (NMS), which was highlighted as being cost-effective⁷⁶. The service provides support for people with long-term conditions newly prescribed a medicine to help improve medicines adherence. It is focused on specific patient groups and conditions. The NMS commenced in 2011. As a result of the ongoing success of this service, the NMS was expanded in September 2021 to include 13 additional conditions⁷⁷.



transplant patients

The Spanish organ transplant system is a clear global leader. Spain tops the international rankings with 5,383 transplants performed in 2022 alone, a rate of 113 transplants per million inhabitants⁷⁸. Low medication adherence rates to immunosuppressive treatments has been identified as the main cause of transplanted organ rejection. The estimated proportion of transplant recipients who are treatment non-compliant ranges

⁷⁵ Khan, R. and K. Socha-Dietrich (2018), "Investing in medication adherence improves health outcomes and health system efficiency: Adherence to medicines for diabetes, hypertension, and hyperlipidaemia", OECD Health Working Papers, No. 105, OECD Publishing, Paris, https://doi.org/10.1787/8178962c-en.

 ⁷⁶ Elliott, R.A., Tanajewski, L., Gkountouras, G. et al. Cost Effectiveness of Support for People Starting a New Medication for a Long-Term Condition Through Community Pharmacies: An Economic Evaluation of the New Medicine Service (NMS) Compared with Normal Practice.
 PharmacoEconomics 35, 1237-1255 (2017). https://doi.org/10.1007/s40273-017-0554-9
 ⁷⁷ <a href="https://www.nhsbsa.nhs.uk/pharmacies-gp-practices-and-appliance-contractors/dispensing-contractors-information/nhs-community-pharmacy-new-medicine-service-nms-expansion-pilot-inclusion-depression-therapeutic

⁷⁸ https://www.ont.es/

POSITION STATEMENT: Community pharmacy is key to more resilient healthcare systems

from 20% to 54%. In other words, up to one in two patients may abandon their medication. The JunTOS project, a new joint initiative between the General Pharmaceutical Council of Spain and the Spanish Society of Hospital Pharmacy, aims to:

- improve the use of immunosuppressive medication in solid organ transplant patients.
- increase adherence rates to immunosuppressive treatment.
- improve training, professional practice and care coordination among community and hospital pharmacists.

Area 4: Triage and treatments for common conditions

Community pharmacies are being recognised as a first port of call for advice and treatment for minor health issues and common clinical conditions. Some countries have established formal schemes encouraging patients to visit pharmacies first. These schemes reduce unnecessary visits to doctors and emergency departments - allowing those healthcare resources to be used in managing cases that are more urgent and require higher level clinical oversight. The result is a more efficient and resilient health system, with faster accessibility to treatment for all patients.



NHS Pharmacy First Scotland allows community pharmacies to give people expert help for treating conditions such as sore throats, earache and cold sores, along with common clinical conditions such as urinary tract infections (UTIs). Pharmacy teams offers advice, treatment or referral to other healthcare teams if required⁷⁹.

In Scotland, a country with a population of 5.4 million people, more than 1.2 million people accessed the Pharmacy First service at least once in the 12 months to March 2022⁸⁰. In more than 85% of patient contacts, the pharmacist was able to dispense an item to treat the condition. Just 4% of the consultations resulted in a referral to another healthcare practitioner, which shows that the program has successfully reduced unnecessary visits to doctors.

⁷⁹ https://www.nhsinform.scot/campaigns/nhs-pharmacy-first-scotland

⁸⁰ https://publichealthscotland.scot/publications/nhs-pharmacy-first-scotland/nhs-pharmacy-first-scotland/