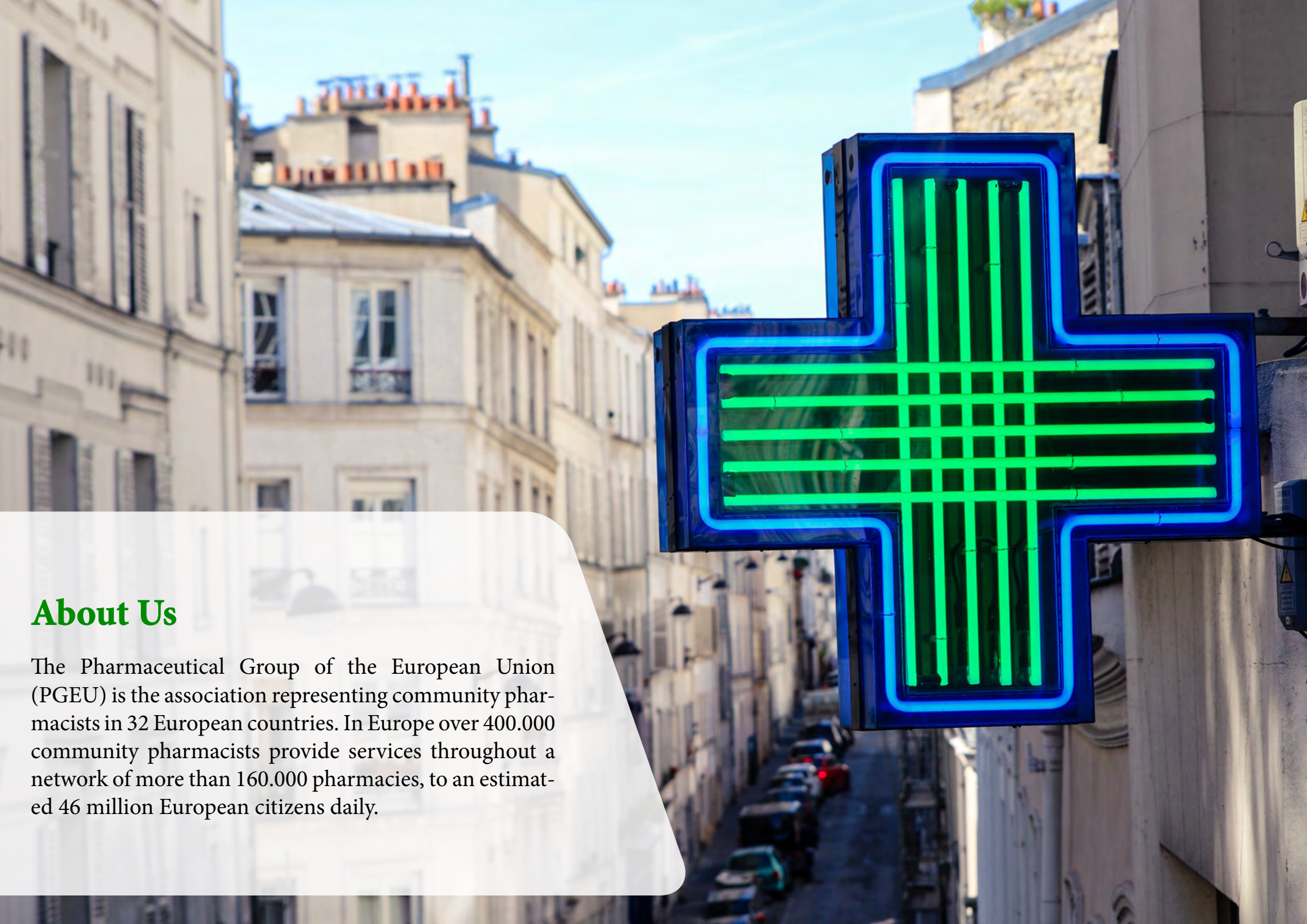
PGEU Position Paper on Cancer

Pharmaceutical Group of European Union

PGEU GPUE



About Us

The Pharmaceutical Group of the European Union (PGEU) is the association representing community pharmacists in 32 European countries. In Europe over 400.000 community pharmacists provide services throughout a network of more than 160.000 pharmacies, to an estimated 46 million European citizens daily.

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Executive Summary

01

European community pharmacists are strongly committed to take up an enhanced role in providing quality, convenient and affordable access to professional healthcare services within their domains of expertise related to cancer prevention, early detection, treatment and in improving people's quality of life.

A successful Europe's Beating Cancer Plan would mean that in the first place, effective prevention and early detection of cancer become fully integrated in European societies and that EU citizens have convenient access to affordable professional services close to where they work or live. Secondly, innovations in diagnostics and treatments would significantly improve life-expectancy and quality of life for cancer patients during and after treatment, whilst not overstretching the sustainability of healthcare systems.

The structural involvement of primary healthcare is vital to reach the prevention objectives effectively and make sure that EU citizens can make use of these services in an accessible and affordable manner. Community pharmacies across Europe are already providing a wide range of professional services related to the prevention of cancer such as smoking cessation services, nutrition advice, health promotion (including public health campaigns) and recommending and administering (in some European countries) HPV and Hepatitis B vaccines.

In addition to the screening for breast, cervical and colorectal cancer, there is scope to increase the coverage of the target population for the screening of skin cancer within Europe's Beating Cancer Plan.

Due to the high prevalence of cancer in society[1], access and affordability are key elements for Europe's healthcare systems. However, today, in some European countries, cancer treatments that can be administered at home, such as oral chemotherapy and self-administrable biological medicines, are still not ac-

cessible for patients through their local community pharmacy, which puts an unnecessary burden on patients and represents an inefficient utilization of healthcare resources. Community pharmacists can supply these treatments close to patients' homes accompanied with expert guidance on their optimal use, safety and adherence.

Community pharmacists are favourable to integrated, people-centred care models for cancer, which can be supported through digital advances. These can lead to more efficient and effective multi-professional communication, transition of care and medicines reconciliation for cancer patients.

Lastly, in order to improve quality of life of cancer patients across Europe, it is vital to guarantee adequate pharmaceutical care provided by pharmacists as many of these patients use complex treatments causing often serious side-effects and are at risk of medication errors. The risk for major potential drug-drug interactions for oral oncological medicines that could result in serious clinical consequences is also common in ambulatory care[2]. Community pharmacists should therefore be systematically involved to provide pharmaceutical services aimed at improving therapy outcomes and adherence and minimising the risks related to using these medicines.

To meet the needs of Europe's patients and healthcare systems in their fight against cancer, PGEU therefore makes the following key recommendations:

European Level

Ensure the availability and affordability of essential medicines across Europe[3].

The EU Pharmaceutical Strategy should put sufficient safeguards in place to en-sure continued access to essential medicines, in-cluding essential medicines used for the preven-tion (e.g. vaccines) and the treatment of cancer as well as for use in palliative care.

European Level

Support meaningful innovations aiming at advancing cancer prevention, diagnosis, treatment and care.

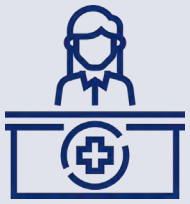
This should include the active development and uptake of the EU Health Data Space to leverage the potential of Big Data and Artificial Intelligence (AI) for cancer across Europe and as a result support healthcare professionals, including community pharmacists, to provide more personalised services and treatment to patients and robust, evidence-based information on therapies while promoting safe and rational medicines use[4].

European Level

Establish platforms, structures and resources to foster the sharing of and collaboration on best practices at EU level.

These initiatives should include practices relating to all four main areas of Europe's Beating Cancer Plan.

National and Regional Level



Increase access to professional and affordable healthcare services close to where people work or live by structurally involving community pharmacists in:

1. The provision of cancer prevention services, including smoking-cessation services, the administration of vaccines and health promotion and education programmes;
2. Early detection for several types of cancer, including colon cancer and skin cancer;
3. The provision of cancer treatments which can be administered at home, such as oral chemotherapy and self-administrable biological medicines;
4. The provision of pain treatment, special nutrition, and management of chemotherapy side-effects for palliative patients;
5. Optimising pharmaceutical care and therapy adherence for cancer patients who are on complex treatments often causing serious side-effects and are at risk of medication errors.

National and Regional Level

Support healthcare professionals in implementing an integrated, patient-centred approach in their practices to ensure efficient and effective multi-professional communication, transition of care and medicines reconciliation for cancer patients.

This can be done through granting access for treating healthcare professionals to all relevant patients' health information and the list of medication via the establishment of integrated eHealth solutions and digital communication tools, while respecting data protection and privacy rules. It is especially important to establish such good communication channels between community and hospital pharmacists in order to ensure successful medication reconciliation as part of the often frequent transitions of care for cancer patients.

National and Regional Level

Ensure that remuneration for community pharmacists properly reflects their contribution to improving pharmaceutical care reducing the burden on other healthcare services, and supporting the sustainability and resilience of European health systems.

National and Regional Level

Combat inequalities in terms of access and affordability of cancer prevention, screening, diagnosis, treatment and (palliative) care services by strengthening primary care in particular in remote and rural areas.

Shared Competence

Increase the share of healthcare budgets' investments in prevention and screening of cancer at European, national and regional levels.

Concrete actions should include the strengthening of the role of primary care in prevention, increasing the access to vaccination and further structurally integrating health promotion and education throughout EU people's lives.

The Community Pharmacy Contribution to Europe's Beating Cancer Plan

02

Prevention

Smoking cessation

Pharmacists are ideally placed to advise patients on how to stop smoking and to provide information on the supply of medication. Several studies and systematic reviews[5] [6] [7] have demonstrated that pharmacists can effectively deliver smoking-cessation services and suggested they are cost-effective in helping patients successfully quit.

Community pharmacy-based smoking cessation programmes will typically include a number of consultations, often based on motivational interviewing or brief intervention techniques. This service has the advantages of accessible locations and opening times, offering a one-to-one consultation, as well as a single access point to the needed support, providing both counselling and nicotine replacement therapy (NRT) products.

Case study: France – Structured smoking cessation service

Since 2017, pharmacists in the Provence-Alpes-Côte d'Azur region offer a community pharmacy counselling service to support smoking cessation on the occasion of the "tobacco-free month". It includes an initial interview, a reassessment of the cessation plan after 8 days, 1 month of follow-up and an assessment after 30 days. The participating pharmacists receive a specific training for conducting the service and commit to a patient support plan. The service is remunerated by the Regional Health Agency.

111 patients were followed by 29 pharmacists in 2017 and 104 smokers by 16 pharmacists in 2018. In 2017, 46.8% of smokers had completely stopped smoking after one month (41.3% in 2018) and 79.2% had reduced the number of cigarettes (67.7% in 2018)[8].

In 2017	In 2018	Service Outcomes
46.8%	41.3%	smokers had completely stopped smoking after one month
79.2%	67.7%	smokers had reduced the number of cigaretts

Health Promotion and Education

Providing basic information and support for people to make healthy lifestyle changes is an essential part of community pharmacists' core mission to maximising the benefits of medicinal therapies and health outcomes of their patients. This includes providing advice and support on nutrition, physical exercise, reducing alcohol consumption and responsible self-care throughout.

Moreover, structured and pro-active pharmacy services aiming at the promotion and support of healthy lifestyle changes have shown their potential in the prevention of non-communicable diseases such as cardiovascular diseases[9] [10].

Community pharmacists across Europe also actively contribute to health promotion campaigns for the prevention of several types of cancer, which are strongly correlated with lifestyle behaviour, such as skin cancer and lung cancer.

Case Study: Spain – Skin cancer awareness campaign

On the occasion of the pan-European Day for the Prevention of Skin Cancer on 13 June, the General Pharmaceutical Council of Spain organises a skin cancer prevention campaign in community pharmacies annually in collaboration with the Spanish Association against Cancer and the Ministry of Health.

The objective of the campaign is to educate the population about the early diagnosis, prevention and treatment of skin cancer. Community pharmacists disseminate patient education and awareness materials[11] [12] [13] and use their visible local network of pharmacies to actively promote sun protection recommendations and information to the public[14].

Recommending and administering HPV and Hepatitis B vaccines

Community pharmacists advise patients on the importance and/or appropriateness of immunisation, identify and remind target groups for vaccination, and of course dispense and advise on vaccines. Most pharmacists in Europe would regard that as part of their core activity. Today, in several European countries[15] pharmacists can also directly administer vaccines in pharmacies as a complementary service to existing vaccination services.

Case study: Pharmacist-delivered vaccination in community pharmacies

In Denmark, Portugal and the United Kingdom, community pharmacists also administer vaccines against Hepatitis B and/or Human Papillomavirus (HPV) which helps increasing the access for the population and immunisation rates. Vaccines against the Hepatitis B virus can prevent chronic Hepatitis B infection that can lead to liver cirrhosis and liver cancer whilst HPV vaccines can prevent infection with viruses that can cause cervical cancer and several other cancers.

Early Detection and Diagnosis

Community pharmacies are highly accessible to the public and most are equipped to carry out health checks for several non-communicable diseases and referral to the most appropriate healthcare provider / service when needed. In the area of cancer, community pharmacists are already successfully supporting population screening programmes for skin and colon cancer in several EU countries.

Colorectal cancer screening programmes

In some European countries, community pharmacists are actively participating in screening programmes for colon cancer. This is usually done by supplying and advising on the use of an Immunochemical Faecal Occult Blood test (iFOB or FIT). After taking a stool sample, the patient either brings back the sample to the pharmacy for analysis in a certified lab or the kit can contain a direct analysis tool (= self test). After a positive iFOB/FIT test, the patient is referred to the physician for a colonoscopy.

Experience from Switzerland[16] has demonstrated that pharmacy services for the screening of colorectal cancer are well received by patients and have the potential for earlier detection of colon cancer and consequently decreasing morbidity and mortality. During the 2016 campaign, the pharmacists evaluated the risk factors through a questionnaire among individuals aged between 50 to 75 years old who did not have had a colonoscopy over the previous 10 years. Pharmacists delivered a Faecal Immunochemical Test (FIT) to those without risk. Patients with identified risk factors or with a positive result were referred to a physician. Patients with a negative result were given lifestyle advice and invited for a new screening in two years. Within 6 weeks, 23,024 people were screened in pharmacies. In total, 760 patients (3%) had risk factors and were directly referred to physicians. The remaining 22,264 received a FIT, and 97% of these individuals performed and sent the FIT to the laboratory. Of the 21,701 tests analysed, 93% were negative. All individuals with positive results (7%) were referred to a physician.

Case study: Spain

In Spain, community pharmacies participate proactively in publicly funded colorectal cancer screening programs in the regions of Catalonia[17], Murcia[18] and the Balearic Islands[19] .

The objective of including community pharmacies is to encourage participation by making the test more accessible for the population - proximity, flexible hours, no need for a prior appointment, and presence of a trained health professional.

The methodology and procedure are as follows:

The Regional Ministry of Health of the autonomous community sends a letter of invitation to people in the identified target population group.

If the invitation is accepted, the subject is referred to his or her nearest pharmacy participating in the programme.

Upon presentation of the letter of invitation, the pharmacist will deliver the kit for sample collection and provide information to the user about the correct collection and delivery of the sample. Once the sample has been collected at home, the kit is returned to the pharmacy, which sends it to the reference laboratory for analysis.

The pharmacies involved in this programme receive training prior to dispensing the test kits. Additionally, both patients and their families receive health education about colorectal cancer and the screening kit.

The results obtained in Catalonia have shown that since 2013, the number of kits delivered has increased by 430%, achieving an average participation close to 50% of the target population. The rate of positive tests was 4.7%. During 2019, more than 319,356 people were supported by the participating pharmacies in the province of Barcelona (average of 85.8%). Users of the service have rated pharmacists' performance at 9.5 out of 10 on average.

Case study: Ireland - A community pharmacy-based pilot project for Bowel Screen in County Kerry

In County Kerry in Ireland, a small pilot was carried out in 2019 in community pharmacies aimed at improving uptake rates of bowel screening[20]. It demonstrated that bowel screening kit return rates following pharmacy intervention were 74%, compared with 38% national return rate. The pilot project will be repeated in 2020 with a larger number of pharmacies.

Skin Cancer Screening

Pharmacists can help to assess moles and pigmented lesions that a patient may be worried about and can help identify any that might be suspicious and refer the patient directly to specialised care.

Case study: Norway - Dermatological cancer screening service

Norwegian pharmacies offer a mole scanning service to patients. The scans are undertaken within pharmacy consultation rooms via the mole scanning system Screen Cancer Mole Navigator® in combination with SIAscope-technology. The image captured in the pharmacy was then sent to a trained specialist in dermatology for interpretation.

A study[21] conducted between 2010 and 2014 has evaluated the impact of the service. 25,836 mole scans on 15,777 individuals were performed in Norwegian community pharmacies and interpreted by trained specialists. Of these, 83.6% had normal scans, 1% had melanoma, and 15.4% had another skin condition. In 2014, the service identified 4.1% of melanoma cases registered in the Norwegian Cancer Registry. Most responders (88%) said that they would use a similar service again. Nearly all (99%) respondents felt the pharmacy was a suitable venue, and 95% would recommend the service to others. In total, 99% of respondents scored their overall satisfaction as “good” or higher. These findings demonstrated that the approach in pharmacies was highly appreciated among patients. Providing mole scanning through pharmacies enables individuals to obtain a rapid check of moles causing concern, in an acceptable environment with a high level of satisfaction.

25 836

mole scans on 15 777 individuals performed in period between 2010 and 2014

4.1%

of melanoma cases identified by sevice in 2014

99%

of respondents scored their overall satisfaction as "good" or higher

Case study: United Kingdom – Cancer risk screening and triage[22]

The Greater Manchester cancer vanguard, in partnership with the University of Manchester and Lloyds Pharmacy, used community pharmacies to support people to complete a Risk Estimation for Additional Cancer Testing (REACT) model. This model weighs up an individual's current risk of having cancer based on their self-reported symptoms. It has been widely used in GP practices, but experts wanted to test it in the community. Trained pharmacists helped participants to complete a series of questions during a face-to-face consultation within the pharmacy. Participants were given an estimate of their risk of having cancer and individuals with high risk scores were referred to a GP for further investigations to help improve early diagnosis of the disease. The findings from this pilot prove that community pharmacists can play an important role in helping patients to understand their risk of having cancer. Participants to the REACT questionnaire said that they valued the guidance and support of a trained healthcare professional. The inviting, community feel was also an important factor in helping patients to feel comfortable talking about the condition. An initial learning is that language and communication is important when talking to people about cancer.

Community pharmacy can play a vital role in helping people to think more about their risk of getting cancer and then to get tested more regularly.

The work from this vanguard is now feeding into a larger study on cancer prevention and early detection.

Treatment and Care

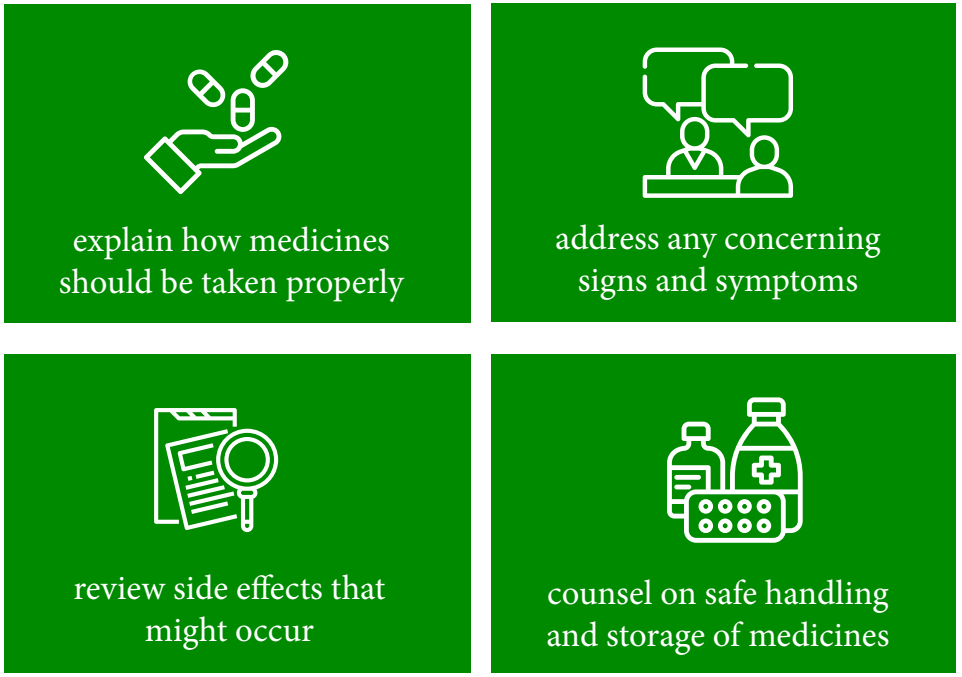
Access to oral chemotherapy medicines through community pharmacy

To improve access and affordability of cancer treatments which can be administered at home, such as oral chemotherapy and self-administrable biological medicines, it is important to make use of the highly accessible network of community pharmacies in Europe.

Oral anti-cancer agents prevent many people with cancer from numerous hospital visits, allowing them to obtain their medicines from their local community pharmacy. People taking these oral medicines still require support, as many of these agents can cause significant side effects and interactions. A study noted that more than half of ambulatory patients with cancer had at least one potential drug interaction. One-third of ambulatory patients with cancer had a major potential drug interaction that could result in serious clinical consequences[23]. Community pharmacies are ideally placed within the community to help these people and can explain any concerning signs and symptoms, particularly symptoms of infection and explain how their medicines should be taken. They can provide reassurance as many people are worried about the use of these medicines and counsel people on safe handling and storage of anti-cancer medicines. Lastly, they can review side effects that might occur and help people manage these alongside their symptoms.

As pharmacogenomics develops, community pharmacists are likely to have a role in providing services to ascertain if people are on the best medicines for them as individuals, using their genomic data[17].

Today, we see however that in some European countries these medicines are still not accessible for patients through their local community pharmacy, which puts an unnecessary burden on patients and is an inefficient utilization of healthcare resources. A study from Portugal has highlighted that the dispensing of medicines in a hospital represents an annual cost of 199 million euro and that on average, each patient travels 7.6 times to the hospital per year to collect medication, with each trip to the hospital having a cost of 14.30 euro for the user, as well as a total layoff time of 5 hours and 27 minutes[24]. Community pharmacists can supply these treatments close to patients' homes accompanied with expert guidance on their optimal use, safety and adherence. Several models of pharmacists' interventions in oncology outpatient care have already proven to be successful, have been consistently efficacious, and have positively influenced patient outcomes[25].



Case study: Ireland - National Competency Framework for Pharmacists Working in Cancer Care

In Ireland, the National Cancer Control Programme (NCCP) has developed a National Competency Framework for Pharmacists Working in Cancer Care[26]. The competency framework was developed in conjunction with colleagues from the Irish Institute of Pharmacy, the Irish Pharmacy Union, hospital oncology pharmacy and community pharmacy. This framework has been developed to improve the development and provision of training for pharmacists working in cancer care. In addition, it addresses the need to optimise medicine use, to improve the quality of care and to improve outcomes for cancer patients by illustrating the behaviours, skills and knowledge pharmacists require for working in cancer care.

Case study: The Netherlands – Pharmacogenomics screening

In the Netherlands, the Royal Dutch Pharmacists Association (KNMP) initiated a pilot in community pharmacies with the aim of demonstrating the impact of Pharmacogenomics (PGx) testing by community pharmacists on individual patients. Following development of evidence-based guidelines and having undergone appropriate training, pharmacists collected and interpreted PGx test results, discussed therapy optimisation with other healthcare providers and advised on changes to patients' pharmacotherapy. This led to interventions such as dose adjustments and therapy switches[27].

Case study: The Netherlands – Pharmacovigilance for oncological agents

The KNMP has developed clinical risk management tools on medication use with monitoring of interactions between oncological agents and other medicines in Dutch community pharmacies. A multi-disciplinary KNMP working group provides updated guidance on interactions between oncological medicines and other medicines on an annual basis, which are incorporated within the 'G-Standaard' database. This database is integrated within pharmacy dispensing software of Dutch community pharmacies enabling the automatic monitoring of interactions of oncological agents at point of care. The community pharmacist receives more specific and relevant signals with the clinical risk management and can concentrate on the high risk alerts, promoting a more personalised pharmaceutical care for every patient.

Pharmacy services related to the support for cancer treatments in primary care

Across Europe, community pharmacists are increasingly developing a structured service approach towards the support for oral chemotherapy in primary care. New medicine services, medication use reviews and adherence support programmes are just some examples of such services that have been implemented in several European countries and which have demonstrated their (cost) effectiveness [28] [29] [30].

Pharmacist-delivered medicines consultations are feasible and acceptable to cancer patients and have the potential to benefit clinical care.

Community pharmacists should therefore be systematically involved in providing pharmaceutical services aimed at improving therapy outcomes and adherence, and minimising risks related to using these medicines.

Case study: France – Oral Cancer Treatment Service

In France, the use of oral anti-cancer medicines, including 40 % of targeted therapies, is increasing. Such treatments can have less negative impact on the quality of life and less venous adverse effects; however, they require tailored dosage, as well as observance to avoid efficiency loss and risks. Community pharmacists were thus recognised as key to ensure the appropriate use of such treatments: the recently introduced support service for patients under oral anti-cancer therapy means to support patients in every aspect of their treatment[31]. On the first year, community pharmacists analyse all medicines taken by the patient to assess any risk of medicines interaction; they then have an initial interview with the patient, collecting general information and comprehending the patient's knowledge of their treatment, of conditions for its administration and of the treatment regimen. Afterwards, another interview is devoted to difficulties related to the treatment in the patient's everyday life, including possible adverse effects, followed by one more interview to assess adherence to treatment. The following years, pharmacists provide one or two such interviews (depending on the type of treatment) for continued support to daily life, monitoring of side effects and adherence.

Case study: England – New Medicine Service

In England, patients commencing a new therapy can receive the 'new medicine service'. This provides support for those patients that have been newly-prescribed a medicine for a long-term condition and is intended to improve adherence. Within two weeks, the patient will have either a face-to-face consultation in pharmacy or a telephone consultation where the pharmacist conducts a semi-structured interview to identify any problems, side effects, concerns or nonadherence to the new medication. Under these circumstances, the patient can be referred to her/his doctor if required or provided with appropriate advice by the pharmacist. They then agree a date for a final consultation within a two-week period. The service is reimbursed by the National Health Service. A randomised controlled trial of the new medicine service showed that the service significantly increased the proportion of patients adhering to their new medicine by about 10%, compared with normal practice. These results are in line with similar services evaluated in Norway[33] and Ireland[34].

Case study: Italy – Medicine Use Reviews

In Italy, Medicines Use Reviews (MURs) for asthma patients are performed as a structured, face-to-face, systematic consultation with a pharmacist. It covers medicines used, symptoms, attitudes towards adherence and medicines and includes pharmacist-identified pharmaceutical care issues. In a recent cluster-randomised control trial, this approach demonstrated both effectiveness and cost-effectiveness and has subsequently been implemented as a pharmacy service[23].

Case study: Denmark – Compliance service

In Denmark, the Compliance Service was introduced in pharmacies for patients with chronic diseases that have problems with compliance[35]. This service provides a private consultation between the pharmacist and a patient that has been taking a medicine for a chronic condition for more than 12 months and is experiencing problems with compliance. The purpose is to achieve better therapy compliance for patients by proving them with information and advice on the safe, effective and rational use of their medicines while also addressing healthy lifestyle measures. In the long term, the service empowers patients and increases the effectiveness of their treatment.

Integrated patient-centred care models supported by digital advancements

The delivery of cancer care must focus on ensuring the best outcomes and experience for the patient by drawing on the wide range of skills of the multidisciplinary team[36]. Healthcare professionals should therefore be stimulated and supported in implementing an integrated, patient-centred approach in their respective practices to ensure efficient and effective multi-professional communication, transition of care and medicines reconciliation for cancer patients. This can be done through granting access for treating healthcare professionals to all relevant patients' health information and the list of medication via the establishment of integrated eHealth solutions and digital communication tools, while respecting data protection and privacy rules.

The active development and uptake of the EU Health Data Space to leverage the potential of Big Data and AI for cancer across Europe can also contribute to achieving this goal. It could lead to supporting healthcare professionals, including community pharmacists, to provide more personalized services and treatment to patients and robust, evidence-based information on issues related to therapies while promoting safe and rational medicines use.

Case study: Belgium – Family Pharmacist Service

In Belgium, chronic patients can assign their preferred 'family pharmacist' who will support them in managing their medications by providing a personalised medication plan, which is updated and shared with patients upon every change of therapy[37]. This medication plan can also be shared electronically with treating physicians upon patient consent and is so improving communication and interdisciplinary collaboration. It is facilitated by the "Dossier Pharmaceutique Partagé" (shared pharmaceutical record), which is an integrated webservice in the pharmacy dispensing software developed by the Association of Pharmacists in Belgium (APB).

Pharmacists are reimbursed for the Family Pharmacist Service by the health insurance, making the service free for chronic patients. The service, launched in October 2017, has in one year reached 600.000 patients (>1/20 of the Belgian population) and is offered by over 80% of community pharmacies in Belgium.

Quality of life for cancer patients, survivors and carers

Improving quality of life for cancer and palliative patients

Community pharmacists have a vital role to play in the provision of pain treatment, special nutrition, and management of chemotherapy side-effects for palliative patients[21] [38].

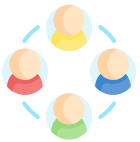
Community pharmacists can provide a prompt and continuous service to patients by ensuring that a supply of specialist palliative care medicines is in stock in the pharmacy in order that prescriptions can be dispensed in a timely manner. Effective communication between the specialist palliative care nurse, prescriber and the community pharmacist should try to anticipate a patient's need for medication and plan accordingly.

A study in the UK has highlighted that patients experiencing pain from advanced cancer often still have unmet needs in terms of management and optimisation of the medicines[39]. It indicates that patients were receptive to the idea of a targeted medicines consultation with a trained community pharmacist and were positive about this being carried out in a face-to-face setting or by telephone.

Case study: The Netherlands - Farmabuddy project in community pharmacies

In the palliative and terminal phase, a patient and his/her informal caregivers are facing complex care problems. To tackle these problems effectively, it is important that primary healthcare providers work together as a team, also with the secondary healthcare providers. The role of the community pharmacy team is essential in this collaboration because the patient almost always uses medicines during these phases.

In the Farmabuddy project, patients in the palliative and terminal phase and their caregivers will have regular contact persons in the community pharmacy: two pharmacy assistants as pharmacy buddies. In this way, the intensive pharmaceutical patient care that the patient and the caregiver need is better structured and more focused on the patient.



Case study: Scotland – Community Pharmacy Palliative Care Network

A model for pharmaceutical palliative care in rural Scotland which is experience-based and funded by Macmillan Cancer Support has shown positive results[39]. In Scotland, they have also established a Community Pharmacy Palliative Care Network which provides value to aspects of the medical supply chain; access to training; opportunity to discuss good clinical practice; and connection to specialists and multidisciplinary teams. The service demonstrates that relationship building between nurses and community pharmacists is needed for a better understanding of patient needs and timely medicine supply[40].

Combatting malnutrition

It is estimated that 1 in 3 cancer patients are at risk of malnutrition and that the prevalence of malnutrition is over 70% in advanced cancer patients, which impacts negatively on survival and quality of life[41].

The provision of optimal nutritional care requires a multidisciplinary approach with pharmacists, physicians, nurses, dietitians, psychologists, social workers, etc., working as a team with adequate facilities and administrative and financial support.

Pharmacists can play a key role in prevention, early identification, treatment and referral of malnutrition. They also have the knowledge to advise on types and usage of nutritional supplements and medical nutrition in primary care when required[42].

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