

# 10th PCNE Working Conference Pharm.Care@BLED 2017

**Workshop |** Exploring the impact of eHealth on pharmaceutical care



# eHealth Solutions and Pharmacy:

PCNE Policy Recommendations for Implementation



### Introduction

#### eHealth

eHealth has been defined in several ways<sup>1</sup> and several EU and global Institutions have also provided definitions.

The WHO defines eHealth as "eHealth is the use of information and communication technologies (ICT) for health. Examples include treating patients, conducting research, educating the health workforce, tracking diseases and monitoring public health"<sup>2</sup>. It is the field of knowledge and practice associated with the development and use of digital technologies to improve health.

The European Commission defines eHealth as "eHealth is the use of ICT in health products, services and processes combined with organizational change in healthcare systems and new skills, in order to improve health of citizens, efficiency and productivity in healthcare delivery, and the economic and social value of health. eHealth covers the interaction between patients and health-service providers, institution-to-institution transmission of data, or peer-to-peer communication between patients and/or healthcare providers"<sup>3</sup>

Regarding this report and the workshop activity which produced it, the understanding of eHealth is considered to be broad, encompassing and includes elements of several definitions. In essence,

<sup>2</sup> WHO 2012 <u>http://www.who.int/topics/ehealth/en/</u>

<sup>&</sup>lt;sup>1</sup> Oh H., Rizo C., Enkin M. and Jadad A. What Is eHealth (3):A Systematic Review of Published Definitions. *Med Internet Res* 2005;7(1):e1) doi:10.2196/jmir.7.1.e1

<sup>&</sup>lt;sup>3</sup> European Commission 2012 https://ec.europa.eu/commission/presscorner/detail/en/MEMO\_12\_959

eHealth is understood to include any form of ICT solution which supports pharmacy practice (including pharmaceutical care), health and wellbeing.

According to the WHO Regional Office for the European region, digital health technologies enable patients to receive care without physically going to a hospital or clinic. This means that healthcare providers will need to have the skills to use digital health tools and to guide patients in understanding and using digital solutions to improve their health (FIP report 2021, p. 47).

#### Pharmaceutical Care

Pharmaceutical Care has been defined by the PCNE as "the pharmacist's contribution to the care of individuals in order to optimize medicines use and improve health outcomes"<sup>4,5</sup>

#### Important documents

- 2016 PGEU Position paper on Digital Health, PGEU-Position-Paper-on-Digital-Health.pdf
- 2017 Nanjing\_Statements. https://www.fip.org/files/fip/PharmacyEducation/Global\_Conference\_docs/Nanjing\_Statem ents.pdf
- 2018 EAFP Position paper, https://eafponline.eu/documents/eafp-position-paper-2018/
- 2018 EC Communication on enabling the digital transformation of health and care in the Digital Single Market; empowering citizens and building a healthier society, <u>https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2018%3A233%3AFIN</u>
- 2019 FIP mHealth: Use of mobile health tool in pharmacy practice, <u>https://www.fip.org/files/content/publications/2019/mHealth-Use-of-mobile-health-tools-in-pharmacy-practice.pdf</u>
- 2019 PGEU Statement: E-Health Solutions in European Community Pharmacies, <u>https://www.pgeu.eu/wp-content/uploads/2019/07/161102E-PGEU-Statement-on-</u> <u>eHealth-Final.pdf</u>
- 2021 FIP digital health in pharmacy education, https://www.fip.org/file/4958

#### Methodology

It was with these two topics in mind that a working group on eHealth and Pharmacy was convened during the 2017 PCNE Working Conference in Bled, Slovenia. Within this working group, a focus group on the topic of "policy recommendations for implementation" was held with the aim of producing recommendations to facilitate the implementation of policies and practices supporting eHealth solutions relevant to pharmacy practice. The focus group met over several days to discuss the barriers and facilitators to policy recommendation implementation based on the model suggested by Fretheim et al ("SUPPORT TOOLS")<sup>6</sup> for evidence informed policy making.

The 2017 focus group consisted of: Samuel Allemann, Olivier Bugnon, Andreia Caldeira, Sek Hung Chau, Pernille Dam, Anita Galic, Joao Gregorió, Nina Griese-Mammen, Kreshnik Hoti, Esther Kuipers, Nika

<sup>&</sup>lt;sup>4</sup> PCNE 2013 <u>http://www.pcne.org//upload/files/3 PCNE Definition Position Paper final.pdf</u>

<sup>&</sup>lt;sup>5</sup> Allemann, Samuel S., et al. "Pharmaceutical care: the PCNE definition 2013." *International journal of clinical pharmacy* 36.3 (2014): 544-555

<sup>&</sup>lt;sup>6</sup> Fretheim A., Munabi-Babigumira S., Oxman AD., Lavis JN. Lewin S. SUPPORT Tools for Evidence-informed Policymaking in health 6: Using research evidence to address how an option will be implemented. *Health Research Policy and Systems*. 2009;7(Suppl 1):S6. DOI: 10.1186/1478-4505-7-S1-S6

Mardetko, James McElnay, Ana Santamaria, Marion Schaefer, Tim Schoenmakers, Dominik Stämpfli and was led by Jacqueline Hugtenburg and Jamie Wilkinson

During the 2021 PCNE Working Conference coordinated from Basel and held by ZOOM because of the COVID-19 pandemic, the PCNE 'Policy on implementation of eHealth in Pharmacy' was revised. A focus group met several days and discussed the PCNE policy document as well as a variety of reports and literature on the subject and adapted the PCNE 'Policy on implementation of eHealth in Pharmacy' accordingly.

The 2021 focus group consisted of: Edyta Czepielews, Amber Damiaens, Christine Flagstad Bech, Kenji Fujita, Nina Griese-Mammen, Martin Henman, Eric Hiddink, Mitra Karimi, Ilyse Kenis, Lise-Marie Kinnaer, Laura Moura, Oliver Schwalbe, Laure Sillis, Ann Kathrin Strunz, Marina Odalovic, Eduarda Satue De Valasco, Juliana Schneider, Céline Stäuble, Pieter Vanhacht, Elzbieta Zmudzka, and was led by Jacqueline Hugtenburg with contributions of Claudia Rijcken, Eric Hiddink, Jaime Acosta, Nilhan Uzman and Ami Eikelenboom.



#### Background

Following initial discussion and brainstorming during the working group, it came to light that the Pharmaceutical Group of the European Union (PGEU)<sup>7</sup> recently published an updated statement on eHealth<sup>8</sup> in the Pharmacy. This paper describes eHealth developments in European community pharmacies and outlines the main benefits that these innovations can provide to patients, pharmacists, other healthcare providers and health system payers alike, as well as making several recommendations to address the barriers to the implementation and use of eHealth initiatives. An annex provides detailed descriptions of 25 different eHealth solutions pharmacists are currently providing across 14 countries in Europe. The focus group reached consensus that this paper is relevant for the aims and objectives of the workshop. As such, it was agreed to utilise this resource as a basis for further development of the focus group's work and to build on the existing PGEU review of policy, research and practice to identify key recommendations to facilitate implementation in the future.

#### Box 1: PGEU eHealth Statement Recommendations 2016

#### PGEU's recommendations are as follows:

- 1. Policy makers, ICT developers and other healthcare providers should engage with pharmacists as experienced users to develop eHealth policies and services at local, regional or national levels as appropriate;
- 2. eHealth should be integrated into health systems complementing and supporting existing practice, with pharmacy potentially as a link between several services, organisations and infrastructures;
- 3. Electronic health records should be linked with ePrescribing systems, thus allowing healthcare providers involved in patient care to access necessary patient information from the electronic health record. There also should be a facility to update the electronic health

<sup>&</sup>lt;sup>7</sup> PGEU is the association representing 400.000 pharmacists from 32 European countries. <u>www.pgeu.eu</u>

<sup>&</sup>lt;sup>8</sup> PGEU 2016 <u>http://pgeu.eu/en/policy/9:e-health.html</u>

record with relevant information when necessary, in order to increase the capacity to identify and address potential medication and patient safety-related issues;

- 4. Communication and collaboration between patients, healthcare providers and ICT developers is crucial to obtain the full potential of eHealth technologies and to build confidence and trust. When developing guidelines for eHealth, policy makers are called upon to meaningfully involve their end users;
- 5. The community pharmacy profession should be recognised, supported and adequately reimbursed for their continuous investment in eHealth, ICT infrastructure, eSkills of the workforce and contribution to improved health outcomes and reduced healthcare costs.

#### Results

The focus group identified 9 key areas / actions to be addressed (see table below) concerning behaviour changes required for (i) healthcare providers and patients, (ii) organisational matters and (iii) health system matter in line with Fretheim et al 2009's SUPPORT TOOL.

Table 1: Overview of key actions / areas to be addressed to improve implementation

- 1. Records & Best Practice
- 2. Patient empowerment
- 3. Collaboration & Integration
- 4. End User Engagement
- 5. Pharmacists Advocacy
- 6. National eHealth Action Plans
- 7. Pharmacist/cy, e-pharmacy, eHealth and digital solutions, Education and Innovations
- 8. Support of self-care and selfmedication
- 9. Governance

Following identification of the key areas, the focus group identified the most significant barriers and facilitators to eHealth implementation (see Annex 1 for full descriptions) and subsequently drafted the key recommendations concerning effective policy implementation (see next Recommendations chapter below) for consideration by the PCNE and other interested parties.



#### **Records & Best Practice**

PCNE considers eHealth to bring effective solutions for the documentation of patient medication use and efficient delivery of pharmaceutical care services in order to improve effectiveness and safety. These should allow patients' access and include follow-up, feedback and support from them (e.g. patient-reported outcomes, satisfaction). The development and use of best practices and accreditation processes should guide the implementation of such solutions. Identified facilitators are remuneration for documentation and informing other healthcare providers (HCPs), as well as for not dispensing a medicine, and education in health and digital literacy.

Implementation of suitable algorithms and methods of data extraction
Collaboration between software developers, pharmacies and patients
Access to exhaustive data and seamless communication between HCPs
Standards to detect and evaluate inappropriate medication
Willingness of patients to share data in accordance to privacy legislation
Digitised data should feed easily into research projects



#### Patient empowerment

Patient empowerment means that patients are taking responsibility over their health and illness and play an active part in decision-making processes, including medication use and pharmaceutical care<sup>9</sup>. Patients should be considered as experts of their own body and therefore their knowledge is crucial for the success of treatments. eHealth services can provide opportunities for patients to be more involved in their treatment and medication use (e.g. a shared platform for GP, community pharmacists and patients). It can also facilitate self-management and enable patients to self-determination (e.g. mobile app to support medication adherence). However, eHealth should therefore be tailored to the patients' needs and abilities. All patients, including both elderly and digital natives, should be able to easily use these services. Training of patients in the use of these services might be necessary.

Community pharmacists should inform every patient about the possible role he/she can play in their own treatment, and about how eHealth services can provide guidance. The degree of involvement of the patient will depend on their willingness to take a more active role.

To empower patients to eHealth services, pharmacists need to be qualified. According to a study of the European Pharmaceutical Students' Association from 2017 the vast majority of pharmacy students in Europe claims to have no or almost no education on eHealth. Only few universities in several countries (e. g. Estonia, France, Norway, Poland, Slovenia, Spain, Sweden, United Kingdom) offer optional subjects on eHealth an digital skills.<sup>10</sup>

Patient education and training
Involving eHealth skills and empowering patients in pharmacy curricula and advanced education
E-health coach for patients
Tailored e-health services, developed in co-design with patients (incl. elderly and digital natives)
eHealth service to facilitate communication between patients and their HCPs (e.g. shared
platform for GP, pharmacist and patient)
eHealth service to facilitate self-management (e.g. mobile app to track adherence)

<sup>&</sup>lt;sup>9</sup> Castro E. M., Regenmortel T. V., Vanhaecht K., Sermeus W., Van Hecke A. Patient empowerment, patient participation and patientcenteredness in hospital care: A concept analysis based on a literature review. *PEC* 2016; 12: 1923–1939. DOI: 10.1016/j.pec.2016.07.026 <sup>10</sup> European Pharmaceutical Students' Association (EPSA), EPSA Position Paper on eHealth and Digital Skills, 2019



#### **Collaboration & Integration**

Collaboration between healthcare providers, interprofessional education and interprofessional practice are increasingly being incorporated into the practice of healthcare providers. Literature suggests that healthcare provider integration together with patient-centered care leads to better patient outcomes, increased job satisfaction, better pharmacists' retention rates and increased awareness of healthcare providers' roles. Barriers include lack of trust and communication, lack of understanding of others' roles and financial (dis)incentives.

Taking this into consideration, the PCNE working group on eHealth and Pharmacy recommends that eHealth solutions should be implemented whilst considering interprofessional collaboration and integrated care for the benefit of the patient. This recommendation also emphasizes the central role of community pharmacies as a key access point in delivery and implementation of eHealth solutions and interventions.

Joint HCP educational programs
CPD, further training and education
Collaborative projects & public health activities
Joint remuneration
Institutional support
New legislation and enforcement and accountability
Clearly defined roles and agreement of roles
Sharing best practices on interprofessional collaboration
E-Health coach for pharmacists



# End User Engagement

PCNE supports the dissemination and the use of eHealth solutions by pharmacies and professional organisations in addition to traditional communication channels. Major risks and barriers which need to be overcome are: inadequate digital infrastructure and interoperability, unsustainability of eHealth solutions, insufficient quality of the eHealth solution, poor understanding of future potential of eHealth and pharmacists are often not considered an "end-user" of eHealth solutions.

Consistent use of agreed terminology / nomenclature
Education on improving digital health literacy
Participation in eHealth projects
Collaboration with patients / patients' organisations / patient movements using eHealth
Community pharmacies could consider resource allocation and workflow to incorporate eHealth
solutions in providing patient care and maximising efficiency
Positive feedback (stories) from early adopters



#### Pharmacists advocacy

Throughout the past century, the role of pharmacists has shifted from a product-centered role to a provider of patient-centered services<sup>11</sup>. Despite the international recognition of the pharmacist as healthcare provider to promote the responsible use of medicines, eHealth initiatives do not routinely consider pharmacists as stakeholders. PCNE supports advocacy for the recognition and consultation of pharmacists during the development of eHealth solutions. Major challenges are: low perceived value of pharmacists' eHealth interventions due to lack of convincing evidence, lack of visibility of pharmacists to key stakeholders and lack of collaboration between patient representatives and health care providers.

#### **Recommendations:**

Collect, audit, review and publish real-world evidence to support pharmacists' contributions in the provision of care to patients

Active participation and lobbying of pharmacists and professional bodies at relevant fora

Collaborate with patient representatives, physicians and other healthcare providers to promote the use of eHealth solutions during the medication review process and other services provided in the pharmacy

Pharmacists are important in digital health and should be involved in ehealth policy making

<sup>&</sup>lt;sup>11</sup> International Pharmaceutical Federation (FIP), World Health Organisation (WHO). Joint FIP/WHO guidelines on good pharmacy practice: standards for quality of pharmacy services. WHO Technical Report Series 2011.



#### National eHealth Action Plans

Currently, community pharmacists are not necessarily recognised as key stakeholders in eHealth and they may not be mentioned in national eHealth action plans as providers of eHealth. Including the community pharmacist in eHealth care can improve the outcome of patient care. Recently, e-prescribing and digital COVID-19 vaccination certificates have been introduced in some European countries.

#### **Recommendations:**

The national organisations that represent community pharmacists should actively promote the community pharmacy as a relevant provider of eHealth and stakeholder in national eHealth Action Plans

The national organisations that represent community pharmacists should have an eHealth strategy for community pharmacies

Initiatives to generate scientific evidence to support the implementation of eHealth initiatives should be conducted by pharmacy practice research groups

Instating an eHealth observatory in order to document current and future eHealth initiatives and to support the common interests of HCPs in eHealth care. The observatory should include relevant stakeholders (community pharmacist, GP, policy makers, other HCPs)

Implementation projects demonstrating the role of the community pharmacist in the provision of eHealth should be conducted and supported



Pharmacist/cy eHealth Education and Innovations

PCNE supports the development and use of pharmacists'/ies' own eHealth solutions to improve pharmacy practice, optimise workflow, and increase communication with patients and other healthcare providers.

These eHealth solutions should be built on existing systems and should be interoperable, user-friendly and affordable. The development process should involve an open co-operation with other partners, particularly with patients and other healthcare providers. Major risks and barriers which need to be overcome are lack of financing and funding and competition (data collection and analysis) from outside the profession.

According to the FIP report 2021 on education in digital health in Pharmacy, only limited numbers of students and pharmacists have received digital health education or training as part of their continuous education.<sup>12</sup>

It was also observed that a considerable number of pharmacy schools do not offer digital health education in their curricula.<sup>12</sup> Digital health should be implemented in healthcare education of pharmacists both at the academic and practise level based on a suitable framework. EAFP and FIP have proposed relevant domains for pharmacy curricula<sup>13,14</sup> to develop and implement an effective education system.

How to build education in digital health in the coming years remains a challenge. Several institutions have introduced model based on certificates for their health students who participated in specific courses. However, systems based on certificates are primarily focused on those students with a specific

<sup>&</sup>lt;sup>12</sup> International Pharmaceutical Federation (FIP), FIP Digital health in pharmacy education. The Hague: International Pharmaceutical Federation, 2021

<sup>&</sup>lt;sup>13</sup> EAFP Position Paper, 2018

<sup>&</sup>lt;sup>14</sup> FIP Nanjing Statements, 2017

interest in digital health and are an interim solution to the eventual adoption of digital health education into the formal health curriculum.<sup>15</sup>

The EAFP position paper (2018) distinguishes four pillars required for pharmacy curricula including 1). Maintaining a science-practice balance where science is translated into practical outcomes. 2). Engaging teaching methods and provision of opportunities for experiential and hands-on learning. 3). Preparing students to act as team players through interdisciplinary learning platforms and 4). Preparedness for lifelong learning.

The FIP Nanjing Statements and the EAFP Position Paper provide a framework for pharmacy education<sup>12</sup>: 1). Personalised care through use of the computerized of patient data, 2). Service provision through using telemedicine patients will have access to healthcare by telecommunications. Beyond communication skills, pharmacists have to embrace remote communication to provide patient counselling, patient monitoring and interact with other HCP, 3). Safety and risk: by regulating the safety, quality and efficacy of delivery systems that feature digital platforms and 4). Leadership: competence to reflect on strengths, weaknesses and opportunities takes up a leading role in adopting digital health to transform health systems. To this end real-life online practices are necessary.

Eight clusters for an effective pharmaceutical education system have been distinguished<sup>14</sup>: 1). Shared global version, 2). Professional skills mix, 3). Recruitment of students, 4). Foundation Training and Leadership, 5). Experiential Education, 6). Resources and Academic staff, 7). Quality assurance and 8). Continuing Professional Development.

Digital health education should preferably be integrated in the whole curriculum, as technology is now a relevant and important aspect to consider for almost every topic and it is important not to think of it as in isolation or a separate curriculum.<sup>12</sup>

- Pharmacy and pharmaceutical sciences education must be needs-based to meet existing and emerging requirements in digital health. These requirements must reflect the needs in all sectors of pharmacy and pharmaceutical sciences, from clinical pharmacy to drug research, of all members of the pharmaceutical workforce as well as patients and the community.<sup>12</sup>
- Students are exposed to the realities of communicating with patients through telemedicine: understanding barriers that patients may have to access healthcare through digital health and overcome anxiety.<sup>12</sup>
- According to the WHO Regional Office for the European region, digital health technologies enable patients to receive care without physically going to a hospital or clinic. This means that healthcare providers will need to have the skills to use digital health tools and to guide patients in understanding and using digital solutions to improve their health.<sup>12</sup>
- Pharmacy students also must learn how digital health is impacting the global healthcare delivery system.<sup>12</sup>

Involve pharmacists in software development
Education on digital literacy of the pharmacy team
Use of business models
Innovation and service development
Integrating digital health into curriculum-considerations
Coordinate innovation with the software of other HCPs, especially that of Health Administrations

<sup>&</sup>lt;sup>15</sup> Aungst T. D. and Patel R., Integrating Digital Health into the Curriculum – Considerations on the Current Landscape and Future Developments. *J. med. educ. curric. dev.* 2020;7:1-7. DOI: 10.1177/2382120519901275



#### Self-care

Responsible self-medication is the is the practice whereby individuals treat their ailments and conditions with medicines that are approved and available without prescription, and that are safe and effective when used as directed. Responsible self-medication requires that these medicines are of proven quality, efficacy and safety, and that they are indicated for conditions that are self-recognisable or for some chronic or recurrent conditions (following initial medical diagnosis). In all cases, these medicines should be specifically designed for this purpose, and will require appropriate dose and dosage forms. (WHO, *The Role of the Pharmacist in Self-Care and Self-Medication<sup>16</sup>*).

In 2011 the International Pharmaceutical Federation and the World Health Organisation adopted their joint *«Guidelines on Good Pharmacy Practice: standards for quality of pharmacy services»*<sup>17</sup> which describes the roles and functions of the community pharmacist. Many of these roles also refer to the responsible use of self-medication.

More recently, the draft report to FIP *Council «Pharmacy : Gateway to care. Pharmacist, supporting self-care»* (2016)<sup>18</sup> highlights that appropriate consumer support from community pharmacists will assist consumers in better health maintenance, greater health efficiency and greater economic efficiency. This report emphasises that fundamental and increasingly important goal for pharmacists - to provide the right medicine to the right patient at the right time and to support effective self-care.

The report proposes the term advised or facilitated self-medication, for when the consumer seeks help in the pharmacy, where the pharmacist is in a strong position to facilitate self-care decisions making by consumers. This is added value to rational and responsible self-medication as a WHO term.

<sup>&</sup>lt;sup>16</sup> The Role of the Pharmacist in Self-Care and Self-Medication, WHO, 1998. http://apps.who.int/medicinedocs/en/d/Jwhozip32e/

<sup>&</sup>lt;sup>17</sup> Guidelines on Good Pharmacy Practice: standards for quality of pharmacy services. FIP - WHO, 2011. https://www.fip.org/www/uploads/database\_file.php?id=331&table\_id=

<sup>&</sup>lt;sup>18</sup> Reference Paper "Pharmacy: Gateway to Care – Pharmacists supporting self-care". FIP, 2016.

New e-technology formats introduced to the growing consumer movement will drive the next generation of self-care by allowing patients to manage their own health conveniently and proficiently. (*Internet-based Patient Self-care: The Next Generation of Health Care Delivery, Forkner-Dunn, 2003.*).

To support and improve the implementation of eHealth solutions for supporting the role of the community pharmacist in facilitated self-medication and self-care, PCNE recommends as follows:

#### **Recommendations:**

Need for confronting and tackle the challenges such as unaccredited, biased, unreliable or inaccurate sources of online information, inaccurate claims and false advertising, including the trivialising of self-care/medication and absence of communication with pharmacist.

There is a great necessity to improve collaboration with patients, patients' organisations and patient movements using eHealth solutions.

There should be proactive engagement towards co-operation with other partners (including industry, developers and other healthcare professionals).

Pharmacists should be a part of actions and projects supporting their role as digital healthcare coach.

Patients feel more in control of their healthcare.



#### Governance

The European Commission (notably led by DG SANTE and DG CONNECT), the European Parliament and Council of the European Union, in collaboration with member states and EU civil society stakeholders have developed policies and legislation to support eHealth solutions<sup>19</sup>. The PCNE considers that with the aim of protecting the patient and respecting national legislation and policy on eHealth, all eHealth pharmacy activities should be in accordance with relevant legislation (e.g. privacy, safety as well as other patients' rights).

#### **Recommendations:**

Create a European Observatory of eHealth solutions which in collaboration with respective national representatives would be responsible for ongoing monitoring of eHealth initiatives

Explore possibility of certification of compliance (perhaps by observatory) on eHealth solutions Data safety has to follow European law and national legislation

Patients' rights and duties should be clear and understandable and HCPs are responsible to inform and explain to patients

Active public discussion as well as engagement of HCPs and patients in creating new legislation regarding eHealth

<sup>&</sup>lt;sup>19</sup> In the EU, the organisation and delivery of health services remains a Member State competence

# **RECORDS & BEST PRACTICE**

Documentation of medication use of patients to improve use (safe, rational effective – check for drug-related problems) and use of best practice.



#### Lack of time

Lack of standards / information / suitable algorithms to indicate inappropriate medication

Stakeholder uptake

Lack of motivation

Access to exhaustive data (fragmentation & interoperability of data)

Obligation to react on data by pharmacist

Unwillingness to patient to share data / privacy

Health literacy

Complexity of medication / regimem

Lack of remuneration

Acceptance by physicians

#### FACILITATORS

Collaboration with software developers & pharmacies plays a role in quality assurance

Implement suitable algorithms and data extraction to evaluate

Accreditation for implementation

Remuneration for documentation and informing other HCPs/ not dispensing a medicine

Documentation of best practices (dissemination)

Follow-up, feedback & support from patients (patient reported outcomes & satisfaction)

Access to documentation by patients

Branding as a personalised service

Articulate data documentation and in a user-friendly value

Digitised data will feed easily into research projects



# **COLLABORATION & INTEGRATION**

Interprofessional collaboration / integrated care for the benefit of the patient (access point: community pharmacy).



#### **FACILITATORS**

Joint educational programs (e.g; during the study)

CPD, further study (intra-prof training)

Collaborative projects & public health activities

Joint remuneration (HCPs, payers)

Institutional support (incl stimulation)

New legislation and enforcement / accountability

Clearly defined roles & agreement of roles

Sharing best practices on interprofessional collaboration

E-Health coach for pharmacists



# **END USER ENGAGEMENT**

Involve end users (patients, pharmacists, other HCPs) and their needs and consider continuous education / training to advance eHealth literacy skills.

# FACILITATORS

Education on the potential of eHealth solutions to improve knowledge of benefits

Education on improving digital health literacy / participation in eHealth projects

Consistent use of agreed terminology/nomenclature

Collaborating with patients / patients' organisations / patient movements using eHealth

Adjusting pharmacy resources and workflow to incorporate eHealth solutions in providing patient care and maximising efficiencies

Marketing, dissemination & use of digital media by pharmacies / prof organisations, in addition to traditional communication channels

Positive feedback (stories) from early adopters



# BARRIERS

Lack of interest from end users

Language & low (digital)health literacy / lack of knowledge of end users, developers

Lack of follow-up and monitoring

Perceived lack of time and/or due to high complexity of solution (implementation & adherence to use)

Lack of remuneration / incentives

Lack of privacy

Inadequate digital infrastructure & interoperability

Insufficient understanding of future potential of eHealth

Patient perceptions of pharmacy environment

Sustainability of eHealth solutions

Quality of the eHealth solution

Perception of marketing activities by end users

Investment costs too high

# **ADVOCACY**

Advocate for the recognition that pharmacists should be consulted in the development of eHealth.



#### BARRIERS

Lack of awareness from pharmacists, institutions and health stakeholders

Lack of visibility and participation by pharmacists at relevant fora

Lack of percieved value / lack of convincing evidence of pharmacists' eHealth interventions

Lack of effective lobbying

Patient perceptions of pharmacy environment

Uninclusive (to pharmacists) eMarketing activities and issues surrounding conflicts of interest

#### **FACILITATORS**

Collaborating with patients / patients' organisations / patient movements using eHealth

Collaboration with physicians and other HCPs

Promoting use of eHealth solutions during medication review process and other pharmacy services / practrices

Collection of evidence (real world), audit and evaluation

Publish evidence / HTA, EBM, clinical guidelines and best practices

Active participation / visibility / engagement of pharmacists / prof associations at relevant fora

Advocate for inclusion of pharmacists as a potential end user

Creation / development of an Observatory / a certification body to evaluate & approve eHealth solutions

Increase organised participation of pharmacists in health politics, policies



# NATIONAL eHEALTH ACTION PLANS

Involve pharmacists in all national eHealth Action Plans.



#### BARRIERS

Poor recognition of role of pharmacists by policy makers other prof bodies

Competing interests / lack of strategy within fragmented profession

Lack of action / advocacy / activity by professional bodies & pharmacists

Lack of technical competence

Ineffective lobbying

Lack of interest and conservativism (pharmacists)

Perceived bad image of pharmacists with politicians

#### FACILITATORS

Demontrate evidence of contribution by pharmacist

Creation of an Observatory with annual reporting

Changing the perception of the role of pharmacists

Creation of a national ePharmacy strategy (for pharmacists, by national prof bodies of pharmacists) to root it into the general national eHealth strategy

Implementation capacity

Adequete lobbying by prof bodies / support from health authorities

Legislation recognising role of eHealth in healthcare, by sharing best practices

# **PHARMACIST / PHARMACY eHEALTH INNOVATIONS**

Facilitate pharmacists' own eHealth solutions (to improve practice /optimise workflow/communication with patients and other HCPs).



#### BARRIERS

Lack of knowledge & digital literacy, skills, time, energy, resources

Lack of business model Indistinct roles within pharmacy

Lack of human resources / team to develop

Competition within profession

Lack of communication with other HCPs

#### FACILITATORS

Education on digital literacy, business models, innovation and service development

Making the first small step

Keep uptodate with trends in market

Understand local health need / demands

Financing and funding

**Raising competition** 

Building on existing systems, interoperable, user-friendly, afordable

Open co-operation with other partners

Integrate patient internet & digital tools for health / wellbeing and healthcare with pharmacists/cies



# **SELF-CARE**

Evaluate & recommend the implementation of eHealth solutions for supporting the role of the pharmacist in facilitated self-medication and self-care.



#### FACILITATORS

Collaborating with patients / patients' organisations / patient movements using eHealth

Open co-operation with other partners

Actions supporting pharmacist as digital healthcare coach / projects

Empower pharmacists in advising using online channels

#### BARRIERS

Unaccredited, biased, unrelaible or innacurrate sources of online information

Inaccurate claims / false advertising Trivialising of self-care/medication



# GOVERNANCE

With the aim of protecting the patient, all activities should be in accordance with the relevant EU legislation (e.g. privacy, safety).



#### FACILITATORS

Creation of an Observatory of eHealth solutions

More public discussion / engagement of professionals and patients in creating new legislation

### BARRIERS

Potential gaps in legislation in covering new eHealth solutions (which can cause a delay in new initiatives)

Lack of informing pharmacist privacy & safety

