



FIP Development Goals

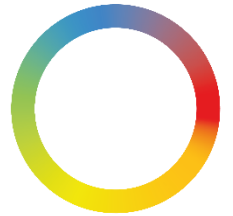
# Pharmacist-led tobacco cessation services

## EVIDENCE OF IMPACT & COUNTRY HIGHLIGHTS

Abridged version

2024

Tobacco cessation  
FIP Practice  
Transformation  
Programme on NCDs



International  
Pharmaceutical  
Federation

## Colophon

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International Pharmaceutical Federation (FIP)

Andries Bickerweg 5

2517 JP The Hague

The Netherlands

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### Authors

Dr Inês Nunes da Cunha, FIP Practice Development and Transformation Projects Manager

Dr Sherly Meilanti, FIP Data and Intelligence Specialist

Farah Aqqad, FIP Data Integration Specialist

Maryanne Favour Ong'udi, FIP Intern

### Editor

Gonçalo Sousa Pinto, FIP Lead for Practice Transformation

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## Executive summary

Tobacco use has been reported as a major risk factor that is common to various non-communicable diseases (NCDs), especially chronic respiratory diseases, cardiovascular diseases, cancer and diabetes. Tobacco cessation (and particularly smoking cessation) is one of the most important interventions to reduce the risk and prevalence of NCDs. The World Health Organization (WHO) has incorporated smoking cessation as one of the six key cost-effective and high-impact measures to help countries reduce demand for tobacco under the MPOWER framework.<sup>1, 2</sup> This means that the WHO encourages offering support to quit tobacco use and believes that health professionals, including pharmacists, have a remarkable potential to promote the reduction of tobacco use in society.<sup>3, 4</sup>

This report provides a comprehensive overview of the key role of pharmacists in tobacco cessation and how this contributes to timely patient care and to health system efficiency through interprofessional care teams. The report also shares global best practices to advance pharmacy practice and international standards of patient care.

The basis for this report was established through a review of existing literature. In addition, a survey and a compilation of brief country highlights specifically tailored to engage FIP member organisations (MOs) were conducted. The full survey results are available to FIP member organisations in an extended version of this report. However, a summary of the findings is provided here too.

Our literature review suggests that tobacco cessation services or interventions provided by pharmacists are strongly correlated with health outcomes, economic savings, increased health system efficiency and reduced burden on other healthcare sectors through interprofessional collaborations. It also identified barriers that prevent the implementation of tobacco cessation services by pharmacists.

Collated evidence from 51 countries and territories and 36 country highlights have identified the range of services currently provided in different countries/regions, explain the scope of tobacco cessation service models or interventions available, explain the remuneration models available and reinforce the valuable role of pharmacists in providing these services/interventions.

The data collected indicate that while most countries support the implementation of tobacco cessation services, the scope of professional standards and policies, the remuneration frameworks and the public advocacy of the role of pharmacists in tobacco cessation varies greatly amongst countries. In addition, the data highlight the challenges faced by pharmacists in attempts to implement tobacco cessation services and demonstrate that there is a need for pharmacists to be thoroughly equipped with appropriate knowledge and skills to be competent tobacco cessation support providers. Further, it is important to strengthen the referral pathways by acknowledging the extended roles of the pharmacist in tobacco cessation initiatives. This will go a long way in fostering interprofessional collaborations between pharmacists and other members of the primary healthcare team.

### Key findings from the systematic literature review, and recommendations

1. Several studies included in the literature review in this report suggest that tobacco cessation services/interventions are provided by pharmacists from different countries in community pharmacies and other primary healthcare settings as well as in hospitals.
2. The findings from the literature review demonstrate the impact of pharmacists' tobacco cessation services and highlighted their convenience and accessibility, their effectiveness and their cost-effectiveness. Here are some examples that demonstrate this:
  - a. In a study conducted in Canada, participants who accepted the referral to the pharmacist-led community-based tobacco cessation programme had much higher smoking cessation rates

than those who did not comply. At six months post-recruitment, 19 out of 53 (33%) participants who attended the pharmacist-led programme self-reported a 7-day point prevalence abstinence, compared to two of the 45 (4%) participants who did not attend the programme.<sup>5</sup>

- b. Another study conducted in Canada, showed that self-reported abstinence rates (determined three months after discharge) were higher after implementation of the Ottawa Model for Smoking Cessation (OMSC) programme at a rehabilitation hospital, compared with before implementation of the programme: for continuous abstinence, 16 out of 56 (28.6%) versus 9 out of 55 (16.4%),  $\chi^2 = 4.462$ ,  $p = 0.035$ ; for 7-day point prevalence abstinence, 21/56 (37.5%) versus 10/55 (18.2%),  $\chi^2 = 6.807$ ,  $p = 0.009$ .<sup>6</sup>
- c. Also in Canada, a comparison between two pharmacist-led smoking cessation programmes (SCPs) showed that quit rates for the SCPs were 36% (intensive SCP, primary care setting) and 22% (abbreviated SCP, designed for implementation in community pharmacies). Incremental costs per life-year gained for the SCPs were \$1,576 (intensive) and \$1,836 (abbreviated). Both the intensive SCP (primary care) and the abbreviated SCP (community pharmacies) were successful in helping participants quit and both were very cost-effective. Pharmacists are uniquely positioned to provide smoking cessation services.<sup>7</sup>
- d. In a cross-country meta-analysis that analysed five studies involving a total of 1,426 smokers, pharmacist interventions showed better abstinence rates as compared with controls (pooled relative risks (RR) 2.21, 95% confidence interval (CI) 1.49-3.29). Compared with the control group, the RR (95% CI) in the intervention group was 3.21 (1.81-5.72) for clinically validated abstinence and 1.66 (1.08-2.54) for self-reported abstinence.<sup>8</sup>
- e. Another cross-country meta-analysis of six studies, with 1,614 participants from five countries (Australia, Italy, Qatar, United States and United Kingdom), found a statistically and clinically significant benefit in favour of a more intensive tobacco cessation intervention given by community pharmacy staff when compared with a less intensive support to quit with very long follow-ups.<sup>9</sup>
- f. A study conducted in England demonstrated that smoking cessation services offered by pharmacies were less expensive and provided a cost-effective intervention when compared with usual NHS Stop Smoking Service (NHS SSS) in the North of England. The highest mean cost for advisor time for the provision of smoking cessation advice was within the NHS SSS at £51.93, whereas the lowest mean cost was within pharmacies at £28.90. Pharmacy services showed a lower mean cost per client (£100.20) and a higher proportion of carbon monoxide-verified quits than the other services.<sup>10</sup>
- g. One study conducted in England at the peak of the COVID-19 pandemic revealed the flexibility and convenience of remote consultations. Pharmacist prescribers can deliver effective tobacco cessation services through remote consultations, with 59% of clients reporting that they had quit smoking. The visibility of practice gained through the role of pharmacy during the pandemic should be utilised in advocacy discussions with governments, third-party payers, other healthcare professions, pharmacy associations and the public.<sup>11</sup>
- h. A study conducted in France revealed that at six months of a pharmacist-led smoking cessation programme, 23.3% of participants attended their follow-up visit, of which 75% had been abstinent since their last visit and more than half for 90 days. From the second follow-up visit, the physical and mental health composite scores amongst all participants were improved in comparison with baseline.<sup>12</sup>
- i. In a study conducted in Portugal, 59/135 (43.7%) of smokers quit tobacco after one month of being part of a pharmacist-led smoking cessation service with behavioural support. The subsequent smoking quit rates were then reduced to 32.6%, 28.1%, and 20.7% at the end of three, six and 12 months, respectively. Smoking cessation success was higher in patients who

- underwent pharmacological therapy, and who participated in more consultations and a greater number of telephone sessions.<sup>13</sup>
- j. In Spain, the CESAR intervention (intensive smoking cessation training programme) provided evidence that a training course for community pharmacists based on behavioural support, together with a smoking cessation service (with individual follow-up visits to identify obstacles and provide positive reinforcement), is efficient in increasing smoking cessation rates and improving quality of life. Costs were lower in the intervention group compared to the control group at both six and 12 months. At 12 months, 54.3% and 37.1% patients from the intervention and the control groups reported smoking cessation, respectively. The mean for quality-adjusted life year (QALY) was also higher in the intervention group [0.03(CI: 0.01; 0.07)].<sup>14</sup>
  - k. A study conducted in Thailand revealed that the inclusion of the PharmQuit app, in addition to the usual tobacco cessation services with pharmacotherapy and counselling, can help obtain better adherence to smoking cessation programmes.<sup>15</sup>
  - l. Another study conducted in Thailand showed that, after interventions by trained pharmacists, 28.8% of smokers (153/532) self-reported smoking abstinence. The mean number of cigarettes smoked daily reduced from  $15.3 \pm 8.7$  to  $1.9 \pm 3.8$  cigarettes ( $p$ -value  $<0.001$ ). And the exhaled carbon monoxide (CO) levels of smokers significantly reduced from  $11.7 \pm 5.9$  ppm to  $7.2 \pm 4.4$  ppm.<sup>16</sup>
  - m. The findings of a study conducted in the United States highlight the potential impact of engaging pharmacists in smoking cessation services at multiple points during hospital stays (e.g., during medication reconciliation at admission and at discharge). Treatment reach increased as rates of delivering nicotine replacement therapy (NRT) rose from 43.6% of eligible patients before implementation to 50.4% after implementation ( $P <0.0001$ ) and quit-line referral rates rose from 0.9% to 11.9% ( $P <0.0001$ ). Overall, pharmacists recorded addressing tobacco use in 62.5% of eligible admissions in the post-implementation period.<sup>17</sup>
  - n. Another study from the USA explored opportunities for interprofessional collaboration between health system providers and community pharmacists in bridging tobacco cessation services during transitions of care. This study highlighted that: collaboration between health systems and community pharmacies can reduce demands on other healthcare professionals' time while enhancing patients' access to evidence-based cessation treatment, which combines behavioural counselling with FDA-approved medicine(s); increased referral to community pharmacists could result in greater prevalence rates for tobacco abstinence; hospitalisations provide opportunities for healthcare providers to address patient tobacco use and refer patients to appropriate services; collaborative referral processes can be incorporated in practice settings such as physicians' offices, ambulatory care clinics, and the discharge planning process of hospitals and other health systems to enhance interprofessional approaches to continuity of care for patients; in expanding the role of pharmacists in tobacco cessation, increasing other healthcare professionals' awareness of legislative advances that permit pharmacists to prescribe cessation medicines in some USA states remains crucial; two-way communication between health system-based and community-based providers, especially via integrated electronic health records, is also suggested; and a keen review of policies and legislations is justified to consider pharmacists as service providers and their eligibility for re-imburement to enhance service provision.<sup>18</sup>
  - o. Findings from another study conducted in the United States highlight that hospitalisations provide an ideal opportunity for patients to make a tobacco quit attempt, and pharmacists can capitalise on this opportunity by integrating smoking cessation treatment into existing inpatient medication reconciliation workflows. The collaborative effort demonstrated effectively increased the reach of smoking cessation treatments among inpatients in a way that may serve as a model for other inpatient hospital settings.<sup>19</sup>

3. Several studies evaluated in the literature review highlight the global variation in the adoption and practice of community pharmacy and hospital-based tobacco cessation services, with an increasing number of countries promoting legislation and policies to enable the provision of such services by pharmacists and pharmacies.
4. Lack of adequate training in tobacco cessation with a behavioural approach, lack of public awareness of the role of pharmacists in tobacco cessation, which affects the demand for the service, lack of adequate reimbursement models, lack of private spaces to facilitate consultations, legal and regulatory barriers, and bureaucracy in referral or continuity of care in other healthcare settings were identified in the reviewed articles as potential challenges that hinder the role of pharmacists in this area.
5. Our findings suggest that legislation efforts to expand pharmacists' prescribing authority to include tobacco cessation medicines in some countries will increase the uptake of tobacco cessation services by addressing the barrier of obtaining a prescription from a medical doctor for the pharmacotherapy to be covered by insurance services.

The evidence presented in this report suggests that pharmacies, through the provision of tobacco cessation services or interventions, contribute positively to healthcare systems. This includes offering pharmacotherapy and behavioural support to tobacco users, which may lead to improvements in cessation rates. Moreover, legislative measures and adequate remuneration models would be beneficial in improving access to licensed tobacco cessation medicines. Additionally, the expanded role of pharmacists in providing these services may enhance public confidence, although further research and implementation efforts are needed to fully assess the impact.



## SUMMARY OF KEY SURVEY FINDINGS



**in 43 countries**  
(84.3%)

pharmacists offer advice to reduce smoke exposure.



pharmacists are involved in tobacco cessation awareness campaigns in



**76.5%**  
(n=39)  
of the countries.

Pharmacists engage in tobacco cessation discussions using techniques like:



**Very Brief Advice (VBA) or the 3As model (Ask, Advise, Act).** This approach is adopted in **42 countries (82.4%)**.



**Tailored support** based on the individual's readiness level utilised in **34 countries (66.7%)**.






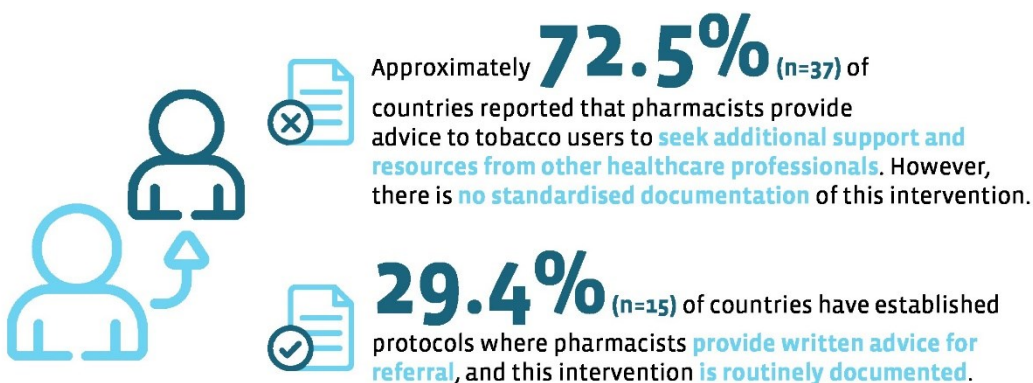
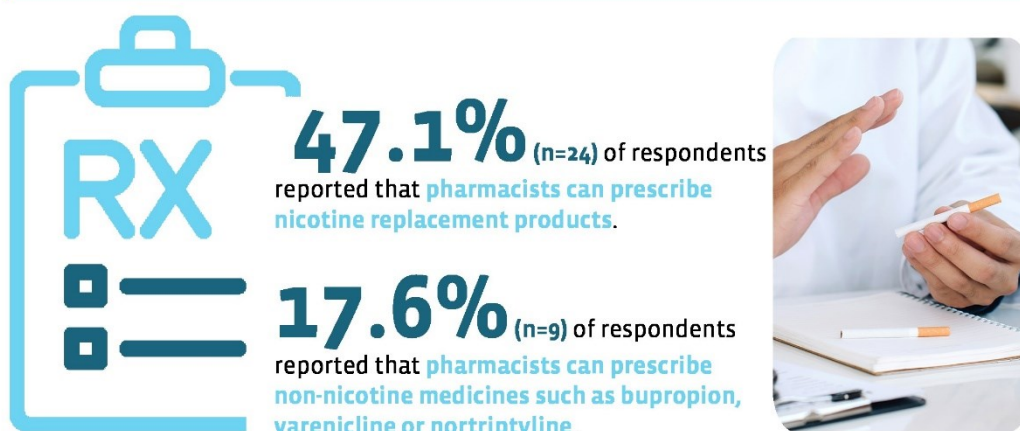
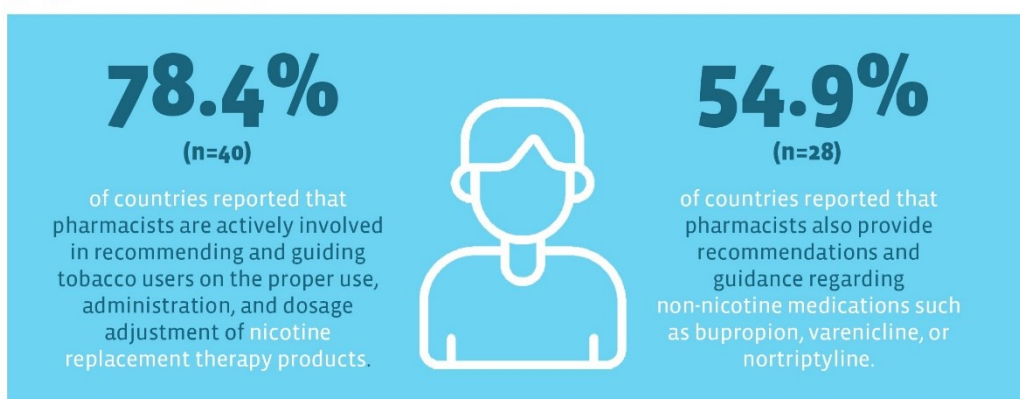
**Motivational interviewing** is utilised in **33 countries (64.7%)** to inspire behavioural change.



**A patient follow-up approach** is utilised in **28 countries (54.9%)**.

Pharmacists utilise a diverse range of tools and interventions such as:

-  **The Fagerström Test** for nicotine dependence in **21 countries (41.2%)**,
-  **The Stages of Change Assessment tool** for motivation or readiness assessment in **19 countries (37.3%)** and
-  **Carbon monoxide (CO) concentration assessment** for abstinence verification in **17 countries (33.3%)**.



In **17**  
countries (33.3%)



pharmacies are paid directly by the patient or customer.

In **12**  
countries (23.5%)



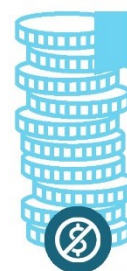
pharmacies are reimbursed by public health systems.

In **2**  
countries



pharmacies receive reimbursement from private health insurance companies.

In **35**  
countries (68.6%)



pharmacies do not receive remuneration for any professional services provided for tobacco cessation.

**39**  
(76.5%)



respondents reported that pharmacists providing tobacco cessation services are not required to undergo additional education or training.

In **25**  
(49%)



countries, organisations or employers offer education and training courses on tobacco cessation.



**82.4% (n=42)** of countries with pharmacist-led tobacco cessation services reported **insufficient remuneration as a barrier**.

**This financial constraint** was also highlighted by **59.3% (n=16)** of countries where pharmacists did not provide tobacco services.

**A lack of supportive regulations or healthcare policies for pharmacists** in tobacco cessation was cited as an obstacle by **88.9% (n=24)** of countries where pharmacists did not provide these services.



**66.7%**  
(n=34)

of countries where pharmacists provide tobacco services reported **operational difficulties**, such as **time constraints and high workload**.



**51.9%**  
(n=14)

of countries where pharmacists do not provide tobacco services reported **inadequate infrastructure**, including **space for private consultations**, as a barrier.

## Foreword

Tobacco use remains one of the world's leading preventable causes of death, killing more than 8 million people each year.<sup>22</sup> As public health efforts increase, 60% of tobacco users want to quit,<sup>23</sup> but only around 35% of the world's population have access to comprehensive tobacco cessation services.<sup>24, 25</sup> Tobacco cessation significantly reduces the risk of various diseases, including heart disease and cancer, while also alleviating respiratory symptoms in conditions like asthma. The willingness of patients to quit underscores the importance of expanding access points and prioritising tobacco cessation within healthcare systems.<sup>26, 27</sup>

In 1998, the WHO first recognised the crucial role of pharmacists in aiding individuals to stop smoking and preventing potential users from starting.<sup>4</sup> This recognition underlines the key role that pharmacists play within health systems. This recognition was reiterated in 2024, through a new [joint statement by WHO and FIP](#) on the role of pharmacists in tobacco cessation, in which the two organisations urge national tobacco control programmes and national pharmacy associations, to develop and implement plans for engaging pharmacists in the fight against tobacco within the context of national tobacco control programmes and national health systems and services.

Considering the global prevalence and burden of tobacco use, especially as a risk factor for NCDs, it is important that the role of pharmacists in this area is expanded and consolidated, and that professional organisations, including FIP, support practitioners in implementing and providing a range of services and products in this area. FIP has published several documents related to tobacco cessation including evidence-based recommendations and guidelines for pharmacists' interventions.

In 2003, the FIP Council approved the [FIP Statement of policy on the role of the pharmacist in promoting a tobacco free future](#), which will be updated in 2024. The important contribution of pharmacists in tobacco use cessation services was also highlighted in the 2007 FIP publication [Curbing the tobacco pandemic: The global role of pharmacy](#), and the 2015 FIP publication [Establishing tobacco-free communities: A practical guide for pharmacists](#).

In 2023, FIP published the [Supporting tobacco cessation and the treatment of tobacco dependence: A handbook for pharmacists](#). This handbook has been developed as a comprehensive and practical resource for pharmacists to support individuals in their efforts to quit tobacco, emphasising the critical role of pharmacists in providing comprehensive and coordinated care to patients seeking to quit. It covers the latest evidence-based practices, techniques and strategies to help our patients quit and not start again. This publication is accompanied by the [FIP knowledge and skills reference guide for professional development in tobacco cessation and other risk factors in NCDs](#), that describes the knowledge and skills required for the delivery of pharmacist-led interventions to support tobacco cessation in addition to other modifiable NCD risk factors such as physical inactivity, unhealthy diet, and harmful use of alcohol. In light of the increasing use of e-cigarettes, particularly among young people, and concerns around the safety of these products, in 2023 the FIP Bureau issued a [Holding Statement on the health and economic impact of e-cigarette use, and the contribution of the pharmacy workforce to its elimination](#).

Pharmacists are well-positioned to improve patient access to care, helping to facilitate access to value-based care programmes in community pharmacies, hospitals and primary health care settings. Pharmacists continue to demonstrate their ability to impact patient care through a variety of interventions, including medication optimisation, disease state management, health and wellness services, educational counselling and more.<sup>26</sup> Therefore, given their expertise in medicines, pharmacists are ideally positioned to deliver tobacco cessation services.

This report brings together the results of a literature review and a compilation of examples of evidence-based tobacco cessation interventions by pharmacists worldwide and the positive health and economic outcomes for patients and the wider community. I'm confident that you will find this report valuable and inspiring.

FIP is committed to supporting member organisations and individual pharmacists in implementing tobacco cessation services at country level to expand pharmacists' scope of practice in tobacco cessation and to better serve patients and strengthen health systems while improving the well-being of our communities.

A handwritten signature in black ink, appearing to read 'Paul Sinclair', with a horizontal line underneath.

Paul Sinclair  
President  
International Pharmaceutical Federation (FIP)

# 1 Introduction

The tobacco epidemic is one of the biggest public health threats the world has ever faced, killing over 8 million people a year around the world. More than 7 million of these deaths are caused directly by tobacco use, while about 1.3 million deaths are caused by exposure of non-smokers to second-hand smoke.<sup>22</sup> Tobacco use poses a significant public health challenge and it not only impacts the health of users and those around them, but also has a negative impact on the economic and social status of individuals and communities.<sup>28</sup> The impact of tobacco use is particularly severe in low- and middle-income countries (LMICs), where tobacco control measures are often inadequate and the tobacco industry has considerable influence. About 80% of the world's 1.25 billion tobacco users live in these regions.<sup>20</sup>

In 2003, WHO member states adopted the WHO Framework Convention on Tobacco Control (WHO FCTC) with the aim of addressing the global tobacco epidemic,<sup>29, 30</sup> which has been supported by FIP ever since. The WHO FCTC requires parties to implement measures to promote tobacco cessation and treat tobacco dependence.<sup>31</sup> In the WHO report on the global tobacco epidemic, published in 2019, offering help to quit tobacco use is emphasised, and member states are highly encouraged to act upon this. The report revealed that offering help to smokers through the quitting process had an impact, especially when combined with other tobacco control strategies.<sup>23</sup>

Currently, 183 countries have both signed and ratified this legally binding treaty as part of their efforts to combat the unmet challenges of tobacco control.<sup>32</sup> However, the successful implementation of the WHO FCTC faces a significant hindrance in the form of interference from the tobacco industry, particularly in LMICs.<sup>33, 34</sup> Overcoming this challenge requires substantial changes to existing systems and structures. Nevertheless, pharmacists, either individually or collectively through pharmacy associations, can contribute to promoting tobacco control and cessation by mobilising the pharmacy profession to support the WHO MPOWER measures.<sup>35</sup> These strategies, aligned with the WHO FCTC guidelines, have demonstrated effectiveness in saving lives and reducing healthcare costs.<sup>22</sup> MPOWER stands for:<sup>1, 2</sup>

- **Monitor** tobacco use and prevention policies;
- **Protect** people from tobacco use;
- **Offer** help to quit tobacco use (cessation);
- **Warn** about the dangers of tobacco;
- **Enforce** bans on tobacco advertising, promotion and sponsorship; and
- **Raise** taxes on tobacco.

WHO's latest global report on trends in tobacco use shows progress in reducing tobacco use, reflecting global efforts over the past two years. Currently, 151 countries have implemented at least one of the MPOWER demand-reduction measures outlined in the WHO FCTC to a level considered best practice, and tobacco use rates are decreasing in 150 countries.<sup>21</sup>

In 2000, about one in three adults worldwide was a current tobacco user. By 2022, however, this figure has fallen significantly, with only about one in five of the world's adult population still using tobacco, reflecting considerable progress in reducing global tobacco consumption.<sup>21</sup> Tobacco control efforts are achieving impact. However, even in the face of success, it is vital that countries remain vigilant to ensure that hard-earned progress is not compromised or reversed by relaxing or reversing ongoing efforts.

Continued commitment is essential to protect and build on the progress made in tobacco control. This is particularly important as only around 35% of the world's population have access to comprehensive tobacco cessation services.<sup>24</sup> Also, the report reveals that only 56 countries are currently on track to achieve the 30% reduction target by 2025. This figure represents a slight decrease from the previous report's count of 60 countries. The progress is despite the COVID-19 pandemic and ceaseless challenges from industry including attempts to stall tobacco control efforts in countries and to maintain nicotine dependence via alternative

nicotine products marketed to young people. There are only six countries in the world where tobacco use is still rising; three are in the Eastern Mediterranean Region (Egypt, Jordan, Oman), one in the African Region (Congo), one in the European Region (Republic of Moldova), and one in the South-East Asia Region (Indonesia). Although the prevalence of tobacco use is declining in all WHO regions, population growth may prevent these reductions from translating into fewer users, as is the case in the African Region and the Eastern Mediterranean Region. Significant reductions in rates are essential to stop the continuing increase in the number of tobacco users in these regions.<sup>21</sup>

Tobacco use is harmful to nearly every organ of the body, causing many diseases that affect the health of both tobacco users and non-users.<sup>36</sup> Tobacco use is also a direct cause of NCDs, increasing the risk of many types of cancer, cardiovascular diseases and chronic respiratory diseases.<sup>36</sup> In addition to its direct health consequences, tobacco use has significant economic, social and environmental impacts.

The economic impact of tobacco use is considerable and includes substantial healthcare costs for the treatment of diseases triggered or caused by tobacco use, as well as the loss of human capital due to tobacco-related morbidity and mortality.<sup>22</sup> The social impact of tobacco use can be profound, as it often carries a negative stigma that can affect relationships and social perceptions of people who use tobacco.<sup>23</sup>

Reducing tobacco use is not only a global health priority but also an economic, sustainable development, and human rights issue. The costs of tobacco-related diseases have been estimated to drain around USD1.4 trillion from the global economy in a single year.<sup>21</sup>

The production and consumption of tobacco also has a significant environmental impact. Tobacco cultivation requires large amounts of land, water and pesticides, contributing to deforestation and soil degradation. In addition, tobacco farming requires the use of hazardous chemicals, which poses a risk of water pollution and harm to wildlife. The manufacture of tobacco products also generates significant amounts of waste, from packaging and transportation to the disposal of cigarette butts and other associated waste.<sup>37,38,39</sup>

Tobacco cessation offers numerous health benefits, regardless of the duration of tobacco use or age. These include cardiovascular, respiratory and reproductive benefits, such as reducing the increased health risks associated with second-hand smoke exposure in children, including respiratory diseases such as asthma and ear infections, and reducing the chance of impotence, fertility problems, premature birth and low birth weight. Stopping tobacco use significantly improves both health outcomes and overall quality of life.<sup>36, 40</sup>

Given the addictive nature of nicotine, self-help for tobacco cessation can be very challenging, leading to the failure of several self-initiated quit attempts, with no success in tobacco cessation. Tobacco users commonly report that quitting is difficult due to stress, weight gain, and withdrawal symptoms. The provision of tobacco cessation interventions by healthcare professionals has proven to be more effective than self-help.<sup>41</sup>

A successful tobacco cessation programme should address the environmental triggers, behavioural aspects and the fact that tobacco is pleasurable, exciting the dopamine pathway in the brain.<sup>42</sup> Pharmacies provide excellent locations for the provision of tobacco cessation services, in the community, in hospitals, or in primary healthcare facilities.<sup>41</sup> With their accessibility and frequent interaction with the public, who are seeking advice or refilling their prescriptions, pharmacists have many suitable opportunities to provide tobacco cessation services, including advice on the correct use of tobacco cessation products and behavioural support to aid tobacco cessation.<sup>41, 43</sup>

Pharmacists and pharmacy teams are well placed to provide smoking cessation services, which are cost-effective interventions to help people stop smoking.<sup>42</sup> Studies from around the world show that trained pharmacists offering tobacco cessation services have a greater impact on quit rates and lead to sustained cessation.<sup>9, 13, 16</sup> In a study conducted in Portugal that trained pharmacists prior to the implementation of the smoking cessation programme, 59 out of 135 (43.7%) of the smokers quit tobacco after one month, while the subsequent smoking quit rates were then reduced to 32.6%, 28.1%, and 20.7% at the end of three, six and 12 months, respectively.<sup>13</sup>

A study looking at real-life practice in Thailand, after interventions by trained pharmacists, 28.8% of the smokers (153/532) reported smoking abstinence by self-reporting.<sup>16</sup> This highlights the clear role of pharmacists in implementing tobacco cessation services. The pharmaceutical intervention provided by trained pharmacists includes a motivational and behavioural approach in addition to pharmacological therapy.<sup>9</sup>

Pharmacists are interested in helping patients to stop using tobacco products, and published data suggest that their services can be both effective and cost-effective. For example, one of the studies included in a UK systematic review showed that pharmacy-led smoking cessation services were highly cost-effective, costing £772 per quitter for a four-week programme, compared with £1612 for the control group-based service.<sup>44</sup> However, there is evidence of barriers to taking on this role, which affects the feasibility of integrating comprehensive tobacco cessation services into practice. Barriers include lack of adequate training, lack of appropriate referral structures, time constraints in community pharmacy settings, lack of public awareness of the provision of tobacco cessation services by pharmacists, lack of private consultation areas in pharmacies, and lack of reimbursement for providing the service.<sup>12</sup>

The accessibility of pharmacists is seen as one of the biggest drivers of tobacco cessation services.<sup>41</sup> Pharmacists are experts in medicines and are perceived to have more time to spend with patients than other healthcare providers. Therefore, as the healthcare landscape changes and pharmacists adapt to more patient-centred roles, there is an urgent need to include training programmes to equip pharmacists and to highlight the role of pharmacists in tobacco cessation through appropriate policies. This will encourage collaboration with other healthcare professionals in the provision of this service.<sup>41</sup>

More work is needed by policy makers and educators to ensure that tobacco cessation services are of maximum benefit to patients. There is a need for policies that highlight the role of pharmacists in tobacco cessation and empower them to proactively offer cessation interventions and services to all tobacco users.<sup>17</sup>

As such, this publication explores and describes the role of pharmacists in the provision of tobacco cessation services, with the aim of expanding the role of pharmacists and addressing the barriers to implementing this service. Using information gathered from FIP member organisations, FIP has assessed the current understanding of tobacco cessation in this context and consolidated international best practice, which has helped to formulate recommendations and promote national, regional and global advocacy for tobacco cessation services.

Data and intelligence for this report were collated through a mixed-methods approach, including a literature review of relevant publications (chapter 2), a survey to FIP MOs as detailed in chapter 3, and a collection of country highlights from FIP MOs (chapter 4).

“Community pharmacists can provide effective smoking cessation treatment because they offer easy access to members of the community. They are well placed to provide both advice on the correct use of smoking cessation products and behavioural support to aid smoking cessation.”<sup>9</sup>



## 2 Review of the literature and existing evidence

A quasi-scoping review of the recent literature was conducted to collate the evidence of the impact and the role of pharmacists in the provision of tobacco cessation services. This review has helped to highlight the key role of pharmacists in tobacco cessation in community pharmacies, other primary healthcare settings and hospitals, the extent to which they have been involved, the health and economic impact of their services, and the potential for increased health system efficiency through interprofessional collaboration. Barriers and enablers to the provision of these services by pharmacists were also identified.

### 2.1 Search strategy and inclusion criteria

The review inclusion criteria were:

- Population: Studies which involved pharmacists or pharmacies (in community pharmacies, other primary healthcare settings or hospitals) or those that were led by pharmacists.
- Outcomes of interest: Pharmacists' and/or pharmacies' role, interventions, economic impact/economic and health outcomes, cost-effectiveness, and barriers and enablers of the tobacco/smoking cessation services.
- Context: Tobacco/smoking cessation services by pharmacies in community pharmacies, other primary healthcare settings or hospitals.
- Study types: Recent literature (2013 – 2023) with full-texts available via open-access sources.
- Studies/articles published in English or with an abstract in English.

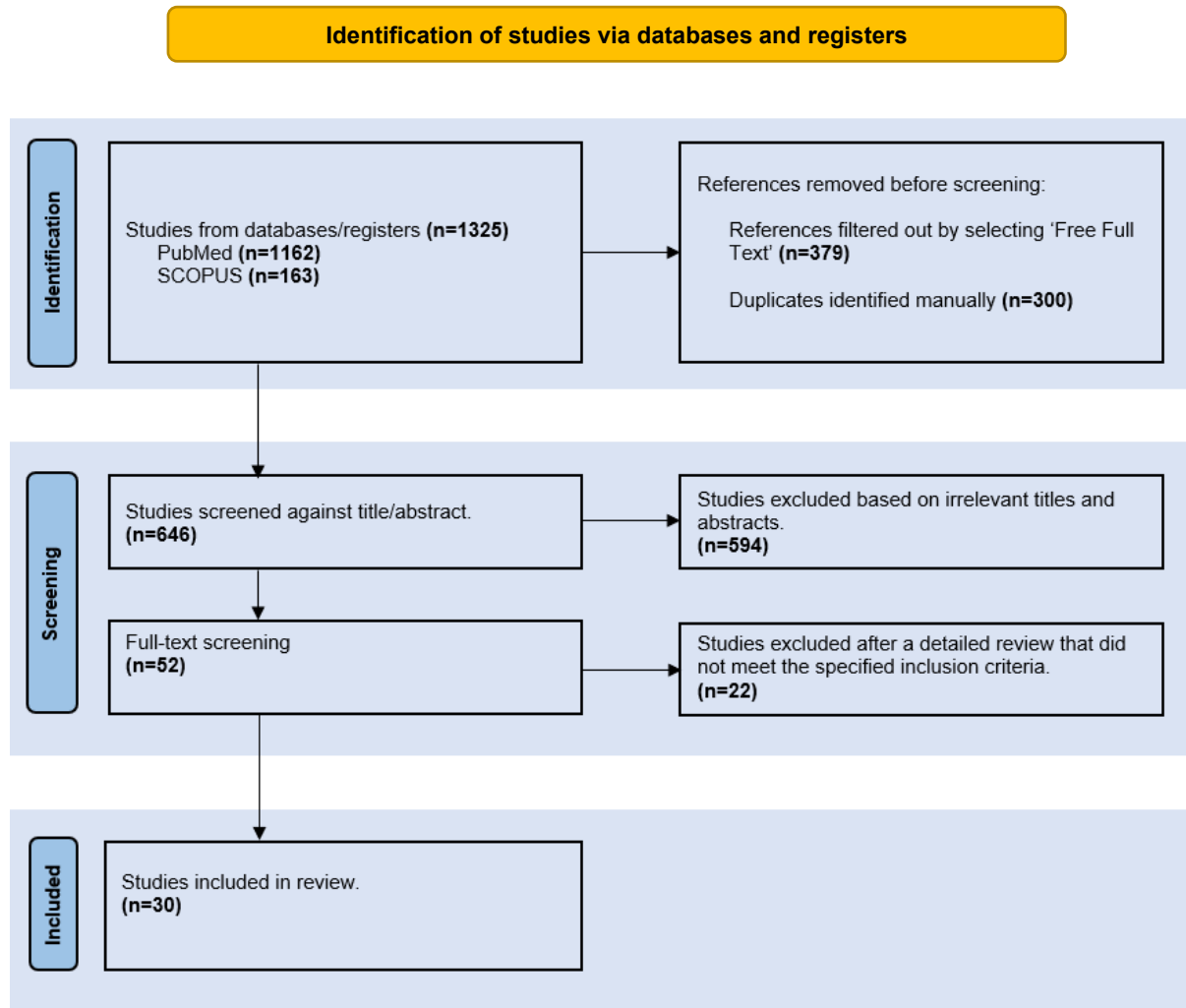
The search was conducted in December 2023, utilising two comprehensive databases: PubMed and SCOPUS. Various keywords were searched using the e-databases; however, controlled vocabulary and keywords were modified to obtain articles that addressed the subject. The details of the search strategies are outlined in Table 1. Only articles published in English were included due to resource constraints for all-language translation. All study types, including primary studies, reviews, and meta-analyses, were incorporated, where full texts were available via open access.

Table 1. Search strategies

Database (up to 5 January 2024)	Search terms and key words	Citations retrieved	Articles included in this review
PubMed	("pharmacy" OR "pharmacist*" OR "pharmacies") AND ("service" OR "intervention") AND ("tobacco cessation" OR "smoking cessation")	340	After filtering to obtain "Free full texts": 946
	("smoking cessation" OR "tobacco cessation") AND ("econom*") AND ("pharmac*"[Title])	65	After excluding duplicates: 646
	("pharmac*"[Title]) AND ("econom*" OR "saving" OR "budget") AND ("smoking cessation" OR "tobacco cessation")	68	After title and abstract screening: 52
	("pharmacy" OR "pharmacist*" OR "pharmacies") AND ("service" OR "intervention") AND ("tobacco cessation" OR "smoking cessation") AND ("economic*" OR "saving")	3	After reviewing the content in detail: 30 articles were included
	("pharmac*") AND ("econom*") AND ("smoking cessation" OR "tobacco cessation")	349	

Database (up to 5 January 2024)	Search terms and key words	Citations retrieved	Articles included in this review
	"community pharmacy"[MeSH] OR "community pharmacy services"[MeSH] OR "community pharmacy practice" OR "pharmacy" OR "pharmacies" OR "pharmacist" AND ("smoking cessation"[Title] OR "tobacco cessation"[Title]) AND ("interventions") AND ("econom*" OR "savings" OR "budget")	6	
	("pharmacy"[Title] OR "pharmacist"[Title] OR "community pharmacy"[Title]) AND ("smoking cessation"[Title] OR "tobacco cessation"[Title])	86	
	("pharmacy"[Title] OR "pharmacist"[Title] OR "community pharmacy"[Title] OR "community pharmacy service"[Title]) AND ("smoking cessation"[Title] OR "tobacco cessation"[Title])	69	
	("community pharmac*[MeSH Terms] OR "community pharmacy service*[MeSH Terms] OR "pharmac*[Title]) AND ("intervention*[Title]) AND ("smoking cessation"[Title] OR "tobacco cessation"[Title])	59	
	("pharmacist-led"[Title] OR "pharmacist*[Title] OR "community pharmacy"[Title]) AND ("smoking cessation"[Title] OR "tobacco cessation"[Title])	65	
	("pharmac*[Title]) AND ("interventions"[Title]) AND ("smoking cessation"[Title] OR "tobacco cessation"[Title])	41	
	("pharmac*[Title]) AND ("interventions") AND ("smoking cessation"[Title] OR "tobacco cessation"[Title]) AND ("health outcome*")	4	
	("pharmacy"[Title] OR "pharmacist"[Title] OR "community pharmacy"[Title] OR "community pharmacy service"[Title]) AND ("smoking cessation"[Title] OR "tobacco cessation"[Title]) AND ("econom*")	6	
	("pharmacy"[Title] OR "pharmacist"[Title] OR "community pharmacist"[Title] OR "community pharmacy service"[Title]) AND ("smoking cessation"[Title] OR "tobacco cessation"[Title]) AND ("econom*[Title] OR "cost saving*")	1	
SCOPUS	( TITLE-ABS-KEY ( ( "pharmacist-led" ) ) OR TITLE-ABS-KEY ( ( "community pharmac*" ) ) AND TITLE-ABS-KEY ( ( "smoking cessation" ) ) OR TITLE-ABS-KEY ( ( "tobacco cessation" ) ) AND TITLE-ABS-KEY ( ( "econom*" ) ) OR TITLE-ABS-KEY ( ( "impact" ) ) OR TITLE-ABS-KEY ( ( "intervention*" ) ) )	163	

We identified 1,325 articles in our initial search, and 379 articles were filtered to obtain 'Free Full Text' only, while 300 articles were excluded due to duplication. The remaining 646 articles were screened for inclusion criteria and were reviewed for relevant titles or abstracts, and 594 were excluded. The remaining 52 studies were closely reviewed based on the relevance of the full text to the subject matter, factoring in studies that were completed, and a final 30 articles were included in the literature review.<sup>5-19, 41, 45-58</sup> The screening process is presented in Figure 1.

Figure 1. Screening process mapped to the PRISMA Flowchart.<sup>59</sup>

## 2.2 Data extraction and analysis

### 2.2.1 Feasibility of pharmacists providing tobacco cessation services

Community pharmacists are well placed to carry out interventions with tobacco users.<sup>7, 18, 55, 58</sup> According to Peletidi et al., community pharmacist-led smoking cessation services lead to reduced morbidity and premature mortality associated with smoking-related chronic diseases.<sup>55</sup> For effective tobacco cessation services to be delivered by community pharmacies, pharmacists need to be willing to provide the service. Their role capability and motivation may be influenced by the practical and financial reality of performing this role in a busy pharmacy setting.<sup>14</sup>

Hospitalisation of patients provides an opportunity for hospital pharmacists to address tobacco use in patients.<sup>17-19</sup> It also provides an opportunity for patients to attempt to stop using tobacco, with pharmacists integrating tobacco cessation treatment into existing inpatient medication reconciliation workflows.<sup>19</sup> The presence of an existing hospital protocol where a full-time trained pharmacist is available to screen each new admission for tobacco use status would further enhance this service.<sup>6</sup> A study conducted in a tertiary care hospital in the United States to implement a US Public Health Service Clinical Practice guideline-based tobacco cessation intervention demonstrated the unique role that pharmacists can play when interacting with almost every inpatient at both admission and discharge.<sup>19</sup> Pharmacists addressed smoking with inpatients during routine medication history, medication reconciliation, and discharge counselling workflows. The pharmacist was also engaged in the refinement of the programme through iterative pilot testing.<sup>19</sup>

A study conducted at the peak of COVID-19 in England showed that pharmacist prescribers can provide effective smoking cessation services through remote consultations.<sup>11</sup> Currently, in the UK, NHS England is supporting the qualification of existing pharmacists as prescribers, including those working in community pharmacies, to facilitate service delivery. As independent prescribers, pharmacists in tobacco cessation programmes can prescribe cessation medicines as needed. It is also important to note that as of 2026, graduates who have completed a pharmacy degree in the UK will register with the regulatory body as independent prescribers, expanding the scope of pharmacists that can offer the service.<sup>11</sup>

In the United States, various strategies have been adopted to improve access to tobacco cessation medications. Pharmacists are given the authority to prescribe under the Collaborative Prescribing Agreement (CPA) or as autonomous prescribers through state-wide protocols. CPAs create formal practice relationships between pharmacists and prescribers, where the prescriber delegates the roles of initiating, modifying, and discontinuing medication therapy and ordering laboratory tests to the pharmacist. In autonomous prescribing, pharmacists are required to complete a continuous education programme before they are authorised to prescribe certain medications under authority granted by the state through laws and regulations.<sup>60</sup>

The accessibility of pharmacists enables them to be considered as the most suitable healthcare providers to provide smoking cessation interventions and are perceived to have more time to interact with patients compared with other healthcare providers. Pharmacists are medication therapy experts and patients would prefer pharmacists' interventions over other healthcare providers.<sup>17</sup>

### 2.2.2 Impact of training pharmacists for tobacco cessation services

A randomised control trial conducted by El Hajj et al. in Qatar to assess the impact of a tobacco education programme on pharmacists' skills and competence involved a total of 86 community pharmacists (54 in the intervention group and 32 in the control group) who completed six Objective Structured Clinical Examination cases. The results of this study showed that an intensive tobacco education programme significantly improved community pharmacists' skills and competence in providing tobacco cessation services.<sup>53</sup> As demonstrated from the literature review, to achieve higher tobacco cessation rates among tobacco users, the training of pharmacists in tobacco cessation should incorporate behavioural support.<sup>8, 14, 18, 41, 48</sup>

“The CESAR intervention provides evidence that a training course for community pharmacists based on behavioural support, together with a smoking cessation service (with individual follow-up visits to identify obstacles and provide positive reinforcement), is efficient to increase smoking cessation rates and improve quality of life.”<sup>14</sup>

In a cross-sectional survey assessing the knowledge and attitude of pharmacists and pharmacy students regarding smoking/smoking cessation in Ethiopia, the recipients of training on quitting tobacco use prior to the survey had significantly higher mean knowledge and attitude scores compared to those without training in smoking cessation.<sup>49</sup>

From a descriptive synthesis and realist review through a qualitative and mixed-methods approach by Greenhalgh et al., “a well-designed training course in smoking cessation plays a crucial role in shifting the pharmacist from a biomedical and product-oriented perspective to a more public health and patient-centred role.”<sup>47</sup>

### 2.2.3 Health-related outcomes

Tobacco use is one of the main modifiable risk factors for non-communicable diseases. Pharmacist-led tobacco cessation interventions can significantly impact abstinence rates in tobacco users and play a crucial role in improving patients' health outcomes.<sup>8</sup> In an observational, longitudinal and prospective study conducted in France by Bouchet-Benezech B. et al., the physical and mental health composite scores of all participants improved from baseline at the second follow-up visit.<sup>12</sup> Pharmacists play a pivotal role in tobacco cessation efforts, acting as frontline healthcare providers who can significantly impact on both individual health outcomes and public health on a broader scale.

“The community pharmacy smoking cessation services should be considered to be included in the national public healthcare policy to help smokers quit and proactively promote health for the community in which they serve.”<sup>16</sup>

A study conducted by Beaupre et al. comparing smoking cessation outcomes between patients who received a pharmacist-led community smoking cessation intervention and those who did not, found that community pharmacist-led smoking cessation programmes are an effective adjunct to usual preoperative care for smokers, with higher smoking cessation rates achieved.<sup>5</sup> Prior to providing the service, the pharmacists were adequately trained according to the provincial standards.<sup>5</sup>

A single-centre retrospective study conducted at a tertiary referral dermatology centre in Singapore to evaluate the efficacy of a structured pharmacist-led smoking cessation clinic that included training in motivational interviewing showed that pharmacist-led patient counselling is effective in providing behavioural support to smokers who wish to quit, thereby reducing cigarette smoking.<sup>54</sup>

In another study conducted by Beaupre et al. in Canada to compare the smoking cessation outcomes between patients who used a pharmacist-led community-based smoking cessation intervention and those who did not,

prior to total joint replacement (TJR) surgery, the participants who complied with the referral to the pharmacist-led community-based tobacco cessation programme had much higher smoking cessation rates than those who did not comply.<sup>5</sup> At six months post-recruitment, 19 out of 53 (33%) participants who attended the pharmacist-led programme self-reported a 7-day point prevalence abstinence (PPA) compared to two of the 45 (4%) participants who did not attend the programme ( $p < 0.001$ ).<sup>5</sup>

According to a research article by Condinho et al. in Portugal reporting the contribution of pharmacists to smoking cessation, 59 out of 135 (43.7%) of the smokers quit tobacco after one month. The smoking quit rates then reduced to 32.6%, 28.1%, and 20.7% at the end of three, six and 12 months, respectively. Smoking cessation success was reportedly higher in patients who underwent pharmacological therapy (Fisher's exact test,  $p < 0.001$ ) and those who participated in more consultations ( $\chi^2 = 59.994$ ,  $p < 0.001$ ) and a greater number of telephone sessions ( $\chi^2 = 17.845$ ,  $p < 0.001$ ).<sup>13</sup>

Additionally, a study conducted by Bouchet et al. to evaluate the feasibility of a smoking cessation programme delivered by pharmacists in community pharmacies in France, revealed that, at six months, 23.3% of participants attended their follow-up visit, among which 75% had been abstinent since their previous visit and more than half for 90 days. From the second follow-up visit, the physical and mental health composite scores among all participants were improved in comparison with baseline.<sup>12</sup>

Further, Creswell et al. conducted research to assess the reach of a new pharmacist-led inpatient smoking cessation treatment intervention by comparing rates of nicotine replacement therapy (NRT) prescribing and Wisconsin Tobacco Quit Line (WTQL) referral before and after implementation. The treatment reach increased as rates of delivering NRT rose from 43.6% of eligible patients before implementation to 50.4% after implementation ( $p < 0.0001$ ) and quitline referral rates rose from 0.9% to 11.9% ( $p < 0.0001$ ). Overall, pharmacists recorded addressing tobacco use in 62.5% of eligible admissions in the post-implementation period.<sup>17</sup>

Pharmacists play a pivotal role in tobacco cessation efforts, acting as frontline healthcare providers who can significantly impact on both individual health outcomes and public health on a broader scale.

## 2.2.4 Economic-related outcomes

A systematic review by Peletidi A. et al. in the United Kingdom highlighted studies that compared pharmacy-led smoking cessation services with control, providing strong evidence that the pharmacy-led services were highly cost-effective.<sup>55</sup> In one of the articles included in this review, the pharmacy-led service required an incremental cost of £772 per quitter for the four-week programme, while the group-based service required a supplementary cessation cost of £1,612. In this review, the first group that received a pharmacy-led smoking cessation service with weekly one-to-one support combined with a supply of NRT had higher smoking cessation rates than the second group that only underwent group therapy in the community in combination with smoking cessation medication. Additionally, the pharmacy-led service had an incremental cost per quality-adjusted life year of £2,600, compared with £4,800 for the group-based service.<sup>55</sup>

Community pharmacists are an accessible, under-utilised yet cost-effective resource for the provision of tobacco cessation services.<sup>7, 10, 14, 55</sup> A pragmatic, mixed methods, randomised trial conducted to compare the abstinence rates between two pharmacist-led Smoking Cessation Programs (SCPs) and the cost-effectiveness between these and a literature-based comparator group revealed that the intensive SCP was the most cost-effective intervention of the three strategies. The intensive SCP cost \$14,000 (per 100 participants) more than the abbreviated SCP but resulted in 14 additional quits and 10.8 additional life-years gained. Relative to the comparator group, the intensive SCP will cost \$35,300 more (per 100 participants) to the health care system but also result in 29 more quits and 22.4 additional life-years gained, yielding incremental cost-effective ratios (ICERs) of \$1217 per additional quit and \$1576 per life-year gained.<sup>7</sup>

“Pharmacist-led smoking cessation programs are effective and highly cost-effective.” This information allows clinicians and policy makers to make rational decisions regarding optimal resource allocation.<sup>7</sup>

One of the studies, conducted in England, compared the cost-effectiveness of smoking cessation services in general dental practice, general medical practice (GMP), pharmacy and NHS Stop Smoking Services (NHS SSS) from the perspective of the provider and the NHS. The service that was found to be 'cost-effective' compared with 'usual care' (NHS SSS) was the pharmacy service.<sup>10</sup> NHS Stop Smoking Services (SSS) were introduced in England and Wales in 2000 to provide free medication and behavioural support to help people stop smoking, and are available from a range of providers including GP surgeries, community pharmacies and specialist clinics.<sup>48</sup>

Another study, conducted in Spain, evaluated the cost-effectiveness of a non-randomised, cluster-controlled trial at 12 months' follow-up. Cost data collected during the study period included direct health care costs, indirect costs (work loss) and intervention costs. The study included 800 smoking patients in the intervention group and 278 in the control group. Costs were lower in the intervention group than in the control group in both perspectives. The mean quality-adjusted life year (QALY) was higher in the intervention group [0.03(CI: 0.01; 0.07)]. The incremental cost-effectiveness ratio (ICER) and the cost-utility ratio (ICUR) were dominant for the intervention group.<sup>14</sup>

### 2.2.5 Impact of interprofessional collaboration in enhancing the role of pharmacists in tobacco cessation

Interprofessional strategies for promoting tobacco cessation can improve quit rates among patients.<sup>18</sup> A study exploring the opportunities for interprofessional collaboration between health system-based providers and community pharmacists emphasised that it is valuable to include community pharmacists in the patient care continuum of tobacco cessation services. This study highlighted several benefits that can be expected from interprofessional collaboration in tobacco cessation services. By involving community pharmacists, there is an opportunity to reduce the demand on the time of other healthcare professionals, while increasing patient access to evidence-based approved tobacco cessation treatment, which improves the quit rates. Community pharmacy tobacco cessation support services can fill an existing gap between tobacco cessation efforts in the hospital and support for maintaining this cessation at home. Interprofessional collaboration provides an avenue for bi-directional communication between patients and healthcare providers across all settings. Through integrated electronic health records, patient safety is enhanced.<sup>18</sup>

Community pharmacists bridge the gap in transitions of care. Hospitalisations provide opportunities for healthcare providers to address tobacco use and foster interprofessional collaborations through appropriate referrals during transitions of care.<sup>18</sup>

According to Greenhalgh T. et al., increased interprofessional interactions between pharmacists and other healthcare practitioners is a prerequisite for effective smoking cessation services to be delivered in community pharmacies. This builds clinicians' confidence in their pharmacist colleagues, and this is enhanced by positive messages from their professional bodies. Ultimately, a clear and well-designed referral pathway is needed, especially from local general practices.<sup>47</sup>

In a study conducted in France by Bouchet-Benezech B. et al., collaboration with other healthcare professionals was one of the key points proposed to develop the role of a pharmacist in smoking cessation services. A main challenge identified from the study was that prescriptions for NRT provided by pharmacists were not reimbursed by the social security system. To reinforce these reimbursements, a collaboration between the pharmacists and the other healthcare professionals who prescribe these products was recommended.<sup>12</sup>

## 2.2.6 Barriers to pharmacists' roles in providing tobacco cessation services

Several articles identified common barriers to the role of pharmacists in the provision of tobacco cessation services. In many countries, lack of knowledge and skills, and lack of training of pharmacists in tobacco cessation was recognised as the main barrier to the provision of these services.<sup>8, 12, 16, 41, 45, 49, 51, 52, 55</sup>

Most pharmacists perceived insufficient training, inadequate knowledge about medication therapy for smoking cessation, and the lack of information materials on smoking cessation as the main barriers to the provision of smoking cessation interventions.<sup>51</sup>

The absence of training led to a lack of self-confidence that created a barrier to effective communication with patients, consequently reducing the quality of the tobacco cessation services offered.<sup>16, 52, 55</sup> In Jordan, most of the pharmacists perceived that they were not able to provide adequate tobacco cessation interventions due to inadequate knowledge about therapy for tobacco cessation, which was a consequence of insufficient training.<sup>51</sup> In a cross-sectional survey conducted in Ethiopia by Erku et al., 410 participants (213 pharmacy students and 197 pharmacists) completed a survey that revealed significant clinical knowledge gaps and inadequate skills among pharmacists regarding tobacco cessation services.<sup>49</sup> Another study, conducted in Australia, which analysed the responses of 250 final year students, 51 pharmacists and 20 smoking cessation educators revealed significant clinical or pharmacotherapeutic gaps in the practice of current evidence-based smoking cessation interventions at pharmacy level.<sup>45</sup>

Lack of remuneration for tobacco cessation programmes or services was also a barrier for many pharmacists willing to offer tobacco cessation services.<sup>8, 12, 18, 51, 52, 55, 57</sup> A research paper from the United States exploring opportunities for interprofessional collaboration between health system-based providers and community pharmacists in bridging tobacco cessation services during transitions of care revealed that the aspect of payment is critical to sustaining any service, including pharmacist-provided tobacco cessation services. Pharmacists in most states are not eligible for payment through Medicaid because they are not considered providers. Pharmacists' eligibility for reimbursement through private insurance is also rare.<sup>18</sup> Additionally, the research suggests that granting pharmacists provider status or explicitly including payment requirements in state-level policies that allow pharmacists to prescribe tobacco cessation medications may be the best way to address this issue.<sup>18</sup>

Lack of demand for tobacco cessation services was identified as a barrier in some countries, such as France, Jordan and Nigeria.<sup>12, 13, 51, 52</sup> To address this concern, Bouchet et al. evaluated the feasibility of a pharmacist-delivered smoking cessation programme in community pharmacies in France and recommended that the service be effectively promoted to pharmacy customers to address the lack of demand.<sup>12</sup> The insufficient awareness of pharmacy professionals regarding the potential of community pharmacists and pharmacies to promote tobacco cessation was highlighted as a barrier to the demand for the service.<sup>13</sup>

Another major barrier identified was the lack of a private space for patient counselling in the pharmacy.<sup>12, 41</sup> A private space set aside in each pharmacy for face-to-face interviews or counselling in a tobacco cessation service was found to create a comfortable environment for patient counselling, resulting in better adherence.<sup>12</sup>

A number of other barriers to implementing tobacco cessation services were also identified, such as the time constraints around implementing a service alongside the other responsibilities.<sup>8, 50, 52, 55</sup> According to a systematic review by Peletidi et al., the lack of time was an issue for all contributors to the service, the patients and the pharmacy staff.<sup>55</sup> A pragmatic pilot cluster-randomised study conducted in Japan among 11 community pharmacies revealed that many pharmacies have not incorporated smoking cessation support into their daily operations due to the time constraints and effort it requires.<sup>50</sup> The unavailability of tobacco cessation medications and products was also highlighted as a barrier.<sup>16, 52</sup> The pharmacist's inability to access the patient medical record (summary care record) whilst off-premises was mentioned as a barrier that could increase the likelihood of prescribing errors occurring if the patient was unable to provide an accurate medical history.<sup>11</sup>



A study conducted in the United States showed that access to tobacco cessation services is hampered by the lack of programmes and policies that encourage healthcare providers, including hospital pharmacists, to proactively offer tobacco cessation interventions to all tobacco users.<sup>17</sup> The weak involvement of pharmacies in tobacco control policies is seen as an additional barrier.<sup>13</sup> Pharmacists also cited the lack of an organised referral system as a barrier to effective service delivery.<sup>14, 17</sup> Cultural barriers were identified while interacting with female patients as well as with young smokers who are concerned about the social stigma associated with smoking. Communication barriers were experienced with non-English and non-Arabic speakers.<sup>17</sup>

The low rate of smoking cessation in Thailand due to a lack of accessibility to smoking cessation services has created a need to develop these services in pharmacies, providing an opportunity for pharmacists.<sup>16</sup>

Despite the barriers outlined, pharmacists have a compelling opportunity in tobacco cessation. Pharmacists are an accessible, under-utilised, yet cost-effective resource in the provision of tobacco cessation services. Pharmacists have a clear role in the provision of tobacco cessation services, and the integration of these services into different areas of pharmacy practice can be justified.

"Pharmacist-led interventions can significantly impact abstinence rates in smokers. Health policy makers should direct incentives for community pharmacists to provide such services."<sup>8</sup>

## 3 Country highlights

FIP invited member organisations from countries where pharmacists provide tobacco cessation services to submit an example of the interventions or services they offer (e.g., smoking awareness campaign, dispensing of smoking cessation aids, motivational interviewing, use of apps to support people who want to quit, etc.). The country highlights were designed to collect detailed information on examples of a pharmacist-led tobacco cessation intervention or service, and to provide relevant links to this initiative in the country. We received 36 country highlights. Overall, regional contributions to this report by the WHO classification are as described in Table 2.

Table 2. Number of FIP member organisations contributing with country highlights to this report by [WHO classification](#)

WHO classification of regions	Number of countries participated	Countries
European region	15	Austria, Belgium, England, Finland, France, Germany, Kosovo, Netherlands, Northern Ireland, Norway, Portugal, Scotland, Spain, Switzerland, Wales
African region	6	Ghana, Mauritius, Nigeria, South Africa, Zambia, Zimbabwe
Americas region	3	Brazil, Canada, United States
West-Pacific region	6	China Taiwan, Japan, Malaysia, Mongolia, Philippines, Singapore
Eastern Mediterranean region	3	Jordan, Lebanon, Yemen
South-East Asian region	3	Indonesia, Sri-Lanka, Thailand

### 3.1 Austria

#### Member organisation

Austrian Chamber of Pharmacists

#### Country highlights:

Every year around new year there are 'tobacco-cessation weeks' advertised by the Austrian Chamber of Pharmacists and executed by all community pharmacists. According to national data up to one third of smokers consider quitting every new year. During this time, smokers are invited to get counselling on tobacco cessation strategies in pharmacies. The promotion is accompanied by price reductions of nicotine replacement products and medicines.

### 3.2 Belgium

#### Member organisation

Association of Pharmacists Belgium (APB)

#### Country highlights:

There are numerous examples of tobacco cessation interventions in Belgian community pharmacies. One typical example is raising awareness with posters and flyers around 31 May - WHO World No Tobacco Day, and providing counselling on nicotine replacement therapy use (type and dosage).

### 3.3 Brazil

**Member organisation**

**Federal Council of Pharmacy**

**Country highlights:**

In the national tobacco control programme available in the public health system, there are several health units in Brazil where the programme is coordinated by a pharmacist. At the Federal University of Paraíba, there is an interprofessional smoking cessation outpatient clinic coordinated by pharmacists, using telehealth.

### 3.4 Canada

**Member organisation**

**Canadian Pharmacists Association**

**Country highlights:**

In Canada, pharmacists play a crucial role in supporting tobacco cessation efforts through various interventions. One notable example is the Smoking Cessation Programme offered by many community pharmacies. This programme involves pharmacists taking an active role in helping individuals quit smoking by providing personalised counselling, dispensing smoking cessation aids, and offering ongoing support. Pharmacists often conduct one-on-one sessions with individuals interested in quitting smoking. During these sessions, they assess the individual's smoking history, motivations and challenges. Based on this information, pharmacists create personalised quit plans and recommend suitable smoking cessation aids such as nicotine replacement therapy (NRT) products or prescription medicines. Motivational interviewing techniques are employed to enhance individuals' commitment to quit smoking and address any concerns or barriers they may have. Pharmacists also educate clients about the benefits of quitting, the potential side effects of cessation aids, and strategies to manage withdrawal symptoms.

### 3.5 China Taiwan

**Member organisation**

**Taiwan Society of Health-System Pharmacists**

**Country highlights:**

In China Taiwan, the pharmacist-led tobacco cessation intervention or service includes directly providing smoking cessation services and NRT, dispensing of smoking cessation medications, referring people to smoking cessation institutions or smoking cessation hotlines, and advocating for a smoke-free environment on campus and in the community.



個案來源	<input type="checkbox"/> 門診 <input type="checkbox"/> 住院 <input type="checkbox"/> 藥局 <input type="checkbox"/> 社區 <input type="checkbox"/> 戒烟所(戒烟場、校園、)	特殊身	<input type="checkbox"/> 孕婦(懷孕) <input type="checkbox"/> 原住民
吸菸狀況	已經吸了 10 年 月, 最近每天 > 20 支 (尼古丁 0.6 mg/支)	是否有吸電子煙?	<input checked="" type="checkbox"/> 是 <input type="checkbox"/> 否
1. 起床後多久抽第一支菸?	<input type="checkbox"/> 5分鐘以內 (3分)	<input checked="" type="checkbox"/> 5-30分鐘 (2分)	<input type="checkbox"/> 31-60分鐘以內 (1分) <input type="checkbox"/> 60分鐘以上 (0分)
2. 在禁菸區不能吸菸會讓你難以忍受嗎?	<input checked="" type="checkbox"/> 是 (1分)	<input type="checkbox"/> 否 (0分)	
3. 那根菸是你最難放棄的?	<input checked="" type="checkbox"/> 早上第一支菸 (1分)	<input type="checkbox"/> 其他 (0分)	
4. 您一天最多抽幾支菸?	<input type="checkbox"/> 31支以上 (3分)	<input type="checkbox"/> 21-30支 (2分)	<input checked="" type="checkbox"/> 11-20支以上 (1分) <input type="checkbox"/> 10支以下 (0分)
5. 起床後幾小時內是你一天中抽最多支菸的時候嗎?	<input checked="" type="checkbox"/> 是 (1分)	<input type="checkbox"/> 否 (0分)	
6. 當您嚴重生病, 幾乎整天臥病在床時還抽菸嗎?	<input checked="" type="checkbox"/> 是 (1分)	<input type="checkbox"/> 否 (0分)	
初診資料	110年 9月 7日	處方品名、 (剛戒菸者請填已開始日期; 未戒菸者請填預定開始日期)	總量、週數 及相關說明
確實告知 受戒菸治療 之權利義務	1. 本人目前尼古丁成癮度達 4 分以上或平均 1 天抽菸 20 支以上, 同意依照現行健保藥品部分負擔額度, 繳納每次療程限 8 週次, 限於同一合約醫事機構 90 天內, 又赴其他合約醫事機構進行戒菸治療, 則視同放棄。如有不符, 本人將依合約醫事機構、國民健康署或其品質, 或接受相關責任追訴。 2. 本人同意合約醫事機構將本人戒菸服務相關病歷資料, 專業機構、團體進行戒菸相關訪查、電話調查及進行個案資料。 本人同意以上聲明, 自願接受戒菸治療, 並同意個案資料利用。個案醫事人員已告知前開說明 醫事人員簽名或極章		

## 3.6 England

### Member organisations

Royal Pharmaceutical Society and Pharmacists' Defence Association

### Country highlights:

In 2020/21 a Pharmacy Integration Fund pilot on smoking cessation began to test a new model of working in which community pharmacies managed the continuing provision of smoking cessation support initiated in secondary care following patient discharge from hospital.

Early findings from the pilot indicated that a consistent, national offer could be achieved through community pharmacy, and that it could create the capacity needed to enable NHS trusts to transfer patients for smoking cessation support into the community. The Smoking Cessation Service (SCS) was therefore added to the NHS Community Pharmacy Contractual Framework (CPCF) as part of Year 3 (2021/22) of the five-year CPCF deal.

The SCS has been designed to enable NHS trusts to undertake a transfer of care on patient discharge, referring patients (where they consent) to a community pharmacy of their choice to continue their smoking cessation treatment, including providing medication and support as required. The ambition is for referral from NHS trusts to community pharmacy to create additional capacity in the smoking cessation pathway. The service can only be provided by a pharmacist or pharmacy technician. The SCS was commissioned as an Advanced service from 10 March 2022. Find out more about this service [here](#).

A [Tobacco and Vapes Bill](#) was introduced in the UK Parliament on 20 March 2024, which may have an impact on current policy Tobacco and Vapes Bill: factsheets - GOV.UK ([www.gov.uk](http://www.gov.uk)).

## 3.7 Finland

### Member organisation

Finnish Pharmacists' Society

### Country highlights:

Current Care Guidelines (Käypä hoito -suositukset) are independent, evidence-based clinical practice guidelines. The guidelines are intended as a basis for treatment decisions. There is a guideline for tobacco cessation: "Supporting tobacco cessation in pharmacies - forms of implementation and factors promoting tobacco cessation counselling".

All pharmacies must keep stock and pharmacists are obligated to give advice on NRT and prescription medicines for tobacco cessation. Pharmacists are recognised as suitable professionals to support tobacco cessation because they have received training in medicines counselling. Pharmacists' participation in promoting tobacco cessation is increased by the perception of public health work as part of their professional role, for example. The opportunity to reach tobacco users is good due to the large number of visits to pharmacies, but nowadays 80-90% of NRT products are sold outside pharmacies.

The guideline highlights, as forms of operation in the pharmacy, for example: pharmacists' knowledge of the local tobacco cessation services, cooperation between different actors and pharmacists' role in complementing and supporting instructions from other healthcare professionals, giving advice and individual treatment plans with focus on everyday challenges, and monitoring and supporting adherence.

More information can be found [here](#).

## 3.8 France

### Member organisation

French Chamber of Pharmacists

### Country highlights:

Since 2016, the Ministry of Health and Santé Publique France have organised an annual national awareness campaign titled '[Mois sans tabac](#)' (Month without Tobacco) every November. The French Chamber of Pharmacists is a partner

in this initiative. In this context, in 2023, out of 20,757 pharmacies, 19,512 displayed campaign window stickers throughout November. Pharmacists actively participate by distributing information kits on smoking cessation (540,000 kits delivered to pharmacies in 2023) and brochures on quitting smoking. More information on the latest edition of this initiative can be found [here](#).

**Vision globale de la présence Pharmacies**

Mois sans Tabac 2023

	Pharmacies			Pharmacies	
	Nombre pharmacies	Quantité		Nombre pharmacies	Quantité
Covering sur mesure	269	269	Totem Vitrine ou bornes d'entrée + sticker	6 760	1 799 Bannières
Covering Affichage 80x120	5 993	5 993			8 482 Stickers
DOOH	186	263	Kit stickers + kits sevrage -> avec Le Patch-	3015	6 030
Lot Stickers vitrine	8 604	11 577			

**70% affichage vitrine – 30% affichage Instore**

### 3.9 Germany

#### Member organisation

ABDA – Federal Union of German Associations of Pharmacists

#### Country highlights:

In Germany several State Chambers of Pharmacists have a service where they offer workshops for school classes on different topics around prevention, such as eating disorders, excessive consumption of alcohol, contraception, or smoking (“Apotheke macht Schule” = “Pharmacy gives a good example”; literal translation: “pharmacy makes school”, where the expression “making school” means “giving a good example”). Schools can book these workshops with the Chamber of Pharmacists in their state.

In addition, there is a federal smoking prevention programme called “Be Smart – Don’t Start” (#BeSmartDontStart) directed to adolescents (age 11-14). It is a competition where school classes can present their own awareness projects. They also collectively agree on not smoking for at least six months. The winner of the competition receives up to EUR 5,000 for the class. The programme was started 27 years ago and is funded by the Federal Centre for Health

Education (BZgA), the German Cancer Aid (Deutsche Krebshilfe) and one large Statutory Health Insurance company (in this case, AOK). For publications, please refer to the webpage of the project coordinator [here](#).

This project is one of many similar projects in the EU with the same purpose (“[Smokefree Class Competition](#)”).

In some cases, State Chambers of Pharmacists who offer tobacco prevention workshops for schools will incorporate the concept of #BeSmartDontStart in their workshops.

## 3.10 Ghana

**Member organisation**

**Pharmaceutical Society of Ghana (PSGH)**

**Country highlights:**

Putting out statements on the dangers of tobacco, engaging in radio and TV interviews to highlight the dangers, and circulating social media posts.

## 3.11 Indonesia

**Member organisation**

**Indonesian Pharmacists Association**

**Country highlights:**

The Indonesian Pharmacists Association actively promotes an annual healthy living campaign, including tobacco cessation. Nicotine replacement products are limited in Indonesia and previous product launches have always failed. The government is trying to limit the use of tobacco but, at the same time, the tobacco industry also generates big tax revenues and many jobs for Indonesians workers. Overall, tobacco cessation has never been popular in the country. However, pharmacists started to raise awareness of this issue many years ago.

## 3.12 Japan

**Member organisation**

**Japan Pharmaceutical Association**

**Country highlights:**

The Japanese government organises a tobacco cessation campaign every year, and the Japan Pharmaceutical Association supports this campaign.

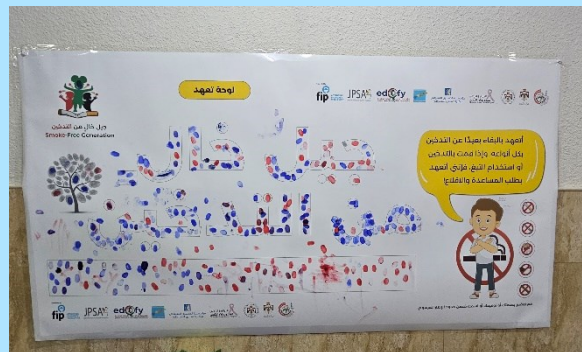
## 3.13 Jordan

**Member organisation**

**Jordan Pharmacists Association**

**Country highlights:**

The Smoke-Free Generation initiative is a national initiative led by the Jordan Pharmacists Association (JPA) and is targeting school adolescents aged 13-16 to empower them with knowledge about the dangers of smoking in its various forms (cigarette smoking, vaping, and others). Official media and press coverage of the event can be found in the following links: [1](#), [2](#), [3](#), [4](#), [5](#), [6](#).



There are several awareness raising initiatives and campaigns to encourage tobacco cessation among communities led by the King Hussein Cancer Foundation and the Jordan Breast Cancer Program (JBCP) particularly when raising awareness about lung cancer. JBCP integrates messages about this in all its lectures and pharmacists are implementing these campaigns. Common practice for pharmacy in community pharmacy settings is to provide brief advice about tobacco cessation and the need to quit tobacco when a smoking patient is detected or is enquiring about the influence of tobacco smoking on their health or medicine efficiency. Pharmacists also provide motivational interviewing informally by encouraging others to quit, leveraging their excellent communication skills and their influence on patients as trusted healthcare providers. Pharmacists are also involved in enriching the body of knowledge about tobacco use behaviour and tobacco cessation through research:

- [Knowledge, attitude, practice and perceived barriers towards smoking cessation services among community pharmacists.](#)

- [Smoking cessation support among oncology practitioners in a regional cancer center in the middle east—improving a critical service for cancer care.](#)
- [Cessation experiences and quitting perspectives of Jordanian cancer patients who smoke.](#)
- [The Emerging Global Tobacco Treatment Workforce: Characteristics of Tobacco Treatment Specialists Trained in Council-Accredited Training Programs from 2017 to 2019.](#)
- [Using cost-effectiveness analysis to support policy change: varenicline and nicotine replacement therapy for smoking cessation in Jordan.](#)
- [Beliefs toward smoking and COVID-19, and the pandemic impact on smoking behavior and quit intention: findings from a community-based cross-sectional study in Jordan.](#)

### 3.14 Kosovo

<b>Member organisation</b>	<b>Kosova Pharmaceutical Society</b>
<b>Country highlights:</b>	
Pharmacists in Kosovo motivate clients to stop smoking and provide information about the harm that smoking causes to health.	

### 3.15 Lebanon

<b>Member organisation</b>	<b>The Order of Pharmacists of Lebanon (OPL) and Institut National de Santé Publique, Epidémiologie Clinique et Toxicologie (INSPECT-LB)</b>
<b>Country highlights:</b>	
OPL: Pharmacists in Lebanon can support patients on how to use nicotine replacement therapy. They give advice on how to improve their quality of life (e.g., healthy diet, increase physical activities).	
INSPECT: Research projects are conducted and many publications led by pharmacists can be found; however, there is no official involvement of pharmaceutical institutions in this field. From the educational point of view, universities teach smoking cessation in chapters related to general courses, and in practice, many pharmacists try to apply smoking cessation counselling. No official figures exist relating to this area.	

### 3.16 Malaysia

<b>Member organisation</b>	<b>Malaysian Pharmacists Society</b>
<b>Country highlights:</b>	
Pharmacists in Malaysia have been leading tobacco cessation efforts since the early 2000s, starting with CSCSP training for healthcare practitioners and progressing from brief to comprehensive interventions. This effort was strengthened by participation in developing Clinical Practice Guidelines for Tobacco Use Disorders. Additionally, Malaysian pharmacists are actively involved in advocacy programmes, collaborating with youth groups like the Green Lung Association and MPS Young Pharmacists.	





AN INTERNATIONAL AWARD-WINNING INSTITUTION FOR SUSTAINABILITY

REPORT ON ACTIVITIES CONDUCTED FROM UNTIL JANUARY 2024

### COMMUNITY ENGAGEMENT



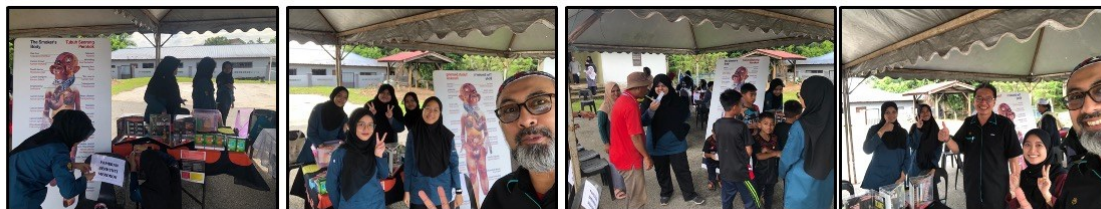
#### PACIFIC PARTNERSHIP (US NAVY-IIUM) HEALTH BOOTH EVENT

This event was held at Kuantan City Mall, Kuantan on 10<sup>th</sup> September 2023. The Sustainable Smoke-Free Sejahtera Campus 3.0 has been selected by the Dean, Kulliyah of Pharmacy to be showcased and highlighted for this event. We have conducted few activities such as carbon monoxide test and exhibition of quit smoking medication and poster to educate public on quit smoking treatment and harmful effect of smoking and vaping.



AN INTERNATIONAL AWARD-WINNING INSTITUTION FOR SUSTAINABILITY  
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### COMMUNITY ENGAGEMENT



#### QUIT SMOKING EXHIBITION FOR MASJID ANGKAT CARNIVAL

This event was held at Masjid Bukit Kuin 2, Sungai Panching, Kuantan on 18<sup>th</sup> November 2023. Our team has been invited by the Sultan Haji Ahmad Shah Mosque to participate in their Masjid Angkat Carnival and conduct quit smoking exhibition. Apart from performing free carbon monoxide analysis, we also display educational poster on the harmful effect of smoking and vaping. At the same time, we provide free consultation on quit smoking treatment for smokers and vapers.



AN INTERNATIONAL AWARD-WINNING INSTITUTION FOR SUSTAINABILITY  
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### COMMUNITY ENGAGEMENT



#### SMOKING AND VAPING CESSATION CAMPAIGN 2024 - QUALITY USE OF MEDICINE

Recognizing the increasing prevalence of vaping among adolescents and the misconception of its safety compared to traditional cigarettes, students from the MAHSA University, School of Pharmacy has invited our team to join their campaign to educate both students and the public on the dangers of smoking and vaping. This event was held on 12<sup>th</sup> January 2024 at SMK Bandar Saujana Putra. Among other collaborators that have been invited to participate are Sunway Multicare Pharmacy, National Cancer Society Malaysia and Pejabat Kesihatan Daerah Kuala Langat.

## 3.17 Mauritius

Member organisation

Pharmaceutical Association of Mauritius

Country highlights:

The main intervention by pharmacists in Mauritius is the provision of advice to patients and the supply of nicotine-based products in a dose-dependent manner to aid tobacco cessation. There are no defined protocols. The Pharmaceutical Association of Mauritius is planning to provide workshop training with their members in collaboration with the Pharmacy Council on smoking cessation.

### 3.18 Mongolia

**Member organisation**

Mongolian Association of the United Pharmaceutical organizations 'Em'

**Country highlights:**

Pharmacists provide a governance programme and motivational interviewing for tobacco users, in addition to participating in research activity, such as questionnaires and meta-analyses.

### 3.19 Netherlands

**Member organisation**

Royal Dutch Pharmacists Association (KNMP)

**Country highlights:**

[Programme for helping individuals stop smoking.](#)

### 3.20 Nigeria

**Member organisation**

Nigerian Association of Foreign Trained Pharmacist (NAFTraPh)

**Country highlights:**

In Nigeria, pharmacists play a vital role in tobacco cessation efforts, often through counselling and medication management services. One example of a pharmacist-led tobacco cessation intervention in Nigeria involves a structured programme aimed at supporting individuals in quitting smoking. The intervention typically begins with an initial consultation where the pharmacist assesses the patient's smoking history, nicotine dependence level and readiness to quit. Based on this assessment, the pharmacist develops a personalised cessation plan tailored to individual's needs and preferences. The plan may include behavioural counselling sessions conducted by the pharmacist to address triggers, coping strategies and relapse prevention techniques. In addition to counselling, the pharmacist may recommend and provide nicotine replacement therapy (NRT) products such as nicotine gums, patches or lozenges to alleviate withdrawal symptoms and cravings. Furthermore, the pharmacist may prescribe prescription medication like bupropion or varenicline under a collaborative practice agreement with a physician to further assist the patient in quitting smoking. They also monitor the patient's progress closely, adjusting treatment plans as needed to optimise outcomes. Throughout the intervention, pharmacists may emphasise the importance of lifestyle modification, such as adopting a healthy diet and engaging in regular physical activity, to promote overall well-being and reduce the risk of relapse.

### 3.21 Northern Ireland

**Member organisation**

Pharmacists' Defence Association

**Country highlights:**

When a patient presents, either through a referral from the GP, self-referral or as a result of opportunistic intervention, they are assessed as being suitable and given advice. They are followed up after two weeks, and if they are still motivated to quit they can be prescribed NRT. Their CO is monitored in exhaled breath at week one, four and 12. The patient is only supplied with one week of NRT at a time to allow for frequent counselling.

### 3.22 Norway

**Member organisation**

Norwegian Pharmacy Association

**Country highlights:**

In Norway, a smoking cessation programme was implemented in community pharmacies over several years, starting in 2006. The structured method consisted of five consultations with a pharmacist over approximately 35 days, following recommendations from the Directorate of Health and tailored to pharmacy practice with input from a psychologist specialising in smoking cessation. All participating pharmacists received two days of training before starting the standardised service.

Results from a pilot study showed that 35% of people had stopped smoking by the fifth consultation. However, the time-consuming nature of the service, lack of remuneration from the Directorate of Health, and customers' unwillingness to pay led to its discontinuation.

Today, pharmacy websites provide extensive information on smoking cessation and resources for smokers seeking help to quit. The declining prevalence of smoking in Norway has probably contributed to smoking cessation becoming less of a priority for the Directorate of Health.

Statistics from 2023 show that 7% of the population aged 16-74 smoked daily, with a slightly higher prevalence among men than women. Among young people aged 16-24, only 3% smoked daily, a significant decrease from the 7% of young smokers in the previous 10 years.

### 3.23 Philippines

**Member organisation**

**Philippine Pharmacists Association (PPhA)**

**Country highlights:**

The Philippine Pharmacists Association (PPhA) launched the PharmaCEASE: Smoking Cessation Advocacy Program in 2018. PPhA started by creating a partnership with the Philippine College of Chest Physicians and was involved in the formulation of clinical pathways for smoking cessation. Smoking cessation programmes in the country are multi-disciplinary but are not at the stage where community pharmacies offer this service. In essence, this pharmacy-based service is still in its infancy.

### 3.24 Portugal

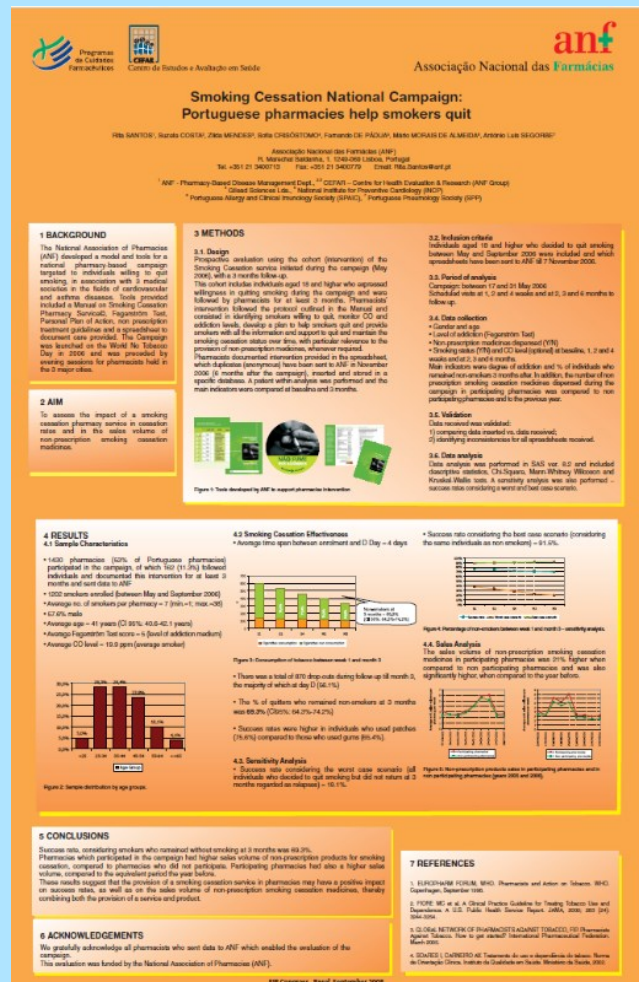
**Member organisations**

**National Association of Pharmacies and Portuguese Pharmaceutical Society**

**Country highlights:**

Portuguese Pharmaceutical Society: Some pharmacies provide tobacco cessation services. In one of these examples the service consists of: the pharmacist questions the patient about his/her motivations, personal and family context, how long he/she has been smoking, and how many cigarettes they smoke. The pharmacist carries out various tests to assess dependence, consumption, etc. and a specific plan is designed for the patient. The D-day is defined and until that date a reduction in consumption is made that may or may not include substitution therapy. Several appointments are scheduled that can take place before, during or after D-day and that can be face-to-face or by telephone.

National Association of Pharmacies: The National Association of Pharmacies (ANF) developed a model and tools for a national pharmacy-based campaign targeted to individuals willing to quit smoking, in association with three medical societies in the fields of cardiovascular and asthma diseases. Tools provided included a Manual on Smoking Cessation Pharmacy Service®, the Fagerström Test, Personal Plan of Action, non-prescription treatment guidelines and a spreadsheet to document care provided. The Campaign was launched on the World No Tobacco Day in 2006 and was preceded by evening sessions for pharmacists held in the three major cities. The aim of this campaign was to assess the impact of a smoking cessation pharmacy service on cessation rates and in the sales volume of non-prescription smoking cessation medicines. The campaign had a success rate, with smokers who remained without smoking at three months being 69.3%. Pharmacies which participated in the campaign had higher sales volume of non-prescription products for smoking cessation, compared to pharmacies who did not participate. Participating pharmacies also had a higher sales volume, compared to the equivalent period the year before. These results suggest that the provision of a smoking cessation service in pharmacies may have a positive impact on success rates, as well as on the sales volume of non-prescription smoking cessation medicines, thereby combining both the provision of a service and product. Currently, ANF is developing a course on pharmaceutical intervention in smoking cessation, as well as a practical guide and other tools to support the implementation of the service in pharmacies.



## 3.25 Scotland

### Member organisation

### Royal Pharmaceutical Society and Pharmacists' Defence Association

#### Country highlights:

Royal Pharmaceutical Society: The community pharmacy smoking cessation support service is part of the Public Health Service (PHS) element of the community pharmacy contract. It aims to provide extended access through the NHS to smoking cessation support, including the provision of person-centred behavioural support and evidence-based pharmacotherapies where appropriate, in line with the national service standards. Individuals are supported in their attempts to quit smoking and to sustain and improve their health while working towards a healthier lifestyle. Find out more about this service [here](#).

#### [Stop Smoking Support – Quit Your Way Pharmacy Service](#)

Pharmacists' Defence Association: A patient can self-refer, an appointment is made, and a stop date agreed. A 7-day reducing dose of NRT is provided for 12 weeks in agreement with the patient, a CO monitor is used to assess compliance, support and advice are provided. If the patient fails, they may not repeat the process for six months. After two failures, patients can be reassessed and prescribed varenicline.

## 3.26 Singapore

### Member organisation

### Pharmaceutical Society of Singapore (PSS)

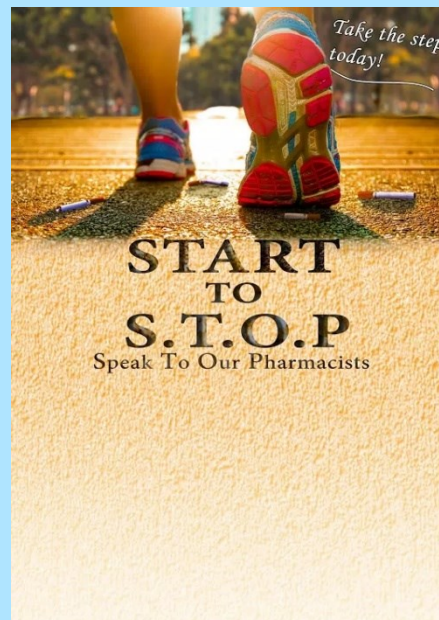
#### Country highlights:

Start to S.T.O.P. (Speak To Our Pharmacists) is a quit smoking programme championed by the Pharmaceutical Society of Singapore (PSS) Community Chapter. It is a nationwide collaborative effort by community pharmacy chains Guardian, Unity and Watsons to help people to quit smoking and improve their health. A qualified and dedicated pharmacist will walk with tobacco users through their entire quit journey. The programme is six weeks long and comprises face-to-face and telephone counselling sessions. Every session is professionally customised and personalised according to individual progress.

The programme is tailored according to each client's pace and progress. The quit consultants will:

- Identify current smoking habits
- Design a personal quit plan
- Advise on quit methods and aids
- Provide strategies to cope with withdrawal symptoms
- Provide ways to overcome any barriers
- Share tips to remain smoke-free and prevent relapse
- Follow up at one, three, six and 12 months after the programme.

Find out more about this service [here](#).



## 3.27 South Africa

### Member organisation

### Pharmaceutical Society of South Africa

#### Country highlights:

In South Africa, a number of pharmacies are supported by the GoSmokeFree Stop Smoking Programme.

The Independent Community Pharmacy Association (ICPA) also runs a campaign in May each year to support World No Tobacco Day on 31 May. Participating pharmacies have links to the Fagerstrom Test, information on nicotine replacement therapy and other smoking cessation medications. They also send out media releases and social media blurbs to create public awareness of the campaigns and encourage the public to visit their local community pharmacy for support and advice to quit smoking tobacco.

In 2018, for example, the focus of World No Tobacco Day (WNTD) was "Tobacco and heart disease." The campaign raised awareness of the link between tobacco and heart and other cardiovascular diseases, including stroke, which combined are the world's leading causes of death, as well as feasible actions and measures that the public can take to reduce the risks to heart health. ICPA's objectives for the 2018 WNTD and the Pharmacists Against Tobacco Campaign were to:

- Alert smokers to the benefits of stopping smoking
- Ask clients about their smoking status

World No Tobacco Day 31 May 2017

**Pharmacists  
Against  
Tobacco**

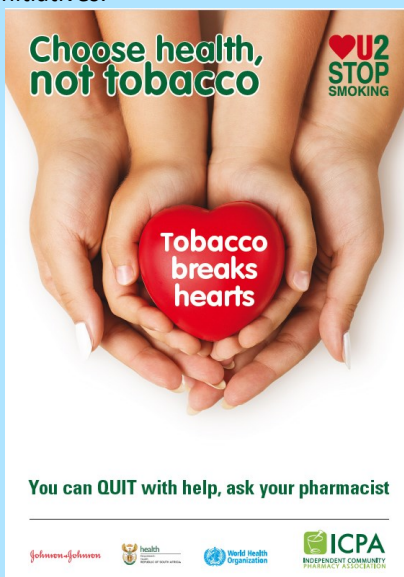
Pharmacists challenge smokers to go **"Smoke-Free"** for 24 hours

Advice from your pharmacist could be all you need to finally stop smoking once and for all.

Visit <http://www.icasa.co.za/ntd-s-pharmacy/> for participating independent community pharmacies

**ICPA**  
INDEPENDENT COMMUNITY  
PHARMACY ASSOCIATION

- Highlight the link between tobacco use and heart disease
- Promote the role of the pharmacist in smoking cessation
- Participate in the WHO anti-tobacco initiatives.



## 3.28 Spain

### Member organisation

### General Pharmaceutical Council of Spain

#### Country highlights:

Pharmacists can indicate a nicotine replacement therapy (NRT): Nicotine is administered by a route other than cigarette smoking and in sufficient quantity to reduce withdrawal symptoms. NRT is contraindicated in patients with acute or unstable cardiovascular disease (acute myocardial infarction or recent stroke, severe arrhythmias or advanced heart failure). The forms of administration used for NRT available in Spain are transdermal patch, chewing gum, mouth spray and lozenge. NRT can be used in a variety of ways, including: 1. Progressive reduction of tobacco use in conjunction with NRT, which may be useful in patients not sufficiently motivated for drastic cessation, with adverse effects similar to those observed with NRT alone and without manifestations of intoxication; 2. Combination therapy, in which nicotine patching is combined with fast-acting formulations that would reduce cravings; 3. Pre-loading strategy, common in clinical practice, which consists of administering the nicotine patch in combination with smoking for a few days before quitting rather than on the day set for abstinence, a modification that improves results after six months. More information can be found [here](#).

## 3.29 Sri Lanka

### Member organisation

### Pharmaceutical society of Sri Lanka

#### Country highlights:

In Sri Lanka, significant strides have been made by the government and major institutions in combating tobacco consumption. However, there remains a noticeable gap in the involvement of pharmacy in raising awareness and taking concrete steps toward tobacco control. It is imperative to bridge this gap by implementing comprehensive guidelines tailored to the pharmacy community.

Pharmacists can verbally advise smokers about the adverse effects it has and its health risks. It is mandatory in Sri Lanka to publish pictorial health warnings about smoking on every packet of cigarettes. Campaigns to raise the awareness of the dangers of smoking are carried out from time to time by various agencies. Smoking cessation aids are in short supply at this moment; therefore, oral and moral advice could be initiated.

More information about the prevention and cessation of tobacco use in Sri Lanka can be found [here](#).

### 3.30 Switzerland

<b>Member organisation</b>	Pharmasuisse
<b>Country highlights:</b>	The distribution of nicotine substitutes is part of the pharmacist's ability to prescribe list B medicines.

### 3.31 Thailand

<b>Member organisation</b>	Pharmaceutical Association of Thailand
<b>Country highlights:</b>	<p>In Thailand, community pharmacists initiated quit smoking campaigns more than ten years ago. The community pharmacy foundation actively promotes these campaigns to Thai pharmacists, including training, support funds, and a toolkit for tobacco cessation interventions such as smoking awareness campaign, dispensing of smoking cessation aids, drugs and nicotine replacement therapy, and follow up.</p> 

### 3.32 United States of America

<b>Member organisation</b>	American Pharmacists Association
<b>Country highlights:</b>	<p>The Lac Courte Oreilles Community Health Center (LCOCHC) is a Federally Qualified Health Center (FQHC) on the Lac Courte Oreilles Ojibwe Indian reservation in northwestern Wisconsin. Pharmacist-provided tobacco cessation services at LCOCHC are performed under a Collaborative Practice Agreement (CPA) that provides pharmacists with prescriptive authority for all seven tobacco cessation medications approved by the U.S. Food and Drug Administration (FDA). LCOCHC has designated a lead pharmacist who oversees the clinical service and supports the training and development of other tobacco cessation providers. Through the use of evidence-based guidelines for the management of tobacco dependence and the Mayo Clinic model for treating tobacco dependence, pharmacists offer patients resources for treatment and management of tobacco dependence. Methods encourage the use of pharmacotherapy and behavioural modification therapy based on the transtheoretical model of health behaviour change. Most frequently, tobacco cessation services are provided as standalone services. However, patients seen for asthma and chronic obstructive pulmonary disease for spirometry studies are often engaged in the site's tobacco cessation services. During other patient visits, such as in the anticoagulation clinic and during medication consultations in the pharmacy, additional opportunities arise for a tobacco cessation intervention. Sometimes medication therapy is initiated after a brief visit, with the pharmacist prescribing nicotine replacement therapy, varenicline, and/or bupropion. At that time, the pharmacist works to coordinate more formal tobacco cessation follow-up visits. The pharmacist sets appointments with patients for treatment, provides counselling using the motivational interviewing approach as well as acceptance and commitment therapy techniques, and has prescriptive</p>



authority for all seven FDA-approved tobacco cessation medications. Patients engage in a series of appointments, lasting from 30 to 60 minutes, ideally beginning before the patient's established quit date. More information on promising practices for pharmacist engagement in tobacco cessation interventions can be found [here](#).

### 3.33 Wales

#### Member organisation

Royal Pharmaceutical Society and Pharmacists' Defence Association

#### Country highlights:

- A person may access the service if at its commencement they are a smoker or are within four weeks of the start of their quit attempt.
- A person may access the service following a referral from a healthcare professional or another Help Me Quit (HMQ) provider, including transfer of care, or may refer himself or herself directly.
- The service will be provided to people who live, or are registered with a GP, in Wales.
- A person wishing to use the service must consent to the sharing of information about their quit attempt with the person with whom they are registered for the provision of General Medical Services and with NHS Wales for the purposes of post payment verification.

More information could be found here:

[National Stop Smoking Service - Community Pharmacy Wales](#)

[HELP ME QUIT](#) support

### 3.34 Zambia

#### Member organisation

Pharmaceutical Society of Zambia

#### Country highlights:

The Centre for Primary Care Research (CPCR) - a research organisation in Zambia, The Centre for Tobacco in Africa (CTCA) in Uganda, and the University of Southern California (USC) are implementing a 5-year research project titled "Quit4Life+: Adapting and Evaluating a Phone-Based Tobacco Use Cessation Program for People Living with HIV in Uganda and Zambia". This randomised controlled trial study aims to promote smoking cessation among HIV infected persons through adapting a standard short message service (SMS) for a tobacco cessation programme and the efficacy of SMS-based programmes, tailored to meet the needs of people living with HIV (Quit4Life+) in comparison to the current standard of care in Uganda and Zambia.

[A phone-based tobacco use cessation program for people living with HIV in Uganda and Zambia: study protocol for a randomized controlled trial.](#)

### 3.35 Zimbabwe

#### Member organisation

Pharmaceutical Society of Zimbabwe

#### Country highlights:

The Pharmaceutical Society of Zimbabwe has a subcommittee called Pharmacists Against Drug Abuse (PADA). They organise campaigns in the fight against drug abuse, and tobacco cessation falls into this category. PADA goes to schools and works with the student's association ZPSA to visit schools as part of the fight against drug abuse. However, the programme is not structured, is often ad hoc, and there is no standardised format. The Community Pharmacists Association is working on guidelines to empower pharmacists in the promotion of smoking cessation. This is work in progress as part of continuous professional development. Nicotine patches and nicotine gum are not easily available, hence only a few pharmacies are keeping them in stock. Pharmacists dispense nicotine substitutes as per doctor's prescription and can then provide support counselling.

## 4 Conclusions, recommendations and future implications

This report summarises information from 30 articles that were evaluated in the literature review, and country highlights from 36 countries, detailing the pharmacist-led tobacco cessation interventions or services they are involved in.

### 4.1 Summary of key findings

This report highlights the important role that pharmacists play in providing services to help people stop using tobacco. Both community and hospital pharmacists have a crucial role in addressing tobacco use and facilitating tobacco cessation interventions and services. Community pharmacists have the potential to significantly reduce morbidity and premature mortality from tobacco-related chronic non-communicable diseases through tobacco cessation services, provided they are willing and able to provide such services within the practical (including workforce capacity) and financial constraints of a busy pharmacy.

In addition, with established protocols and trained pharmacists who can address tobacco use with inpatients on admission and discharge, hospitalisation is an opportune time for hospital pharmacists to integrate tobacco cessation into existing workflows.

This report highlights the cultural, socioeconomic, and healthcare system differences across regions and the unique challenges and opportunities associated with pharmacist-led tobacco cessation services. It captures the nuances and contextual factors that may influence the delivery and effectiveness of these interventions and services. This report also outlines several tools and interventions utilised by pharmacists to enhance their service delivery. Additionally, it identifies variations in prescribing practices and referral protocols.

The evaluated evidence demonstrates the effectiveness of pharmacist-led tobacco cessation interventions and highlights the importance of adequate training and interprofessional collaboration in overcoming barriers to pharmacist involvement in tobacco cessation services, ultimately contributing to improved patient health outcomes. Most countries identified lack of knowledge, skills and training of pharmacists in tobacco cessation as the main barriers to the provision of tobacco cessation services. Our survey results also reveal wide-ranging diversity in remuneration models, with most pharmacies not receiving reimbursement for cessation services. Common barriers to pharmacist-led cessation services include insufficient remuneration, lack of supportive regulations, and operational challenges. These findings highlight the urgent need for targeted interventions, sustainable funding mechanisms, regulatory reforms, and policy development to improve global access to cessation services.

### 4.2 Recommendations and future implications

A comprehensive understanding of pharmacist-led tobacco cessation services and their impact across different regions and healthcare settings is critical to the global involvement of pharmacists in this role.

Future research efforts should prioritise the engagement of stakeholders from a wider range of regions as each region may possess unique challenges in pharmacy practice and burden of disease and risk factors. This can be achieved through targeted outreach, collaboration with professional organisations and the use of international networks to ensure a more diverse and representative sample. Despite the distinct challenges encountered in each region, fostering collaboration among stakeholders can facilitate shared learning experiences and best practices, benefiting countries worldwide.

Given the identified barriers related to pharmacists' lack of knowledge, skills and training in tobacco cessation, there is a need for comprehensive capacity-building initiatives tailored to the specific needs of different regions and nations. This could include the development of standardised training programmes, the use of technology for distance learning and skills development, and the promotion of continuing professional development opportunities for pharmacists worldwide.

Policy makers and health authorities should prioritise the integration of pharmacist-led tobacco cessation services into national and regional health policies and guidelines. Advocacy efforts are needed to raise awareness of the role of pharmacists in tobacco cessation and to secure adequate resources and support for the implementation and expansion of these services in different health care settings.

Recognising the benefits of interprofessional collaboration highlighted in the report, future initiatives should promote closer collaboration between pharmacists, physicians, nurses, public health professionals and other stakeholders involved in tobacco control efforts. This can increase the effectiveness and sustainability of tobacco cessation interventions by drawing on the expertise and resources of different health care disciplines.

In conclusion, the accessibility of pharmacists is seen as one of the most important drivers of tobacco cessation services. Pharmacists and pharmacy teams are well placed to provide tobacco cessation services, which are cost-effective interventions to help people stop using tobacco, by combining pharmacological and behavioural approaches and personalised support and follow-up. While this report provides valuable insights into the role of pharmacists in tobacco cessation services, several limitations highlight the need for further research and action. By addressing these challenges and taking advantage of opportunities for improvement, stakeholders can work towards realising the full potential of pharmacist-led tobacco cessation interventions, ultimately contributing to a reduction in the burden of tobacco and nicotine dependence, as well as tobacco-related disease, and improved public health outcomes on a global scale.

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## Appendix 1. List of countries with electronic cigarette policies and practices

Country	Electronic cigarettes policy	Pharmacists commonly recommend electronic cigarettes	Electronic cigarettes available in pharmacy
Australia	Yes	No	Yes
Austria	No official guidance	No	No
Belgium	Policy under review	No	No
Brazil	No	No	No
Canada	No	No	No
Cape Verde	No official guidance	No	No
China Taiwan	No	No	No
Costa Rica	No	No	No
Croatia	No official guidance	No	No
Denmark	No	No	No
Egypt	Yes	No	No
England	Yes	No	Yes
Estonia	No	No	No
France	Policy under review	No	No
Finland	No	No	No
Germany	No	No	No
Ghana	No official guidance	No	No
Indonesia	No official guidance	No	No
Iraq	No official guidance	Yes	No
Ireland	No	No	No
Israel	No	No	No
Japan	No	No	No
Jordan	No	No	No
Kenya	No	No	No
Kosovo	No	No	No
Lebanon	No	No	No
Malawi	No official guidance	No	No
Malaysia	No	No	No
Mauritius	No	No	No
Mongolia	No	No	No
Namibia	No	No	No
Netherlands	No	No	No
Nigeria	No	No	No
Northern Ireland	No	No	No
Philippines	Policy under review	No	No
Portugal	No official guidance	No	No
Scotland	No	No	No
Serbia	No	No	No
Singapore	No	No	No
Slovenia	No	No	No
South Africa	No	No	No
Spain	No	No	Yes
Sri Lanka	No official guidance	No	No
Switzerland	No	No	No
Thailand	No	No	No
Uganda	No official guidance	No	No
USA	No	No	No
Wales	No	No	Yes
Yemen	No official guidance	No	Yes
Zambia	No	No	No
Zimbabwe	No	No	No



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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](http://www.fip.org)

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