# Changing circulation patterns of acute respiratory infections: Implications for self-care and pharmacy practice

## Report from a FIP insight board

2026



FIP Development Goals

International Pharmaceutical Federation

# Colophon

Copyright 2026 International Pharmaceutical Federation (FIP)

International Pharmaceutical Federation (FIP)
Andries Bickerweg 5
2517 JP The Hague
The Netherlands
www.fip.org

All rights reserved. No part of this publication may be stored in any retrieval system or transcribed by any form or means – electronic, mechanical, recording, or otherwise without citation of the source. FIP shall not be held liable for any damages incurred resulting from the use of any data and information from this report. All measures have been taken to ensure the accuracy of the data and information presented in this report.

**Recommended citation**
International Pharmaceutical Federation (FIP). Changing circulation patterns of acute respiratory infections: Implications for self-care and pharmacy practice. The Hague: FIP; 2026.

**Cover image**
@Drazen Zigic | istockphoto.com

# Contents

**Acknowledgements** ..... 3
**Executive summary** ..... 6
**1 Introduction** ..... 8
**2 Methods overview** ..... 11
2.1 Participant selection and representation ..... 11
2.2 Insight board design and discussion format ..... 11
2.3 Collection of participant insights ..... 12
2.4 Synthesis and analysis of insights ..... 12
2.5 Scope and considerations for reporting ..... 12
**3 Key insights** ..... 13
3.1 Changing perceptions of ARIs and vaccination ..... 13
3.1.1 Increased awareness alongside changing perceptions of risk ..... 13
3.1.2 Vaccine hesitancy, fatigue and changing confidence ..... 13
3.1.3 Pharmacists' role in rebuilding trust and supporting informed prevention decisions ..... 14
3.2 Evolving self-care behaviours and pharmacy-seeking patterns ..... 14
3.2.1 Changing patterns of care-seeking and access to pharmacy services ..... 15
3.2.2 Evolving expectations for OTC medicines and self-care support ..... 15
3.2.3 Persistent expectations for antibiotics and implications for responsible self-care ..... 16
3.3 Implications for pharmacy practice and service delivery ..... 17
3.3.1 Increasing complexity of symptom assessment and triage ..... 17
3.3.2 Expanding counselling responsibilities and patient safety considerations ..... 17
3.3.3 Referral, diagnostic support and continuity of care ..... 18
3.3.4 Workload, workforce capacity and operational pressures ..... 19
3.3.5 From medicine supply to integrated respiratory care ..... 19
3.4 Professional preparedness and support needs ..... 20
3.4.1 Education, clinical competencies and continuing professional development ..... 20
3.4.2 Practical clinical guidance and decision-support tools ..... 21
3.4.3 Diagnostic capabilities and access to clinical information ..... 21
3.4.4 Regulatory frameworks, remuneration and sustainable service provision ..... 22
3.4.5 Workforce readiness, professional motivation and career development ..... 22
3.4.6 Towards a coordinated approach to professional preparedness ..... 23
3.5 Opportunities to strengthen pharmacists' contributions to ARI prevention, management and public health 24
3.5.1 Strengthening vaccination and preventive care ..... 24
3.5.2 Developing integrated pathways for respiratory infection care ..... 25
3.5.3 Expanding opportunities in early detection and antimicrobial stewardship ..... 26
3.5.4 Community pharmacies as contributors to respiratory infection surveillance ..... 26
3.5.5 Strengthening interprofessional collaboration and health-system integration ..... 27
3.5.6 Demonstrating the value and sustainability of pharmacy-based services ..... 27
3.5.7 Towards an integrated role for pharmacy in respiratory health ..... 28
**4 Discussion** ..... 29
4.1 Changing ARI patterns require more responsive approaches to self-care ..... 29
4.2 The growing clinical role of pharmacists requires a shift from isolated services to integrated care ..... 30
4.3 Professional capability and health-system readiness must develop together ..... 30
4.4 Community pharmacies offer opportunities to strengthen public health intelligence ..... 30
4.5 Sustainable implementation depends on demonstrating value ..... 31
4.6 Implications for pharmacy practice and policy ..... 31

5 Recommendations....32
5.1 Strengthened integrated, evidence-based approaches to ARI assessment and self-care....32
5.2 Strengthened professional competencies and practical implementation support....32
5.3 Improved access to diagnostic tools, clinical information and coordinated referral pathways....33
5.4 Systematical integration of pharmacists into respiratory infection prevention and public health....33
5.5 Established and sustainable policy, workforce and financing arrangements....33
5.6 Strengthened evidence generation and evaluation for pharmacy-based ARI services....34
5.7 Identified priorities for coordinated action....34
6 Conclusions....35
References....36

# Acknowledgements

The content of this report has been produced independently by FIP.

This work was written and compiled by the following team members:

Ntombizodwa Luwaca, Disease prevention and self-care programme manager
Gamze Nur Songur, Disease prevention and self-care programme coordinator
Stephanie Rakotomalala, Disease prevention and self-care programme intern

It was signed off by:

Dr Catherine Duggan, Chief Executive Officer

This report is supported by unconditional funding from Angelini Pharma.



FIP expresses gratitude and appreciation to all the insight board participants listed below

| Moderator | |
|---|---|
| Catherine Duggan | Chief executive officer, FIP |

| FIP Team | |
|---|---|
| Ntombizodwa Luwaca | Disease prevention and self-care programme manager |
| Gamze Nur Songur | Disease prevention and self-care programme coordinator |
| Hanadi Alolimi | UNITWIN and provision coordinator |
| Stephanie Rakotomalala | Disease prevention and self-care programme intern |

| Participants | | |
|---|---|---|
| Leticia Caligaris | Secretary, FIP Community Pharmacy Section (CPS) | Uruguay |
| Jack Collins | Treasurer, FIP Social and Administrative Pharmacy Section (SAPS); Senior lecturer, The University of Sydney | Australia |
| Ryan Forrey | Immediate past president, FIP Hospital Pharmacy Section (HPS); Adjunct assistant professor, The Ohio State University College of Pharmacy | USA |
| Isabel Guerreiro | Information manager, National Association of Pharmacies (ANF) of Portugal | Portugal |
| Sigurbjörg Guðmundsdóttir | Chair, Pharmaceutical Society of Iceland | Iceland |
| Piotr Merks | Scientific director and board member, European Pharmacists Association (EPA); Professor, Faculty of Medicine, Lazarski University, Warsaw, Poland; President, Trade Union of Pharmacy Workers (ZZPF) | Poland |
| Tibor Hodbod | Pharmacist; Member of the Slovak Chamber of Pharmacists | Slovakia |
| José Luis Nájera | Member of the Executive Committee (ExCo), FIP Community Pharmacy Section (CPS); Vice-president, Official College of Pharmacists of Palencia; Lecturer, Universidad Europea Miguel de Cervantes (UEMC) | Spain |
| Laura Mihaela Palade | Vice-president, International Affairs Delegate, Association of Pharmacies and Pharmacists in Romania (AFFR) | Romania |
| Ema Paulino | President, National Association of Pharmacies (ANF) of Portugal | Portugal |
| Katherine Pearson | Elected member, Royal College of Pharmacy English Advisory Council, Royal College of Pharmacy; Assistant Professor in Clinical Pharmacy, University of Birmingham | England |
| Andrea Pudak Kelčec | Executive director, Croatian Pharmaceutical Society | Croatia |
| Christian Ude | President, Hessen Chamber of Pharmacists (Landesapothekerkammer Hessen) | Germany |
| Magali van Steenkiste | International affairs manager, Association of Pharmacists Belgium (APB) | Belgium |

| Participants who submitted written responses | | |
|---|---|---|
| Kennedy Erickson | Chair-elect, Community Pharmacy Practice of the American Pharmacists Association | USA |

| **Observers from Angelini Pharma** | |
|---|---|
| Federica Pelacchi | CHC Global Medical Associate Director |
| Daniela Pierucci | CHC Global Medical Associate Director |
| Roselli Maria Ilaria | CHC Global Medical Director |

# Executive summary

Acute respiratory infections (ARIs) remain an important public health concern, with changing patterns of respiratory pathogen circulation presenting challenges for prevention, self-care and healthcare delivery. The coronavirus disease 2019 (COVID-19) pandemic has influenced public perceptions of respiratory infections, vaccination behaviours and expectations of community pharmacy services, highlighting the need for responsive and integrated approaches to respiratory health.

To explore these developments, the International Pharmaceutical Federation (FIP) convened a virtual insight board on 29 September 2026, entitled *"Changing circulation patterns of acute respiratory infections: Implications for self-care and pharmacy practice."* The insight board brought together pharmacy professionals and experts from different countries to examine changing patient behaviours, the implications for pharmacy practice, professional preparedness and opportunities to strengthen pharmacists' contributions to ARI prevention and management.

The insight board used facilitated breakout discussions, plenary exchanges and supplementary written contributions to gather participants' perspectives. A qualitative thematic synthesis identified five interconnected areas of insight.

### Changing perceptions of ARIs, vaccination and self-care

Participants described a mixed post-pandemic picture, characterised by increased awareness of respiratory infections alongside vaccine fatigue, misinformation and, in some settings, reduced perceptions of risk. These changing perceptions influence how individuals understand respiratory health risks, engage in preventive behaviours and approach self-care. The discussions highlighted the importance of health literacy, public trust and clear, evidence-based communication in strengthening confidence in vaccination and supporting individuals to take an informed and active role in maintaining their respiratory health.

### Evolving self-care behaviours and pharmacy-seeking patterns

Participants highlighted the role of community pharmacies as accessible points of contact for individuals seeking support with respiratory symptoms. Evolving healthcare-seeking behaviours and patient expectations were reflected in increased demand for over-the-counter medicines, diagnostic support and professional advice, alongside continued requests for antibiotics where their use may not be clinically indicated. These experiences illustrate the increasing complexity of pharmacy-based respiratory care and the importance of pharmacists' clinical judgement in supporting appropriate self-care, responsible medicine use and antimicrobial stewardship.

### Implications for pharmacy practice and service delivery

Overlapping respiratory symptoms, differing patient risk profiles and increasing expectations for pharmacy-based care have added complexity to the assessment and management of acute respiratory infections. Participants emphasised the importance of pharmacists' clinical judgement in identifying when self-care is appropriate and when further medical assessment is required, while ensuring that recommendations for symptomatic relief are evidence-based and responsive to individual patient needs. Structured approaches to symptom assessment, counselling and referral were identified as essential to delivering consistent, person-centred respiratory care.

### Professional preparedness and need for support

Participants recognised pharmacists' existing expertise in medicines, disease prevention and self-care, while highlighting differences in their ability to translate these competencies into practice across healthcare systems. Gaps in access to diagnostic tools, relevant patient information, practical clinical guidance and continuing professional development can limit the delivery of comprehensive pharmacy-based respiratory care. Workforce capacity, regulatory recognition and sustainable remuneration were also identified as important enablers of pharmacists' ability to provide accessible, high-quality care.

## Opportunities to strengthen pharmacists' contributions

Participants identified opportunities to integrate vaccination, early assessment, self-care support, appropriate testing, referral and antimicrobial stewardship within coordinated respiratory care pathways. The experience shared from Spain also illustrated the potential contribution of community pharmacy data to public health surveillance, complementing established epidemiological systems.

Changing perceptions of respiratory infections, evolving self-care behaviours and increasing expectations for accessible healthcare support are reshaping how individuals seek and engage with respiratory care. These developments have implications for community pharmacists, who are increasingly called upon to support informed self-care, assess respiratory symptoms, promote preventive measures and identify when further medical attention is needed. The insight board highlighted that responding to these changing needs requires pharmacists to adapt their practice while maintaining a person-centred approach to care.

Across the five themes, a central finding was that professional competencies alone are insufficient to ensure effective and sustainable pharmacy-based respiratory services. Pharmacists' ability to respond to evolving patient needs depends on appropriate regulatory frameworks, clinical tools, access to relevant health information, interprofessional collaboration and sustainable financing. Strengthening these enabling conditions is therefore essential to translating professional expertise into accessible and coordinated respiratory care.

The report recommends strengthening evidence-based ARI assessment and self-care pathways; supporting professional education and clinical decision-making; improving access to diagnostic tools and patient information; integrating pharmacists more systematically into prevention and public health; establishing sustainable policy and financing arrangements; and strengthening the evaluation of pharmacy-based services. Together, these priorities provide a framework for coordinated action to enable pharmacists to respond more effectively to changing respiratory health needs, ultimately supporting individuals and communities to make informed decisions about prevention and self-care, and to access appropriate care when needed.

# 1 Introduction

Acute respiratory infections remain a major global public health concern, contributing substantially to morbidity, mortality and healthcare use. Caused by a range of viral and bacterial pathogens, ARIs encompass infections of the upper and lower respiratory tract, with clinical presentations ranging from common ailments to severe disease requiring hospitalisation. Common viral pathogens include influenza viruses, respiratory syncytial virus (RSV), severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and human metapneumovirus (hMPV), while bacterial pathogens such as *Streptococcus pneumoniae* and *Mycoplasma pneumoniae* also contribute to the burden of respiratory disease. Although many ARIs can be managed through appropriate self-care and symptomatic treatment, certain population groups, including young children, older adults, pregnant women and individuals with underlying health conditions, are at increased risk of complications.

The scale of this burden underscores the importance of effective prevention, early recognition and appropriate management. According to the World Health Organization (WHO), seasonal influenza is associated with approximately one billion cases annually, including three to five million cases of severe illness and an estimated 290,000–650,000 respiratory deaths worldwide.[1] RSV also represents a substantial public health challenge, particularly among young children, with an estimated 33 million episodes of RSV-associated acute lower respiratory infection, three to four million hospitalisations, and more than 100,000 deaths annually among children under five years of age.[2] Beyond their direct clinical consequences, respiratory infections place considerable pressure on healthcare systems through increased demand for consultations, diagnostic services, medicines and hospital care.

Historically, the circulation of many respiratory viruses has followed relatively recognisable seasonal patterns, although these vary considerably across geographical regions and pathogens. In temperate climates, influenza activity has generally been concentrated during colder months, whereas tropical and subtropical regions may experience more prolonged or less predictable transmission throughout the year. RSV has similarly demonstrated seasonal circulation in many settings, with variations in the timing and duration of epidemics. These established patterns have traditionally informed public health surveillance, vaccination campaigns, healthcare resource planning and clinical preparedness.

However, the COVID-19 pandemic significantly disrupted the epidemiology of respiratory infections. The widespread implementation of non-pharmaceutical interventions (NPIs), including physical distancing, face coverings, enhanced hand hygiene, travel restrictions and temporary closures of schools and public spaces, contributed to substantial reductions in the circulation of several common respiratory viruses. As these measures were progressively relaxed, the resurgence of respiratory pathogens did not consistently follow previously established seasonal patterns. Instead, studies documented changes in the timing, intensity and duration of outbreaks, including unusually timed epidemics and differences in the resurgence of individual viruses.[3,4]

A global analysis using data from the WHO Global Influenza Surveillance and Response System (GISRS) demonstrated notable changes in respiratory virus circulation during the pandemic period. In the 2022/2023 season, influenza and RSV epidemic peaks occurred approximately 1.9 months earlier in the Northern Hemisphere than during the pre-pandemic reference period, while influenza epidemics lasted an average of 2.2 weeks longer. However, comparable shifts were not consistently observed across other geographical regions, highlighting the importance of considering regional differences in respiratory virus epidemiology.[3]

Further evidence has demonstrated that the resurgence of common respiratory viruses following the pandemic was asynchronous, with different pathogens returning at different times and with varying patterns of circulation.[4] These observations suggest that changes in respiratory infection epidemiology cannot be explained by a single mechanism. Rather, they may reflect interactions between population immunity, pathogen-specific characteristics, changes in social contact patterns, public health measures and environmental conditions. The concept of an immunity gap arising from reduced exposure to circulating pathogens has been proposed as one possible contributor, although its relative importance and the mechanisms underlying observed changes continue to be investigated.

Environmental and climatic factors may further influence respiratory infection dynamics. Temperature, humidity, rainfall and air pollution have been associated with variations in the transmission and burden of

respiratory pathogens, although the nature and strength of these relationships differ across viruses and geographical settings.[5] These interacting influences reinforce the need for continued surveillance and caution against assuming that respiratory infection patterns will necessarily return to their pre-pandemic characteristics.

The implications of these changes extend beyond epidemiological surveillance. Shifts in the timing and circulation of respiratory infections may influence how individuals perceive their risk, recognise symptoms, engage in preventive behaviours and seek healthcare support. The COVID-19 pandemic also transformed public awareness of respiratory health, introducing greater familiarity with concepts such as transmission prevention, testing, vaccination and self-isolation. However, changes in awareness do not necessarily translate into consistent preventive behaviours or appropriate self-care decisions. Vaccine hesitancy, misinformation, variations in perceived disease severity, and changing expectations of healthcare services remain important considerations.

Within this evolving landscape, community pharmacists have an important role in supporting the prevention and management of ARIs. As accessible healthcare professionals, pharmacists frequently encounter individuals seeking advice for cough, sore throat, nasal congestion, fever and other respiratory symptoms. Their responsibilities extend beyond the supply of over-the-counter (OTC) medicines to include symptom assessment, patient education, support for responsible self-care, identification of warning signs and timely referral when further medical evaluation is indicated. Pharmacists also contribute to antimicrobial stewardship by addressing inappropriate expectations for antibiotics and supporting the responsible use of medicines.

The COVID-19 pandemic demonstrated the important role of pharmacists in maintaining access to essential healthcare services and supporting public health responses during periods of disruption. Across different healthcare systems, pharmacists contributed to public health communication, respiratory infection testing, vaccination campaigns and continuity of medicine supply, reinforcing their role as accessible healthcare professionals in disease prevention and self-care. These experiences highlighted opportunities to strengthen pharmacists' contributions to public health beyond the pandemic, particularly through patient education, early assessment, preventive services and support for informed self-care decisions. However, the extent to which pharmacists can deliver these services varies across countries, influenced by differences in scope of practice, regulatory frameworks, funding, infrastructure and workforce capacity.[6-8]

As respiratory infection patterns evolve, pharmacists are increasingly required to apply their clinical judgement in assessing respiratory symptoms and tailoring self-care recommendations to individual patient needs, while responding to changing patient expectations and managing the volume and complexity of respiratory-related consultations. Changes in disease presentations and the availability of diagnostic technologies may also influence approaches to clinical assessment, triage and referral. At the same time, opportunities exist to strengthen pharmacy-based vaccination advocacy, public health education, surveillance and collaboration with other healthcare professionals. Realising these opportunities requires an understanding of pharmacists' preparedness, the resources and clinical guidance available to them, and the wider policy and health-system factors that enable or constrain their contribution.

Against this background, FIP convened an international insight board on 29 September 2026, entitled *Changing circulation patterns of acute respiratory infections: Implications for self-care and pharmacy practice*. The insight board brought together pharmacy experts and representatives from different countries to exchange perspectives on the implications of evolving ARI circulation patterns for patient behaviours, self-care and community pharmacy services.

The insight board aimed to assess how changes in ARI epidemiology are being experienced in pharmacy practice, including their influence on patients' perceptions of respiratory infections, vaccination attitudes, healthcare-seeking behaviours and expectations regarding OTC medicines and antibiotics. It also sought to explore the implications for pharmacists' day-to-day practice in relation to symptom assessment, counselling, triage, referral, workload and service delivery. Further attention was given to pharmacists' preparedness to respond to evolving respiratory health needs, the barriers and enablers affecting service provision, and opportunities to strengthen their contribution to prevention, vaccination advocacy, public health education and surveillance.

To address these objectives, the insight board discussions were guided by five questions exploring changes in patient perceptions and behaviours, implications for pharmacy practice, professional preparedness and opportunities to strengthen pharmacists' contributions to ARI prevention and management:

1. How have patients' perceptions, risk awareness and attitudes towards ARIs changed since the COVID-19 pandemic, including their attitudes towards vaccination?
2. How have evolving ARI circulation and seasonal patterns influenced when and how patients seek pharmacy support, their self-care behaviours and demand or expectations for OTC medicines and antibiotics?
3. How have evolving ARI patterns and presentations affected day-to-day pharmacy practice, including triage, counselling, self-care recommendations, referral, workload and the challenges pharmacists encounter?
4. How well equipped are pharmacists to respond to evolving ARI trends, and what gaps in education, clinical guidance, policy, tools or resources need to be addressed?
5. What opportunities exist for pharmacists to expand their role in the prevention and management of ARIs, and what would be needed to enable these opportunities in practice?

This report presents a thematic synthesis of the perspectives shared during the insight board, supplemented by written participant contributions and relevant published evidence. It seeks to identify emerging challenges, examples of pharmacy practice and opportunities for strengthening pharmacists' contribution to respiratory health, while informing future professional development, service delivery and policy priorities. The findings are intended to support pharmacists, professional organisations, policymakers and other healthcare stakeholders in considering how pharmacy services can respond effectively to an evolving respiratory infection landscape.

# 2 Methods overview

FIP convened a two-hour virtual insight board bringing together invited pharmacy professionals and representatives of professional organisations from different countries to explore how evolving acute respiratory infection (ARI) patterns are influencing patient behaviours, self-care practices and pharmacy service delivery.

The insight board adopted a qualitative, discussion-based approach to gather practice-informed perspectives, identify emerging challenges and explore opportunities to strengthen pharmacists' contributions to ARI prevention and management. Discussions were informed by published evidence on changing respiratory infection epidemiology and structured around five guiding questions.

Participant contributions were gathered through facilitated breakout discussions, plenary exchanges and written responses submitted through Padlet, an online collaborative bulletin board. These sources provided complementary perspectives for the development of this report.

## 2.1 Participant selection and representation

Participants were invited to contribute professional expertise and experiences from different healthcare systems and pharmacy practice environments. The selection sought to capture diverse geographical perspectives and differences in pharmacy services, professional responsibilities, regulatory frameworks and approaches to ARI prevention and management.

The geographical scope included six countries identified as priorities for representation: Spain, Poland, Germany, Romania, Slovakia and Australia, with Australia providing a comparative perspective beyond Europe. To broaden the discussion, participants from England (UK), the USA, Belgium, Iceland, Portugal, Croatia and Uruguay were also invited.

Potential contributors were identified based on their relevant professional expertise and country perspectives. Invitations were extended to suitable candidates across the identified countries, with participation determined by individual availability and acceptance. Consequently, the number of contributors from each country varied.

Participants brought experience from patient-facing pharmacy practice, professional organisations, pharmacy leadership, education and public health. This diversity enabled discussions to consider both the practical implications of changing ARI patterns for everyday pharmacy practice and the broader system-level factors influencing pharmacists' contributions.

Participation was by invitation rather than random selection. The perspectives gathered therefore reflect the experiences and professional judgements of contributors and should not be interpreted as statistically representative of pharmacy practice within the countries discussed.

## 2.2 Insight board design and discussion format

The insight board was moderated and structured around facilitated discussions, providing participants with opportunities to share experiences, compare perspectives and identify common challenges and priorities.

Discussions explored the implications of changing ARI circulation patterns for patient perceptions, vaccination attitudes, self-care behaviours and pharmacy practice. Participants also considered professional preparedness, gaps in education and clinical guidance, and opportunities to strengthen pharmacists' contributions to prevention, vaccination advocacy, public health education and surveillance.

The five guiding questions presented in the Introduction provided a consistent framework for discussion while allowing participants to elaborate on issues of particular relevance to their countries and practice settings.

## 2.3 Collection of participant insights

Qualitative information was collected through meeting recordings, facilitator-supported discussions and written contributions. The meeting was recorded to support accurate documentation of participants' perspectives and the preparation of the outcomes report. Contributions from the main session and breakout discussions were captured in transcripts, providing a record of the experiences, observations and examples shared.

Participants were also encouraged to contribute through Padlet, a virtual bulletin board that enabled them to provide written responses to the discussion questions and share supporting information. The platform was available before and during the meeting and remained open for additional contributions until 7 October 2026. This provided an opportunity for participants to expand on points raised verbally, contribute perspectives that could not be fully explored within the meeting time and share relevant examples from their countries.

An additional technical contribution describing pharmacy network initiatives in Spain was also made available to inform the report, including examples of pharmacy-supported influenza vaccination promotion and surveillance activities.

## 2.4 Synthesis and analysis of insights

The report draws on the plenary room and breakout discussion transcripts, written Padlet contributions and supplementary technical material provided by participants.

The material was reviewed to identify recurring themes, shared experiences, differences between country contexts and examples of established or emerging pharmacy practices. The synthesis was organised around the principal areas explored during the insight board, including patient perceptions and self-care behaviours, implications for pharmacy practice, professional preparedness, and opportunities and barriers to expanding pharmacists' contributions.

Where relevant, participant observations were considered alongside published scientific literature to provide context for the reported changes in respiratory infection circulation and their implications for healthcare delivery.

The analysis was intended to produce a high-level qualitative synthesis rather than a quantitative assessment of the frequency or distribution of particular views. Particular attention was given to preserving differences between healthcare systems and distinguishing participant-reported experiences from established scientific evidence.

## 2.5 Scope and considerations for reporting

This report presents a qualitative synthesis of the professional perspectives gathered through the insight board and accompanying written contributions. Its purpose is to highlight emerging practice considerations, identify areas of shared concern and inform priorities for strengthening pharmacy-supported ARI prevention and management.

As the insight board involved a selected group of invited participants, its findings should not be interpreted as representative of all pharmacists or healthcare systems. Differences in professional scope of practice, healthcare infrastructure, national policies and access to services may also influence the applicability of individual country experiences.

The meeting was conducted as a confidential, invitation-only consultation. Participants were informed that discussions would be recorded to support report development and that their contributions would be presented without individual attribution, unless otherwise agreed.

The report was developed independently by FIP, with the insight board supported through unconditional funding from Angelini Pharma.

# 3 Key insights

## 3.1 Changing perceptions of ARIs and vaccination

The insight board highlighted a complex shift in public perceptions of ARIs following the COVID-19 pandemic. Participants described greater familiarity with respiratory infection transmission, testing, prevention and vaccination, alongside increasingly varied perceptions of personal risk. Although the pandemic heightened awareness of respiratory illnesses, participants observed that this awareness has not consistently translated into appropriate preventive behaviours or sustained confidence in vaccination.

### 3.1.1 Increased awareness alongside changing perceptions of risk

A recurring observation was the coexistence of heightened concern among some patients and a growing tendency to normalise respiratory infections among others. Participants from Belgium, Poland, Spain and the USA described patients who remain cautious about respiratory symptoms and seek early reassurance, while others increasingly regard COVID-19 and similar infections as routine illnesses requiring little additional attention.

These contrasting responses were considered relevant in the context of changing ARI circulation patterns and overlapping respiratory symptoms. The contribution from Belgium highlighted difficulties patients may experience in distinguishing between influenza, COVID-19, RSV and other respiratory infections, especially when traditional seasonal expectations are less reliable. Participants emphasised that greater awareness of respiratory diseases does not necessarily equip individuals to assess symptom severity, recognise warning signs or determine when professional assessment is appropriate.

The perspective shared from the UK also highlighted how risk-based categorisation during the COVID-19 vaccination programme may have contributed to sustained anxiety among some clinically vulnerable groups. Conversely, reduced concern about COVID-19 among other population groups was identified as a possible contributor to declining interest in preventive measures.

Together, these observations suggest that pharmacists are increasingly required to respond to differing perceptions of respiratory infection risk, providing reassurance where appropriate while helping patients recognise situations that require timely clinical assessment.

### 3.1.2 Vaccine hesitancy, fatigue and changing confidence

Changes in vaccination attitudes emerged as a prominent theme across contributions from several countries. Participants from Poland, Portugal, Romania, Spain, Belgium and the UK described increasing vaccine hesitancy, fatigue with repeated vaccination recommendations, and declining perceptions of the seriousness of some respiratory infections.

In Romania, participants associated reduced vaccination confidence with public distrust arising from pandemic communication and the circulation of misinformation. Similar concerns were raised in Poland, where participants described greater public familiarity with vaccination but continued uncertainty about vaccine safety, effectiveness and the need for additional doses.

Contributions from Portugal highlighted differences in acceptance between individual vaccines. Participants noted that access to vaccination services does not necessarily translate into uptake, especially when patients perceive COVID-19 as less serious or experience fatigue following successive vaccination campaigns. A Portuguese participant reported influenza vaccination coverage of 66.2%, compared with 38.6% for COVID-19, among adults aged 60 years and older during the 2025/26 season.[9] This observation reinforces the importance of considering vaccine-specific attitudes rather than treating hesitancy as a uniform phenomenon.

The perspective shared from Australia similarly highlighted differences in how patients perceive individual respiratory infections and their prevention. Participants described reduced concern about COVID-19 among some patients, alongside growing attention to RSV and the availability of tests that distinguish between respiratory pathogens. These observations reinforce the importance of considering disease-specific perceptions and individual risk when discussing vaccination and other preventive measures.

The perspective shared from Belgium similarly highlighted that patients may accept one vaccine while questioning another. Differences in eligibility criteria, target populations, reimbursement and service availability were identified as potential sources of confusion for both patients and healthcare professionals.

These observations indicate that vaccine confidence cannot be addressed solely through general awareness campaigns. Participants emphasised the importance of understanding individual concerns, explaining personal risk and providing consistent, evidence-based information to support informed vaccination decisions.

### 3.1.3 Pharmacists' role in rebuilding trust and supporting informed prevention decisions

Despite the challenges described, participants consistently identified community pharmacists as accessible healthcare professionals who can support informed decisions about respiratory infection prevention.

*"I think people think they are now all virus experts after COVID, after the COVID pandemic."*

Contributions from Portugal and Poland highlighted how pharmacy-based vaccination services create opportunities to combine vaccine recommendations, patient education and administration within a familiar healthcare setting. However, participants emphasised that service availability alone is insufficient without personalised communication and attention to individual barriers.

A practical example was provided from Castile and León, Spain, where a public health campaign module integrated into the electronic prescription system supports influenza vaccination promotion through community pharmacies. The system identifies patients eligible for vaccination and displays a recommendation during dispensing, prompting pharmacists to discuss vaccination, address concerns and support informed decision-making. The intervention also enables documentation of patient responses and reasons for declining vaccination, generating information that can inform future public health campaigns.

Participants considered this type of structured, personalised engagement valuable because pharmacists can draw on established relationships and knowledge of patients' circumstances, including their health risks and contact with vulnerable family members.

The discussions therefore reinforced a shift from general vaccination promotion towards more individualised, risk-based prevention conversations. Pharmacists were viewed as important contributors not only to vaccine delivery, but also to rebuilding confidence, clarifying recommendations and helping patients translate awareness of respiratory infections into appropriate preventive action.

## 3.2 Evolving self-care behaviours and pharmacy-seeking patterns

The insight board highlighted changes in how patients seek support for ARIs, with community pharmacies increasingly recognised as accessible points of contact for symptom management, self-care advice and healthcare navigation. Participants described a shift in patient expectations following the COVID-19 pandemic, influenced by greater familiarity with pharmacy-based services, continued pressures on access to primary care and changing perceptions of respiratory infection risk.

However, these changes were not uniform. While some participants observed patients seeking advice earlier and taking a more proactive approach to managing symptoms, others reported delayed consultations, inappropriate self-treatment and continued expectations for antibiotics. The discussions highlighted the importance of distinguishing greater engagement in self-care from the ability to make safe and informed decisions about respiratory symptoms.

### 3.2.1 Changing patterns of care-seeking and access to pharmacy services

Participants described the COVID-19 pandemic as an important catalyst in changing how patients use community pharmacies. In several countries, the expansion of pharmacy-based testing, vaccination and other services increased public awareness of the support available beyond medicine dispensing.

In Portugal, participants observed that the availability of COVID-19 testing in community pharmacies contributed to changing expectations of pharmacy services. Patients increasingly approached pharmacists not only to obtain medicines but also to seek assessment, reassurance and advice on whether testing or further medical evaluation was necessary. This was viewed as an important development towards a more clinical and patient-centred model of pharmacy care.

A similar experience was described in Poland, where restrictions on access to other healthcare services during the pandemic increased reliance on community pharmacies. A participant cited research conducted during the first wave of COVID-19 showing increased patient attendance at pharmacies while many nearby healthcare facilities were not operating normally.[10] Although these findings relate to the pandemic period, the participant suggested that some of the resulting changes in care-seeking behaviour have persisted, supported by convenience, accessibility and continued pressures on primary care services.

Contributions from Portugal also highlighted the importance of community pharmacies in settings where access to a family doctor may be limited. In these circumstances, pharmacies can provide an accessible first point of professional contact, helping patients determine whether symptoms can be managed through self-care or require further assessment.

Nevertheless, participants cautioned that patients do not necessarily seek help at an appropriate stage of illness. Contributions from Belgium and Spain described differing behaviours, with some patients seeking early reassurance while others delay consultation because respiratory symptoms have become increasingly normalised. These differences reinforce the need for pharmacists to assess individual circumstances rather than rely on assumptions about how patients respond to respiratory infections.

### 3.2.2 Evolving expectations for OTC medicines and self-care support

The discussions suggested that demand for OTC medicines increasingly reflects a broader expectation of immediate advice and support rather than a straightforward request for a product.

Participants reported that patients commonly approach pharmacies with symptoms such as cough, sore throat, fever, nasal congestion and fatigue, often without knowing the underlying cause. In the context of overlapping respiratory infection presentations and less predictable circulation patterns, selecting an appropriate treatment may require more detailed consideration of symptom duration, severity, medical history, concomitant medicines and potential warning signs.

Contributions from Belgium and Poland highlighted the importance of helping patients understand the expected course of respiratory illnesses and the realistic benefits and limitations of symptomatic treatments. Patients may request stronger medicines when symptoms persist, even where additional treatment is unlikely to provide meaningful benefit. Participants therefore emphasised that appropriate self-care support requires counselling on symptom management, safe medicine selection and circumstances in which further medical assessment is needed.

A participant from the USA also described increasing requests for advice on products beyond traditional cold and flu treatments, including supplements, probiotics and products marketed for immune support. Although this observation was acknowledged as potentially specific to the participant's practice setting, it illustrates how patients' understanding of self-care may extend beyond conventional symptom relief.

The experience shared from Australia highlighted how access to diagnostic technologies and digital health information is influencing patients' expectations of pharmacy consultations. A participant described the availability of multipathogen self-testing kits, with some patients seeking pharmacists' advice on interpreting results and understanding their implications. Concerns were also raised about patients arriving with treatment expectations shaped by artificial intelligence tools, which may not adequately account for individual clinical circumstances. These developments reinforce pharmacists' role in helping individuals

interpret health information, understand the limitations of self-testing and make informed decisions about appropriate self-care.

Taken together, these observations indicate that pharmacists' contribution to self-care increasingly involves interpreting patient requests, assessing the appropriateness of proposed treatments, and supporting informed decisions, rather than simply responding to demand for particular products.

### 3.2.3 Persistent expectations for antibiotics and implications for responsible self-care

Inappropriate expectations for antibiotics emerged as a recurring concern across the discussions. Participants from Romania, Poland, Belgium, Spain and the USA described patients requesting antibiotics for respiratory symptoms, including presentations likely to be viral in origin.

In Romania, participants noted that some patients continue to regard antibiotics as a first-choice treatment for respiratory infections. Pharmacists therefore play an important role in explaining when symptomatic treatment is appropriate and when medical assessment is necessary. The contribution from Romania also described limited regulatory provisions permitting emergency antibiotic dispensing under specified conditions, illustrating how national legislation can influence the pharmacist's responsibilities in responding to patient requests.

Participants from Poland and Spain similarly emphasised that simply informing patients that antibiotics are unnecessary may not be sufficient to change expectations. Patients may have established beliefs about particular antibiotics or expect medication that they perceive as stronger or more effective.

A pharmacy-based sore-throat management pathway studied in Poland illustrates how rapid testing for group A Streptococcus can complement pharmacist counselling and referral. In the study, patients with positive test results were referred to a physician, while those with negative results received pharmacist counselling and symptomatic treatment. This approach provides a practical basis for explaining when antibiotics may not be indicated and supporting appropriate next steps, although the study did not directly assess subsequent reductions in antibiotic use.[11]

Participants advocated practical counselling approaches that explain why an antibiotic may not be indicated, recommend appropriate alternatives for symptom relief and establish clear expectations for recovery and reassessment.

*"It is not enough simply to say that they are not indicated."*

Research among Polish healthcare professionals also identified differences between recognition of antimicrobial resistance as a global concern and perceptions of its relevance to individual patients, reinforcing the need for continued professional education and patient counselling.[12]

A participant from Belgium highlighted forthcoming changes to the dispensing of selected oral antibiotics, under which pharmacists would supply the quantity corresponding to the prescribed treatment course rather than automatically dispensing a full commercial pack. Scheduled for implementation from January 2027, this approach aims to reduce leftover antibiotics and opportunities for inappropriate reuse or self-medication, while providing an additional opportunity for patient counselling.[13] However, the participant cautioned that dispensing arrangements alone cannot address inappropriate prescribing or insufficient patient counselling and must form part of a broader antimicrobial stewardship approach.

Croatia provided a contrasting regulatory perspective. A participant reported that patients generally recognise that antibiotics require a medical prescription and therefore do not routinely approach community pharmacies expecting pharmacists to supply them without one. This illustrates how established regulatory arrangements can shape patient expectations, although appropriate prescribing and counselling remain important components of antimicrobial stewardship.

These experiences reinforce the importance of pharmacists' contribution to antimicrobial stewardship within routine ARI consultations. Appropriate self-care involves not only recommending effective symptomatic treatments but also helping patients understand the limitations of antibiotics, avoid unnecessary medicine use and recognise when further clinical assessment is required.

Overall, the insight board suggested that changing pharmacy-seeking behaviours are creating opportunities for pharmacists to provide more structured, patient-centred respiratory care. However, meeting these expectations safely requires sufficient time for assessment and counselling, access to appropriate clinical guidance and clear pathways for referral. These implications for pharmacy practice and service delivery are explored in the following section.

## 3.3 Implications for pharmacy practice and service delivery

The insight board highlighted the growing complexity of managing ARIs in community pharmacy settings. Participants described an expanding role for pharmacists in symptom assessment, triage, counselling, prevention and referral, reflecting both changing patient expectations and the challenges associated with overlapping respiratory infection presentations.

While these developments create opportunities to strengthen pharmacy-based care, participants emphasised that they also increase professional responsibilities and place additional demands on pharmacy workflows. The discussions highlighted a growing need to balance the accessibility of community pharmacies with the clinical, operational and organisational requirements of delivering safe and effective services.

### 3.3.1 Increasing complexity of symptom assessment and triage

Participants consistently identified symptom assessment and triage as increasingly important components of pharmacy-based ARI management. Influenza, COVID-19, RSV and other respiratory infections may present with similar symptoms, making it difficult to distinguish between potential causes based on clinical presentation alone.

Contributions from Belgium, Poland, Romania, Portugal and Spain highlighted the importance of moving beyond symptom-based product recommendations towards structured assessment. Participants described the need to consider symptom onset, duration and severity, underlying health conditions, concomitant medicines, vaccination history and potential warning signs before determining whether self-care is appropriate.

The contribution from Spain emphasised that the pharmacist's primary objective should not be to identify the causative pathogen with certainty based on symptoms alone, but rather to determine the appropriate level of care. A practical triage approach was described in which pharmacists distinguish between patients who can safely manage their symptoms through self-care, those requiring scheduled medical assessment or follow-up, and those needing urgent referral.

Particular attention was given to populations at increased risk of complications, including older people, young children, pregnant women, immunocompromised individuals and people with significant respiratory or cardiovascular conditions. Participants emphasised that these patients may require earlier assessment or a lower threshold for referral.

However, the ability to undertake structured assessment varies between healthcare systems. In Romania, for example, the limited formal recognition of rapid diagnostic testing as a pharmacy service was identified as a constraint on differential assessment. Participants from Poland similarly highlighted diagnostic uncertainty and the need for clearer pathways to support decisions about self-care, testing and referral.

These experiences suggest that the growing clinical role of pharmacists requires accessible, evidence-based assessment tools and clearly defined referral criteria to support consistent decision-making.

### 3.3.2 Expanding counselling responsibilities and patient safety considerations

Participants described respiratory symptom consultations as increasingly demanding, particularly when patients present with specific treatment expectations, conflicting health information or multiple underlying risk factors.

Contributions from Belgium, Poland and Portugal highlighted that straightforward-seeming requests for cough, cold or influenza medicines may require detailed clinical conversations. Pharmacists must consider whether treatment is necessary, whether the selected medicine is appropriate and whether patients may be at risk of adverse effects or interactions.

An important counselling consideration was the potential for therapeutic duplication, particularly when patients use multiple combination products for respiratory symptoms. Participants emphasised the need to review existing medicines, explain appropriate dosing and ensure that recommendations are suitable for the patient's clinical circumstances.

The increasing availability of digital health information was also identified as a challenge. Participants from the UK and the USA described patients arriving at pharmacies with self-diagnoses or treatment expectations influenced by online sources and artificial intelligence tools. Where this information is inaccurate or incomplete, pharmacists may need to spend additional time clarifying misconceptions and explaining appropriate treatment options.

These discussions reinforced the importance of the pharmacist's role in supporting responsible medicine use and patient safety. However, they also highlighted that effective counselling depends on sufficient consultation time, access to relevant patient information and opportunities for meaningful interaction.

### 3.3.3 Referral, diagnostic support and continuity of care

Participants emphasised that effective pharmacy-based ARI management requires more than identifying when a patient should seek medical attention. Referral pathways must enable patients to access appropriate care in a timely manner and support communication between pharmacists and other healthcare professionals.

The contribution from Spain highlighted the importance of distinguishing between routine medical assessment and urgent referral, particularly when patients present with breathing difficulties, chest pain, confusion, dehydration, rapid deterioration or worsening of an underlying condition. Participants also noted that effective referral should involve clear criteria and communication channels with primary care, rather than relying solely on general advice to consult a physician.

Access to diagnostic testing emerged as another important consideration. In Portugal, participants described the development of structured approaches to managing common ailments, including respiratory conditions, which may incorporate rapid diagnostic testing where appropriate. Such approaches can support more consistent clinical decision-making when integrated into defined assessment and referral pathways.

Conversely, participants from other countries highlighted limitations in the availability, recognition or integration of diagnostic services within community pharmacy practice. These differences illustrate how national regulatory frameworks and service models influence pharmacists' ability to support respiratory infection management.

The perspective shared from Australia highlighted how the availability of multipathogen self-testing is creating additional opportunities for pharmacists to support patients in interpreting test results and deciding on appropriate next steps. Participants also described patients seeking professional advice on whether their respiratory symptoms warranted medical assessment. These experiences reinforce the importance of pharmacists' clinical judgement in interpreting patient-reported information, supporting informed self-care and facilitating timely referral when indicated.

A further challenge concerned access to clinical information. A participant from the USA described situations in which pharmacists receive antibiotic prescriptions without access to the diagnostic findings or clinical reasoning underlying treatment decisions. Limited access to relevant patient records can restrict pharmacists' ability to assess treatment appropriateness, identify potential risks and contribute fully to antimicrobial stewardship.

Overall, participants considered stronger integration with primary care, appropriate diagnostic support and access to relevant clinical information important for ensuring continuity and safety as pharmacy-based respiratory care evolves.

### 3.3.4 Workload, workforce capacity and operational pressures

The expansion of pharmacists' responsibilities was accompanied by concerns about workload and workforce capacity. Participants described increasing demands arising from symptom assessment, counselling, vaccination, testing, documentation and other professional and administrative activities, often alongside existing dispensing responsibilities.

Contributions from Poland and Romania highlighted the pressure created when additional services are introduced without corresponding increases in staffing or operational support. Participants noted that comprehensive clinical consultations require time and attention, which can be difficult to provide consistently in busy community pharmacy environments.

The contribution from Belgium similarly highlighted the potential overlap between respiratory infection peaks, vaccination campaigns, medicine supply challenges and increased demand for patient reassurance. These pressures can intensify when circulation patterns are less predictable, making it more difficult to anticipate service demand and allocate resources.

A participant from Spain observed that respiratory symptom consultations are no longer necessarily concentrated within traditionally expected seasonal periods. This reduced predictability was considered relevant to pharmacy staffing, stock management and the timing of preventive communication.

Participants also raised concerns about the sustainability of expanding professional responsibilities without adequate recognition of the time and expertise involved. In Portugal, structured clinical approaches were viewed as beneficial for improving care, but participants acknowledged that their implementation requires suitable consultation conditions, practical tools and sufficient workforce capacity.

During the plenary discussion, the cumulative impact of introducing new pharmacy services was also highlighted. Rather than adding separate responsibilities to existing workflows, participants and the moderator emphasised the importance of considering how services can be integrated into a coherent model of pharmacy care.

These observations suggest that the continued expansion of pharmacy-based ARI services must be accompanied by attention to workforce planning, workflow design and the resources required to deliver clinical care safely and sustainably.

### 3.3.5 From medicine supply to integrated respiratory care

Across the discussions, participants described a broader transition in community pharmacy practice, from primarily supplying medicines towards providing more comprehensive support for respiratory health.

This transition encompasses symptom assessment, appropriate self-care recommendations, vaccination, diagnostic testing where authorised, antimicrobial stewardship and referral. Although the extent of service development varies considerably between countries, participants identified common challenges relating to clinical infrastructure, professional responsibilities and integration with the wider healthcare system.

Australia provided a comparative example of how evolving professional responsibilities may support this transition. A participant described the expansion of pharmacist prescribing roles and the increasing use of dedicated consultation spaces for more comprehensive patient assessments. Although these developments are not specific to ARI management, they illustrate how broader changes in pharmacy practice could provide opportunities to strengthen respiratory symptom assessment, counselling and referral within community pharmacy services.

*“Because so much that we're doing now in an OTC context, there's no documentation, no one has any idea what happened at the time.”*

The insight board reinforced that the value of pharmacy-based ARI care lies not simply in expanding the number of services available, but in ensuring that these services are coordinated, clinically appropriate and responsive to patient needs.

Participants therefore highlighted the importance of developing integrated approaches that allow pharmacists to combine prevention, assessment, treatment advice and referral within practical and sustainable workflows. The professional capabilities, resources and policy conditions required to support this transition are examined in the following section.

## 3.4 Professional preparedness and support needs

The insight board highlighted considerable variation in pharmacists' preparedness to respond to evolving ARI patterns. Participants recognised that the COVID-19 pandemic accelerated developments in pharmacy practice, including vaccination services, point-of-care testing, consultation facilities and the adoption of new clinical responsibilities. However, these developments have not occurred uniformly across countries, and the availability of professional competencies does not always correspond with the infrastructure, regulatory authority or resources needed to apply them in practice.

A recurring theme was that strengthening pharmacists' contributions to ARI prevention and management requires more than additional education. Participants emphasised the need for practical clinical guidance, access to diagnostic and patient information, appropriate funding and supportive professional environments. The discussions also highlighted the importance of ensuring that pharmacists are willing, confident and adequately supported to undertake expanded responsibilities.

### 3.4.1 Education, clinical competencies and continuing professional development

Participants generally recognised pharmacists' existing strengths in medicines management, self-care, prevention and patient communication. Nevertheless, several contributors identified a need to strengthen competencies related to the clinical assessment of respiratory symptoms and the management of increasingly complex patient presentations.

Contributions from Poland and Romania highlighted the importance of continuing professional development in symptom assessment, recognition of warning signs, appropriate self-care recommendations, antimicrobial stewardship and referral. In Poland, participants observed that professional preparedness in vaccination had advanced considerably following the pandemic, while structured respiratory assessment and diagnostic decision-making remained areas requiring further development.

A participant from the UK described changes to pharmacy education intended to strengthen history-taking, clinical reasoning, recognition of red flags and referral competencies. These developments were considered relevant as pharmacists assume greater responsibilities for managing common conditions and, in some settings, prescribing medicines. However, participants also noted differences in the depth and consistency of training and the importance of maintaining competencies after qualification.

Croatia provided a further example of how professional education is being aligned with anticipated changes in pharmacists' scope of practice. A participant explained that vaccination-related education has been incorporated into the regular university pharmacy curriculum in recent years. However, a formal training programme for practising pharmacists seeking to acquire the competencies required to administer vaccines has not yet been established. This distinction highlights the importance of ensuring that both undergraduate education and postgraduate professional training develop alongside the regulatory frameworks needed to support expanded pharmacy services.

The contribution from Belgium advocated an integrated approach to professional development rather than education organised exclusively around individual respiratory pathogens. Participants highlighted the need to bring together prevention, vaccination, symptom assessment, responsible use of OTC medicines, antimicrobial stewardship, risk communication and referral within a coherent framework.

In addition, participants from Spain emphasised the importance of keeping pharmacists informed about changes in respiratory virus circulation, vaccination recommendations, diagnostic options and available treatments. Communication skills, including approaches to addressing misinformation and supporting informed decisions, were also identified as important areas for continued development.

Overall, participants considered education essential but insufficient in isolation. Professional development must be accompanied by practical opportunities to apply acquired competencies within appropriately supported pharmacy services.

### 3.4.2 Practical clinical guidance and decision-support tools

The need for accessible, standardised and practically applicable clinical guidance emerged as a prominent theme.

Participants described the value of concise, symptom-based algorithms that support pharmacists in assessing common respiratory presentations, identifying patients at increased risk of complications and determining appropriate management or referral. Such tools were considered important where symptoms overlap and diagnostic certainty is limited.

The contribution from Belgium highlighted the need for guidance covering expected symptom duration, suitable self-care measures, contraindications, warning signs and referral criteria. Participants emphasised that guidance should be designed for use during routine pharmacy consultations rather than requiring pharmacists to interpret lengthy technical documents while attending to patients.

Slovakia provided an example of nationally developed clinical guidance, with a participant identifying the *Standard Guidelines for the Management of Patients with Suspected Acute Upper Respiratory Tract Infections in Community Pharmacies*, issued by the Ministry of Health of the Slovak Republic. This example illustrates how structured guidance can support consistent approaches to respiratory symptom assessment and management in community pharmacy practice.

Contributions from Poland and Spain also emphasised the potential value of integrating clinical algorithms and prompts directly into pharmacy software. Participants suggested that embedding decision support within existing workflows could improve usability and reduce reliance on separate educational resources.

Another identified need was access to timely epidemiological information. Participants noted that surveillance findings are most useful to frontline pharmacists when translated into concise, actionable updates explaining which respiratory infections are circulating and how this information may influence assessment, prevention and patient communication.

The discussions therefore highlighted a distinction between the availability of scientific information and its practical application. Pharmacists require not only evidence about changing ARI patterns, but also guidance on how to respond appropriately during individual patient encounters.

### 3.4.3 Diagnostic capabilities and access to clinical information

Access to diagnostic tools and relevant patient information was identified as an important determinant of pharmacists' ability to provide safe and effective ARI care.

Participants described differences in the availability and integration of point-of-care testing across countries. In Slovakia, point-of-care testing, including C-reactive protein testing, was reported as an established component of pharmacy practice. In contrast, participants from Romania identified limitations in the formal recognition of rapid diagnostic testing as a pharmacy service.

In Portugal, participants noted that rapid diagnostic tests may be available but are generally paid for directly by patients. This was identified as a potential barrier to access, epecially where testing could support more informed clinical assessment and referral.

Beyond diagnostics, limited access to patients' clinical and medication histories emerged as a significant cross-cutting concern. Participants emphasised that pharmacists may be expected to assess symptoms, recommend treatment, administer vaccines or refer patients without access to information needed to understand their wider clinical circumstances.

The experience shared from Poland illustrated this challenge, with pharmacists able to record vaccination interventions in electronic systems but unable to access broader patient health information. In Slovakia, community pharmacists have access to electronic prescriptions but not to patients' clinical data from their

medical records. Limitations in access to comprehensive clinical information were also reported in Portugal. These constraints were considered especially relevant when managing patients with chronic conditions, multiple medicines or increased vulnerability to respiratory infection complications.

Participants therefore highlighted the importance of appropriate access to medication histories, vaccination records, relevant diagnoses and diagnostic results, supported by clear data governance arrangements and secure information-sharing mechanisms.

The discussions reinforced that digital integration is not simply an administrative improvement, but an important consideration for patient safety, continuity of care and effective collaboration between healthcare professionals.

### 3.4.4 Regulatory frameworks, remuneration and sustainable service provision

Participants emphasised that professional preparedness is influenced by the regulatory and financial environments in which pharmacists practise.

Differences in scope of practice determine whether pharmacists can provide vaccination, diagnostic testing, structured clinical assessment and other ARI-related services. Even where legislation permits expanded responsibilities, participants noted that implementation may be constrained by limited funding, inadequate infrastructure or insufficient recognition of pharmacists' clinical contributions.

In Romania, participants highlighted the lack of separate remuneration for certain counselling and clinical activities, despite the professional time and expertise involved. The need for formal recognition and sustainable funding of pharmacy-based services was therefore identified as a priority.

Contributions from Portugal similarly emphasised that pharmacists may already possess relevant capabilities but require supportive policies and funding arrangements to apply them consistently. Participants also noted that out-of-pocket payment for diagnostic testing can limit patients' access to pharmacy-based services.

In Poland, the expansion of vaccination services was considered a significant professional development, but participants raised concerns about the relationship between service expectations, remuneration and the resources available for implementation.

The contribution from Australia highlighted a related challenge in recognising the clinical value of routine pharmacy consultations. A participant noted that pharmacists frequently provide assessment and advice for patients seeking OTC treatment without receiving direct remuneration when no product is supplied. As pharmacists' roles expand towards more comprehensive clinical consultations, this experience raises questions about financing models that recognise professional advice and assessment as healthcare services in their own right, rather than activities dependent on medicine sales.

> *"So we're often providing those consultations more or less free of charge if we're not supplying any products."*

Across these experiences, participants highlighted the importance of recognising pharmacy-based clinical activities as healthcare services with defined responsibilities, appropriate documentation and quality standards, rather than treating them solely as extensions of medicine supply.

The discussions suggested that sustainable implementation requires attention to both sides of service financing: adequate remuneration for pharmacies and affordability for patients.

### 3.4.5 Workforce readiness, professional motivation and career development

An important dimension of professional preparedness concerned pharmacists' willingness and capacity to adopt expanded clinical roles.

Participants acknowledged that regulatory permission, education and infrastructure do not necessarily result in widespread service implementation. Pharmacists may differ in their professional interests, confidence, motivation and willingness to assume additional responsibilities, particularly where these involve greater clinical accountability or workload.

Contributions from Poland highlighted concerns about professional engagement, the practical uptake of expanded services and the need to encourage pharmacists to participate in new areas of practice. Participants also noted that some pharmacists may prefer established professional responsibilities rather than pursuing additional clinical roles.

In the UK, participants discussed the importance of strengthening competencies through undergraduate education while also ensuring that graduates can maintain and apply these skills in practice. Concerns were raised about potential gaps between educational preparation and the realities of service delivery.

Participants from Poland and Romania further highlighted the importance of attracting students to pharmacy, strengthening professional development opportunities and ensuring that pharmacy remains an appealing and rewarding career. However, the experience was not uniform. Contributions from Portugal suggested growing professional interest in expanded pharmacy services, demonstrating that willingness to adopt new responsibilities may vary across practice environments.

The contribution from Australia broadened the discussion of workforce preparedness beyond pharmacists alone. A participant emphasised the importance of providing pharmacy assistants with appropriate training and practical support tools, recognising that they are often the first members of the pharmacy team to engage with patients. This perspective highlights the value of preparing the wider pharmacy workforce to recognise when pharmacist involvement is required and to support consistent, coordinated patient interactions within their respective roles.

These perspectives reinforced the need to consider workforce readiness as an essential component of service development. Successful implementation depends not only on whether pharmacists are authorised and trained to deliver services, but also on whether they have the capacity, motivation and professional support to do so.

### 3.4.6 Towards a coordinated approach to professional preparedness

Taken together, the discussions highlighted that pharmacists' preparedness to respond to evolving ARI patterns depends on the alignment of professional competencies, clinical tools, infrastructure, regulatory frameworks and workforce support.

Participants identified positive developments across countries, including expanded vaccination competencies, consultation facilities, point-of-care testing and structured clinical guidance. However, these developments were often accompanied by gaps in access to patient information, service funding, professional recognition or implementation support.

Participants also acknowledged that the experiences discussed were drawn predominantly from higher-income healthcare systems and that the availability of professional resources, clinical infrastructure and opportunities for service development may differ substantially in other settings.

The insight board therefore reinforced the need to move beyond isolated interventions towards a coordinated approach to professional preparedness. Education and training must be complemented by practical decision-support tools, appropriate digital integration, sustainable financing and supportive working environments.

*"The main gaps are not limited to the education and training."*

Importantly, participants emphasised that expanding pharmacists' responsibilities should not be viewed solely as a matter of increasing professional scope. It also requires healthcare systems and the pharmacy profession to develop the conditions necessary for these responsibilities to be delivered safely, consistently and sustainably.

These considerations provide an important foundation for examining future opportunities to strengthen pharmacists' contributions to ARI prevention, management and public health.

## 3.5 Opportunities to strengthen pharmacists' contributions to ARI prevention, management and public health

The insight board identified opportunities to strengthen pharmacists' contributions across the continuum of ARI prevention and management. Participants considered community pharmacies well positioned to support early identification of risk, vaccination, symptom assessment, responsible self-care, antimicrobial stewardship and timely referral, reflecting their accessibility and frequent contact with patients.

However, the discussions emphasised that these opportunities should not be approached as a series of additional, isolated services. Rather, participants advocated greater integration of pharmacists into coordinated respiratory care pathways, supported by appropriate clinical protocols, information systems, interprofessional collaboration and sustainable funding.

The potential contribution of community pharmacies to public health surveillance also emerged as an important area for development, particularly as changing respiratory infection patterns create a need for timely information about emerging community health needs.

### 3.5.1 Strengthening vaccination and preventive care

Participants identified vaccination as an established and expanding area of pharmacists' contribution to ARI prevention. Experiences from several countries demonstrated how the COVID-19 pandemic accelerated the development of pharmacy-based vaccination services and created opportunities to broaden preventive care.

In Poland, participants described the substantial expansion of pharmacist vaccination responsibilities following the pandemic, including the provision of vaccinations against several respiratory and other vaccine-preventable diseases. This experience was presented as an example of how professional competencies, regulatory changes and service financing can support the development of new pharmacy-based public health services.

Contributions from Portugal similarly highlighted the role of community pharmacies in delivering seasonal influenza and COVID-19 vaccinations. Participants considered the existing vaccination infrastructure a foundation for strengthening pharmacists' contributions to other aspects of respiratory infection prevention and management.

In Romania, pharmacy-based seasonal influenza vaccination was identified as an established service for appropriately trained pharmacists, although participants noted that further development would require stronger professional recognition, supportive policies and sustainable remuneration.

Germany and Croatia provided further perspectives on the development of pharmacy-based vaccination services. A participant from Germany described the introduction of influenza and COVID-19 vaccination in community pharmacies as a positive development, while acknowledging the importance of engagement with medical colleagues as pharmacists' responsibilities evolve. In Croatia, vaccination-related education has been incorporated into the university pharmacy curriculum, although a formal training pathway for practising pharmacists has not yet been established. Anticipated regulatory developments could create future opportunities for pharmacists to administer vaccines in community pharmacy settings. Together, these experiences illustrate different stages of service development and the importance of aligning professional preparation, regulatory authority and interprofessional collaboration.

Beyond vaccine administration, participants emphasised the importance of pharmacists' contribution to identifying patients who may benefit from vaccination, discussing individual risk and addressing concerns. This was considered relevant in the context of changing vaccine confidence and the increasingly diverse recommendations for different respiratory infections and population groups.

The experience shared from Spain provided an example of how pharmacy-based prevention can be supported through digital integration. In Castile and León, a public health campaign module incorporated into the electronic prescription system enables the identification of patients eligible for influenza vaccination.

Community pharmacists can use the resulting prompts to provide personalised information, discuss concerns and support informed vaccination decisions. The intervention also enables the recording of patients' responses, including reasons for declining vaccination, which can inform the design of future public health campaigns.

These experiences suggest that the opportunities for pharmacists in vaccination extend beyond increasing the number of administration sites. Participants highlighted the potential for pharmacies to support more systematic identification of eligible individuals, personalised prevention conversations and closer integration with wider immunisation programmes.

### 3.5.2 Developing integrated pathways for respiratory infection care

A prominent theme was the opportunity to develop more comprehensive pharmacy-based respiratory care pathways that connect prevention, assessment, self-care and referral.

Participants from Belgium, Poland and Portugal advocated approaches that bring together functions which are often developed separately, including vaccination, symptom assessment, point-of-care testing, OTC medicine counselling, antimicrobial stewardship and referral.

The contribution from Belgium proposed an integrated, symptom-based approach rather than separate services organised around individual respiratory pathogens. Such a model would allow pharmacists to assess patients presenting with respiratory symptoms, identify relevant risk factors, recommend appropriate self-care and determine when further medical evaluation is required.

Participants from Poland similarly described the potential for community pharmacies to provide a more coordinated patient journey, incorporating structured assessment, testing where appropriate, treatment advice, identification of warning signs and consideration of vaccination needs.

In Portugal, participants emphasised that future development should build on existing pharmacy services and integrate them into wider healthcare pathways. Rather than viewing vaccination, testing and common ailment management as independent activities, pharmacies could contribute to a more continuous model of care, from prevention through to follow-up.

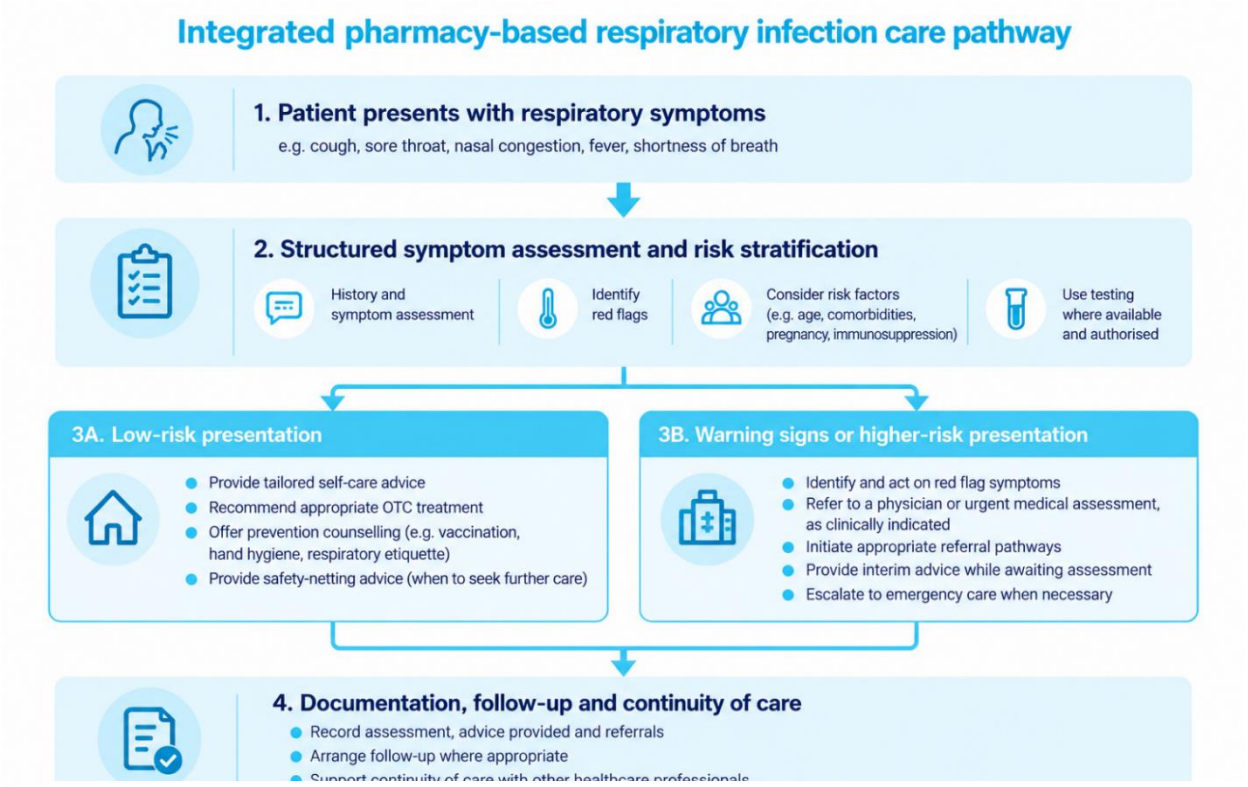



Figure 1 Integrated pharmacy-based respiratory infection care pathway

These perspectives reinforced the importance of developing services around patients' needs rather than individual professional activities. Participants also emphasised that integrated respiratory care should maintain clear boundaries between pharmacy-based assessment and medical diagnosis, with appropriate referral arrangements and clinical oversight.

### 3.5.3 Expanding opportunities in early detection and antimicrobial stewardship

Participants identified structured respiratory assessment and diagnostic support as areas in which pharmacists could make a greater contribution to early identification of illness and appropriate management.

The accessibility of community pharmacies was considered valuable for patients seeking timely advice about respiratory symptoms. Where authorised and appropriately supported, pharmacists could contribute through structured symptom assessment, point-of-care testing and identification of patients requiring medical attention.

A participant from the USA highlighted opportunities for pharmacists to become more involved in respiratory infection testing and treatment pathways, including antiviral treatment where permitted by national or local scope-of-practice arrangements.

Contributions from Belgium and Poland similarly emphasised the potential for validated diagnostic tools to support more informed decisions about self-care and referral. However, participants cautioned that testing should not be introduced as an isolated activity or regarded as a substitute for appropriate clinical assessment. Diagnostic services need to be embedded within defined pathways that address interpretation of results, treatment decisions, documentation and follow-up.

Antimicrobial stewardship was also identified as an important opportunity. Participants described how pharmacists can help reduce inappropriate expectations for antibiotics, support responsible medicine use and reinforce evidence-based management of respiratory symptoms.

Where pharmacists have access to relevant clinical information and appropriate professional authority, their contribution could extend to more active participation in antimicrobial treatment review and coordination with prescribers.[14]

The discussions suggested that strengthening these functions could improve the consistency of pharmacy-based respiratory care, provided that service development is accompanied by clear protocols, appropriate training and effective collaboration with other healthcare professionals.

### 3.5.4 Community pharmacies as contributors to respiratory infection surveillance

An important opportunity identified during the insight board was the potential contribution of community pharmacies to respiratory infection surveillance.

Participants noted that community pharmacies encounter patients with respiratory symptoms and respond to demand for medicines, tests and other health products on a daily basis. Changes in these interactions may provide useful information about emerging community health needs, particularly when respiratory infection circulation becomes less predictable.

The contribution from Spain provided a practical example through a sentinel community pharmacy network operating in Castile and León. The network monitors the use of medicines for cold and influenza symptoms, generating information that can complement established clinical and virological surveillance.

According to the participant's supplementary technical submission, the network comprises approximately 70 community pharmacies and uses medicine demand data to monitor changes associated with respiratory infection activity. The participant reported that this approach has provided signals ahead of influenza incidence peaks, offering potential value for public health preparedness.

The experience from Spain illustrates how information generated through routine pharmacy activity may contribute to earlier recognition of changes in community respiratory illness patterns. Importantly, medicine demand data do not establish a diagnosis or identify the causative pathogen and should therefore be

interpreted as complementary indicators rather than replacements for established epidemiological surveillance.

Participants also discussed opportunities to expand the types of information collected, potentially incorporating demand for respiratory diagnostic tests and other relevant products.

The contribution from Belgium similarly suggested that changes in requests for cough medicines, antipyretics, tests and antibiotics could provide useful signals about community health needs. However, participants emphasised that any such approaches would require appropriate aggregation, standardisation, data protection safeguards and coordination with public health authorities.

These discussions highlighted the potential for community pharmacies to contribute not only to individual patient care but also to broader population health intelligence. The development of such functions would require reliable data systems, agreed reporting arrangements and clear understanding of the strengths and limitations of pharmacy-generated surveillance information.

### 3.5.5 Strengthening interprofessional collaboration and health-system integration

Participants consistently emphasised that the expansion of pharmacy-based ARI services depends on stronger integration with the wider healthcare system.

Contributions from Portugal and Spain highlighted the importance of establishing clear referral pathways and effective communication between community pharmacies, primary care providers and other healthcare services. Participants noted that pharmacists may identify patients requiring further assessment, but the value of this intervention depends on whether patients can access appropriate follow-up care.

The need for interoperable digital systems was also highlighted. Access to relevant patient information, shared documentation and communication channels could support safer clinical decisions and reduce fragmentation between pharmacy-based services and other parts of the healthcare system. Participants considered these arrangements important where pharmacists undertake testing, vaccination, structured clinical assessment or other expanded responsibilities.

The discussions also highlighted the importance of collaboration in developing clinical protocols, defining professional responsibilities and establishing quality standards. Expanded pharmacy services were not presented as a replacement for other healthcare professionals, but as an opportunity to make better use of pharmacists' expertise within coordinated care pathways.

This approach was considered especially relevant in healthcare systems experiencing pressures on primary care access and workforce capacity.

### 3.5.6 Demonstrating the value and sustainability of pharmacy-based services

A further opportunity concerned strengthening the evidence available to demonstrate pharmacists' contributions to respiratory health.

Participants from Romania highlighted the need for systematic evaluation of pharmacy-based services, including their effects on appropriate healthcare utilisation, medicine use, patient outcomes and healthcare expenditure. Although pharmacists provide substantial support for patients with respiratory symptoms, participants noted that the benefits of these interventions are not always captured through routine reporting or formal service evaluation.

The contribution from Romania emphasised that better documentation and evaluation could support stronger recognition of pharmacy services within national healthcare policies and funding arrangements. Evidence from established services in other healthcare systems was also considered potentially useful when exploring new models of care.

Participants from Spain similarly highlighted the importance of defining quality indicators, evaluation arrangements and data governance when pharmacies are assigned public health responsibilities.

These perspectives suggest that the development of expanded ARI services should be accompanied by mechanisms to assess implementation, patient access, clinical outcomes and sustainability.

Participants emphasised that demonstrating service value is important not only for professional recognition, but also for informing policy decisions and supporting the long-term integration of pharmacists into healthcare delivery.

### 3.5.7 Towards an integrated role for pharmacy in respiratory health

Across the discussions, participants identified opportunities for community pharmacies to contribute more systematically to ARI prevention, early assessment, self-care, antimicrobial stewardship, referral and public health surveillance.

The country experiences highlighted both the potential of expanded pharmacy services and the importance of adapting approaches to different regulatory and healthcare environments.

A consistent message was that the development of these responsibilities should not simply involve transferring additional tasks to pharmacists. Effective implementation requires alignment between professional competencies, clinical authority, infrastructure, information systems, workforce capacity and sustainable funding.

The insight board therefore highlighted an opportunity to position community pharmacies more fully within coordinated respiratory health pathways, connecting individual patient support with broader prevention and public health objectives.

As ARI circulation patterns continue to evolve, participants considered integrated, responsive and evidence-based approaches essential to enabling pharmacists to contribute safely and sustainably to respiratory health.

# 4 Discussion

The insight board highlighted the evolving interplay between changing ARI patterns, public perceptions of respiratory health and the role of community pharmacy. Although the COVID-19 pandemic increased global awareness of respiratory infections and accelerated the development of pharmacy-based services, participants described a complex and uneven transition towards more integrated approaches to respiratory care.

Three interconnected considerations emerged across all discussions: the need to support informed self-care in the context of changing patient behaviours; the increasing clinical complexity of pharmacy-based ARI management; and, the importance of ensuring that expanded professional responsibilities are matched by appropriate health-system support.

## 4.1 Changing ARI patterns require more responsive approaches to self-care

The discussions highlighted that changes in respiratory infection circulation and public perceptions, have made traditional assumptions about seasonal demand and patient behaviour less reliable.

Participants described differing responses to respiratory infection risk, ranging from heightened concern and early help-seeking to reduced perceptions of severity and delayed consultation. These differences have implications for the timing and nature of pharmacy interventions, particularly when patients present with overlapping symptoms or uncertainty about appropriate treatment.

The findings reinforce the importance of support for person-centred self-care. Greater public familiarity with respiratory infections does not necessarily translate into the ability to distinguish between self-limiting illness and presentations requiring clinical assessment. Similarly, increased access to health information does not guarantee that patients can interpret or apply it appropriately.

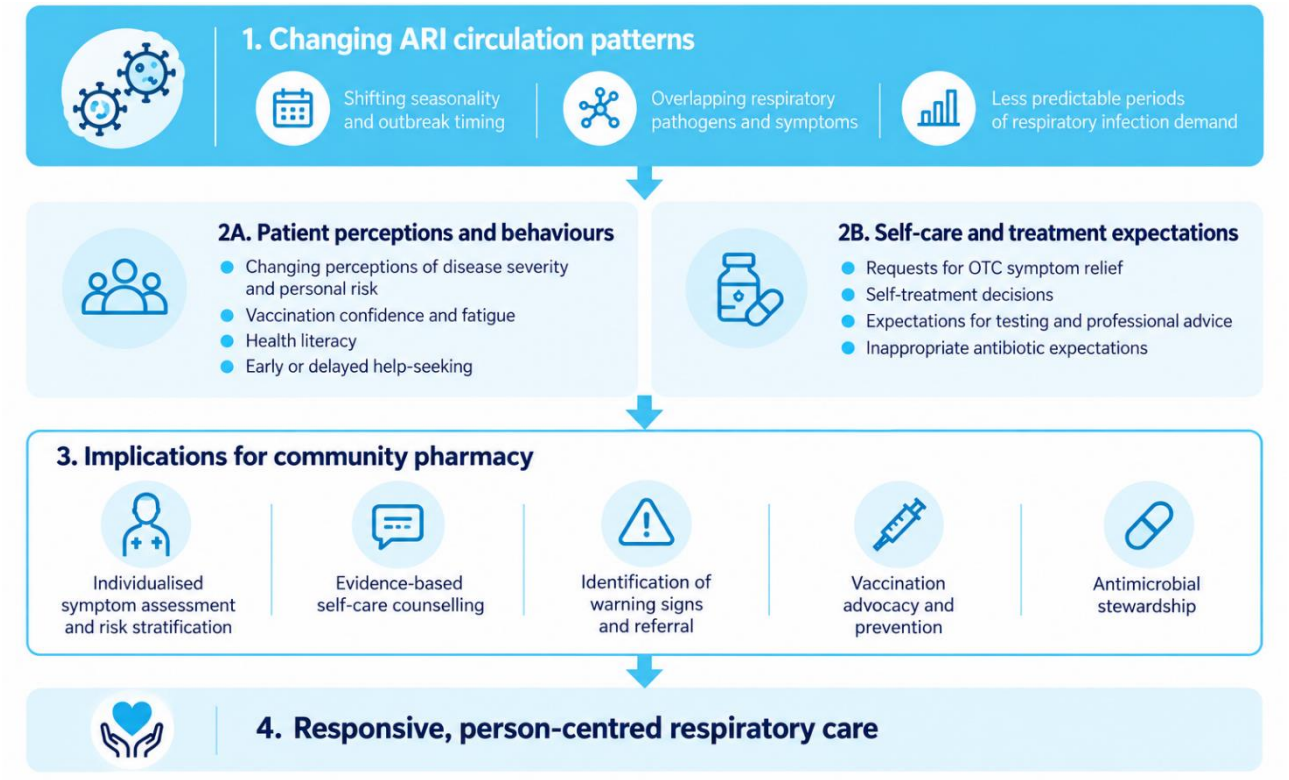



Figure 2 Changing ARI patterns: Implications for pharmacy practice

Community pharmacists are well positioned to address these challenges through accessible, individualised advice. However, the effectiveness of such support depends on pharmacists having sufficient time, appropriate assessment tools and clear referral pathways.

## 4.2 The growing clinical role of pharmacists requires a shift from isolated services to integrated care

An important finding was the increasing complexity of respiratory consultations in community pharmacies. Participants described how apparently straightforward requests for symptomatic treatment may require consideration of underlying conditions, concomitant medicines, warning signs, and the need for further assessment.

The expansion of vaccination, testing and other pharmacy-based services has created opportunities to strengthen respiratory care. Nevertheless, participants cautioned against introducing these functions as separate activities without considering how they interact within routine practice.

An integrated approach would connect prevention, symptom assessment, appropriate self-care, antimicrobial stewardship, referral and follow-up. Such an approach could help ensure that patients receive consistent support throughout their care journey, while allowing pharmacists to contribute according to their competencies and national scope-of-practice arrangements.

Importantly, greater involvement in respiratory care should not be interpreted as replacing medical diagnosis or other healthcare professionals. Rather, the findings support clearer recognition of pharmacists' contributions within coordinated, multidisciplinary pathways.

## 4.3 Professional capability and health-system readiness must develop together

The insight board demonstrated that professional preparedness cannot be assessed solely through pharmacists' knowledge or training.

Participants identified substantial progress in professional competencies and service provision following the COVID-19 pandemic. However, limitations in diagnostic access, clinical information, remuneration and service integration continue to restrict the application of these capabilities in some settings.

These findings suggest that expanding pharmacists' scope of practice without addressing implementation requirements risks creating additional responsibilities without the resources necessary to deliver them safely and sustainably.

Health-system readiness must therefore develop alongside professional readiness. This includes appropriate regulatory authority, practical clinical guidance, access to relevant patient information, adequate infrastructure, workforce capacity and sustainable financing.

The discussions also highlighted the importance of professional engagement. Pharmacists' willingness and capacity to adopt expanded responsibilities may vary, reinforcing the need for supportive working environments, meaningful professional development and opportunities for participation in service design.

## 4.4 Community pharmacies offer opportunities to strengthen public health intelligence

The experience shared from Spain highlighted a further dimension of pharmacy's potential contribution to respiratory health: the use of information generated through routine pharmacy activity to support public health surveillance.

Community pharmacies encounter patients seeking advice and products for respiratory symptoms throughout the year. When appropriately aggregated and interpreted, changes in these interactions may complement existing sources of information about respiratory illness activity.

This opportunity is relevant where circulation patterns are changing or becoming less predictable. Pharmacy-generated indicators could potentially contribute to earlier recognition of shifts in demand and support more responsive public health planning.

However, such approaches require careful consideration of data quality, interpretation, privacy and integration with established surveillance systems. Medicine demand is an indirect indicator of respiratory illness activity and should not be treated as equivalent to confirmed infection data.

The findings nevertheless illustrate how community pharmacies may contribute beyond individual patient encounters, supporting broader population health objectives through appropriately designed surveillance and reporting arrangements.

## 4.5 Sustainable implementation depends on demonstrating value

A recurring concern expressed was the limited recognition and measurement of pharmacists' clinical contributions to respiratory care. Participants described substantial activity in patient education, symptom assessment, prevention and referral, but noted that these interventions are not always documented or evaluated systematically.

Strengthening the evaluation could help demonstrate the contribution of pharmacy-based services to appropriate healthcare utilisation, medicine safety, patient experience and public health objectives. It could also provide evidence to inform decisions about service commissioning, remuneration and integration into national healthcare systems.

The findings suggest that evaluation should be considered during service development rather than introduced only after implementation. Defining appropriate outcomes, documentation requirements and quality indicators from the outset may support more consistent assessment of service effectiveness and sustainability.

## 4.6 Implications for pharmacy practice and policy

Taken together, the findings suggest that the evolving ARI landscape presents both a challenge and an opportunity for pharmacy.

Community pharmacists are increasingly positioned to support respiratory health through prevention, self-care, early assessment and referral. However, the ability to realise this potential varies according to professional competencies, regulatory arrangements, health-system infrastructure and available resources.

The insight board reinforced that greater service availability does not automatically translate into patient uptake, consistent implementation or improved outcomes. Public trust, professional engagement, affordability and integration with other healthcare services remain essential considerations.

A coordinated response will require collaboration between pharmacy organisations, educators, policymakers, healthcare providers and public health authorities. Such collaboration should aim to strengthen the quality, accessibility and sustainability of pharmacy-based respiratory care while ensuring that expanded responsibilities are supported by appropriate professional and health-system frameworks.

# 5 Recommendations

The insight board identified opportunities to strengthen pharmacists' contributions to ARI prevention, self-care and management. Translating these opportunities into practice requires coordinated action across professional education, clinical service development, health-system integration and public health policy.

The following recommendations are informed by the experiences and priorities shared by participants. They are intended to guide consideration by pharmacy organisations, policymakers, educators, healthcare providers and other relevant stakeholders, recognising that implementation will depend on national regulatory frameworks, available resources and healthcare system priorities.

## 5.1 Strengthened integrated, evidence-based approaches to ARI assessment and self-care

Professional organisations and healthcare authorities should support the development and implementation of practical, evidence-based approaches to managing respiratory symptoms in community pharmacy.

Priority actions include:

- Developing or adapting symptom-based assessment pathways that incorporate relevant patient risk factors, warning signs, appropriate self-care recommendations and clear referral criteria.
- Supporting the use of concise clinical decision-support tools that can be integrated into routine pharmacy workflows.
- Promoting consistent counselling on the expected course of respiratory infections, appropriate use of OTC medicines and circumstances requiring medical assessment.
- Strengthening pharmacists' contributions to antimicrobial stewardship through patient education, responsible medicine use and collaboration with prescribers.

These approaches should support safe, person-centred decision-making without extending pharmacists' responsibilities beyond their professional competencies or authorised scope of practice.

## 5.2 Strengthened professional competencies and practical implementation support

Pharmacy educators, professional organisations and healthcare providers should ensure that pharmacists are equipped to respond to evolving respiratory infection patterns and changing patient needs.

Priority actions include:

- Integrating relevant competencies into undergraduate education and continuing professional development, including symptom assessment, identification of warning signs, vaccination, antimicrobial stewardship, risk communication and referral.
- Providing accessible, regularly updated educational resources that reflect changes in respiratory infection circulation, clinical recommendations and available preventive measures.
- Supporting pharmacists in addressing misinformation, vaccine hesitancy and inappropriate treatment expectations through effective patient communication.
- Ensuring that education is complemented by practical implementation resources, including clinical protocols, appropriate consultation facilities and workflow support.

Professional development initiatives should recognise differences in existing competencies, practice settings and national service arrangements across and between nations, so a one sized solution is not possible.

## 5.3 Improved access to diagnostic tools, clinical information and coordinated referral pathways

Healthcare authorities and relevant stakeholders should address the infrastructure and information gaps that limit pharmacists' ability to provide safe and coordinated respiratory care.

Priority actions include:

- Supporting access to validated point-of-care testing where clinically appropriate and permitted by national regulatory frameworks.
- Establishing clear protocols for the appropriate use, interpretation and follow-up of diagnostic tests within pharmacy-based services.
- Improving secure access to relevant patient information, including medication histories, vaccination records and other clinical information necessary for safe decision-making.
- Strengthening digital interoperability and communication between community pharmacies, primary care providers and other healthcare services.
- Developing agreed referral pathways that support timely access to further assessment and continuity of care.

These developments should be accompanied by appropriate quality assurance, information governance and patient confidentiality safeguards.

## 5.4 Systematical integration of pharmacists into respiratory infection prevention and public health

Policymakers, public health authorities and pharmacy organisations should explore opportunities to strengthen pharmacists' contributions to respiratory infection prevention and population health.

Priority actions include:

- Supporting pharmacists' involvement in vaccination awareness, identification of eligible individuals, personalised counselling and vaccine administration, where authorised.
- Exploring the integration of preventive prompts and patient education into existing pharmacy information systems.
- Considering how community pharmacy data, including aggregated demand for respiratory medicines and tests, could complement established public health surveillance.
- Supporting appropriately designed sentinel pharmacy networks or similar initiatives where these can provide useful information about changing community health needs.
- Establishing clear arrangements for data quality, interpretation, reporting and collaboration with public health authorities.

Pharmacy-generated surveillance information should complement, rather than replace, established clinical and epidemiological surveillance systems.

## 5.5 Established and sustainable policy, workforce and financing arrangements

The expansion of pharmacy-based respiratory care should be supported by policies and resources that enable safe, consistent and sustainable service delivery.

Priority actions include:

- Aligning professional responsibilities with appropriate regulatory authority, clinical infrastructure and quality standards.

- Recognising the time and expertise involved in pharmacy-based assessment, counselling, prevention and referral when developing service financing arrangements.
- Considering funding models that support both the sustainability of pharmacy services and equitable patient access.
- Incorporating workforce capacity, staffing requirements and workflow implications into service planning.
- Engaging pharmacists in the design and implementation of expanded services to support professional confidence, motivation and long-term participation.

Service expansion should be accompanied by the necessary implementation support rather than introduced solely through additional professional responsibilities.

## 5.6 Strengthened evidence generation and evaluation for pharmacy-based ARI services

Professional organisations, healthcare authorities and researchers should support the systematic evaluation of pharmacy-based interventions in respiratory infection prevention and management.

Priority actions include:

- Developing appropriate indicators to assess service implementation, patient access, quality of care and relevant clinical outcomes.
- Strengthening documentation of pharmacists' contributions to self-care support, vaccination, antimicrobial stewardship and referral.
- Evaluating the acceptability, feasibility and sustainability of integrated pharmacy-based respiratory care pathways.
- Assessing the potential contribution of pharmacy services to healthcare utilisation and resource use where reliable data are available.
- Sharing evidence and implementation experiences across countries to inform service development while recognising differences in healthcare systems.

Evaluation should be incorporated into service planning from the outset to support continuous improvement and inform future policy and funding decisions.

## 5.7 Identified priorities for coordinated action

The recommendations highlight the need for a coordinated approach that connects professional development, clinical service design and health-system support.

While implementation priorities will vary between countries, the insight board suggests that progress will depend on three complementary considerations: ensuring pharmacists have the competencies and tools required to provide safe respiratory care; creating the regulatory, operational and financial conditions necessary to apply those competencies; and, integrating pharmacy-based interventions into wider healthcare and public health pathways.

Together, these priorities provide a foundation for strengthening pharmacists' contributions to ARI prevention and management while supporting the quality, accessibility and sustainability of care.

# 6 Conclusions

Changing patterns of ARI circulation, together with evolving public perceptions and healthcare-seeking behaviours, are creating both new challenges and opportunities for pharmacy practice. The insight board highlighted how the COVID-19 pandemic has influenced awareness of respiratory infections, expectations for self-care and vaccination, and the role of community pharmacies as accessible points of healthcare support.

Participants described an increasingly complex environment in which pharmacists are expected to provide evidence-based advice, assess respiratory symptoms, identify patients requiring referral, promote vaccination and support responsible medicine use. These responsibilities reinforce the importance of pharmacists' contributions to individual patient care and broader respiratory health objectives.

However, the discussions demonstrated that the ability to respond effectively varies across healthcare systems. While progress has been made in expanding pharmacy-based services and professional competencies, challenges remain in access to clinical information, diagnostic tools, practical guidance, workforce capacity, remuneration and integration with other healthcare providers.

The insight board also identified opportunities to strengthen pharmacists' contributions through integrated respiratory care pathways, expanded preventive services, interprofessional collaboration and participation in public health surveillance. Experiences shared across countries illustrated the potential value of these approaches while highlighting the importance of adapting implementation to national healthcare contexts.

A central conclusion was that expanding pharmacists' responsibilities does not, in itself, ensure effective or sustainable service delivery. Professional competencies must be supported by appropriate regulatory frameworks, infrastructure, resources and recognition within the wider healthcare system.

Strengthening pharmacists' role in ARI prevention and management will therefore require coordinated efforts by professional organisations, educators, policymakers, healthcare providers and public health authorities. By aligning professional preparedness with supportive health-system arrangements, community pharmacies can contribute more effectively to accessible, person-centred and integrated respiratory care as infection patterns and population needs continue to evolve.

# References


1. World Health Organization. Influenza (seasonal). Geneva: World Health Organization; 2025 Feb 28 [cited 2026 September]. Available from: https://www.who.int/news-room/fact-sheets/detail/influenza-(seasonal)
2. World Health Organization. Respiratory syncytial virus (RSV). Geneva: World Health Organization; 2025 Dec 19 [cited 2026 September]. Available from: https://www.who.int/news-room/fact-sheets/detail/respiratory-syncytial-virus-(rsv)
3. Del Riccio M, Caini S, Bonaccorsi G, Lorini C, Paget J, van der Velden K, et al. *Global analysis of respiratory viral circulation and timing of epidemics in the pre-COVID-19 and COVID-19 pandemic eras, based on data from the Global Influenza Surveillance and Response System (GISRS).* Int J Infect Dis. 2024;144:107052. doi:10.1016/j.ijid.2024.107052.
4. Zhao C, Zhang T, Guo L, Sun S, Miao Y, Yung CF, et al. *Characterising the asynchronous resurgence of common respiratory viruses following the COVID-19 pandemic.* Nat Commun. 2025;16:1610. doi:10.1038/s41467-025-56776-z.
5. He Y, Liu WJ, Jia N, Richardson S, Huang C. *Viral respiratory infections in a rapidly changing climate: the need to prepare for the next pandemic.* EBioMedicine. 2023;93:104593. doi:10.1016/j.ebiom.2023.104593.
6. Pantasri T. *Expanded roles of community pharmacists in COVID-19: a scoping literature review.* J Am Pharm Assoc (2003). 2022;62(3):649-657. doi:10.1016/j.japh.2021.12.013.
7. Merks P, Jakubowska M, Drelich E, Świeczkowski D, Bogusz J, Bilmin K, et al. The legal extension of the role of pharmacists in light of the COVID-19 global pandemic. *Research in Social and Administrative Pharmacy.* 2021;17(1):1807–1812. doi:10.1016/j.sapharm.2020.05.033.
8. Hess K, Bach A, Won K, Seed SM. *Community pharmacists roles during the COVID-19 pandemic.* J Pharm Pract. 2022;35(3):469-476. doi:10.1177/0897190020980626.
9. Direção-Geral da Saúde. Relatório final da campanha de vacinação sazonal do outono-inverno 2025/2026 [Final report on the autumn–winter 2025/2026 seasonal vaccination campaign]. Portugal: Direção-Geral da Saúde; 2026 [cited 2026 September]. Available from: https://www.dgs.pt/em-destaque/dgs-divulga-relatorios-do-pnv-2025-e-da-campanha-de-vacinacao-sazonal-do-outono-inverno-20252026.aspx
10. Merks P, Świeczkowski D, Bilmin K, Jakubowska M, Drelich E, Lewicki J, et al. Community pharmacy during the COVID-19 pandemic: a cross-sectional study. Przegl Epidemiol. 2020;74(4):620–633. doi:10.32394/pe.74.53.
11. Merks P, Sikorski S, Religioni U, Świetlik D, Plagens-Rotman K, Drelich E, Kaźmierczak J, Królak-Ulińska A, Sierpiński R, Doniec Z. Effectiveness of Pharmaceutical Counseling in Sore Throat Management According to Patients and Pharmacists. *Healthcare.* 2025;13(21):2708. doi:10.3390/healthcare13212708.
12. Krolak-Ulińska A, Merks P, Religioni U, Chełstowska B, Drab A, Wdowiak K, Plagens-Rotman K, Doniec Z, Staniszewska A. Opinions of Medical Staff Regarding Antibiotic Resistance. *Antibiotics.* 2024;13(6):493. doi:10.3390/antibiotics13060493.
13. Belgian Federal Government. Affaires sociales — Délivrance et tarification des antibiotiques par période de traitement. Belgium: Belgian Federal Government. Available from: https://news.belgium.be/fr/affaires-sociales-delivrance-et-tarification-des-antibiotiques-par-periode-de-traitement-deuxieme
14. Królak-Ulińska A, Religioni U, Chełstowska B, Panford-Quainoo E, Doniec Z, Vaillancourt R, Merks P. The role of pharmacists in ensuring rational antibiotic therapy within the interdisciplinary team. Medicine and Pharmacy Reports. 2025;98(2):176–182. doi:10.15386/mpr-2740.

International
Pharmaceutical
Federation

Fédération
Internationale
Pharmaceutique

Andries Bickerweg 5
2517 JP The Hague
The Netherlands
-
T +31 (0)70 302 19 70
F +31 (0)70 302 19 99
fip@fip.org
-
www.fip.org