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# The organizational framework of community pharmacies in Europe

## Introduction

According to the World Health Organization (WHO), people-centred and integrated health services are critical for reaching universal health coverage. A prerequisite for good health is access to preventive and curative health care.[1]

This issue of access to care is still governed by many old lessons. It can be expressed in the five Á's': *affordability* (ability to pay for care), *availability* of care, *ability* to reach care (geographically), *accommodation* (adapted to the organizational needs of the client), and *acceptability* (from the clients perspective).[2] Access to care implies enough health care professionals to cover the population served. Equity, another dimension of access to care, indicates that care must be available to all, regardless of their geographical location or social, economic and demographic situation.

Recently, more emphasis has been put on primary care, as disease prevention is essential to ensure better health, and to a decreased use of more expensive secondary and tertiary care.[3]

Community pharmacy is unquestionably an important part of primary care for various reasons. First, preventive and curative medicine often require the use of medicines, and these are in most countries typically (or exclusively) available from the pharmacy (traditional approach: product-based). Secondly, medicines may ideally (and increasingly) be delivered to the patient by employing clinical pharmacy principles for appropriate and rational use (intermediate approach: essential service). In some European regions, forms of preventive care are practiced by community pharmacy, including screening activities, and health promotion campaigns (current approach: service development). Lastly, community pharmacies are easily accessibility, and often are the first point of contact between a care

provider and the patient. Because community pharmacy is part of primary care, the principles of access and equity are also valid for this sector of healthcare. Over the past decades, the pharmacy profession has developed, with pharmaceutical care putting an increasing focus on the patient certainly in Europe. [4]

Access to medicines especially by rural populations in some European countries has been a concern tackled in sparsely populated regions by the creation of legislation directed at the opening of new pharmacies ensuring equitable distribution.[5] In some European countries such as Switzerland and the Netherlands, medical doctors may dispense medicines from their practice. [6,7]

It is interesting to note that community pharmacy practice is changing in the European Union and affiliated countries. These changes are facilitated (but also sometimes hindered) by national and European legislation, and active pharmacist or pharmacy organizations. Having a good overview of the health care systems in various European countries may help explaining and anticipating these changes.

Between 2005 and 2007 a series of papers were published in the Annals of Pharmacotherapy, on the new pharmaceutical care related roles of pharmacy.[8,9,10,11,12,13,14] In view of the rapid structural changes in Europe, a new overview seems necessary.

The objectives are to list and compare health care and community pharmacy structure in Europe; and to discuss the facilitators and barriers that can be found in health care systems for the implementation of new community pharmacy services. Additionally, to better understand eventual differences arising, it was also intended to explore education and training of pharmacy staff.

## Method

A cross-sectional observational study was conducted with a structured questionnaire. Data were collected using an online platform available between March and April 2013. A purposive sample of 31 representative individuals from 25 European countries was invited to participate. Respondents were selected based on their experience and visible contribution in pharmacy practice activities in their country and internationally, or by their engagement in political or scientific activities. To identify potential but less 'visible' respondents, a snowball sampling technique was used.

Based on literature, a survey was specifically developed for this study. A series of articles entitled "Pharmacy around the world", published in the Annals of Pharmacotherapy from 2005 to 2007, which characterized various aspects of the health systems, particularly the operating characteristics and regulation of community pharmacies in the country, and described care related services was central to the development of the survey tool.[8]

The survey comprised five main sections:

1. Description of the health care system (e.g. main provider, funding, etc.)
2. Description of community pharmacies (e.g. regulation in place)
3. Available products pharmacies and elsewhere
4. Education and training of pharmacists and other auxiliary staff
5. Services available through community pharmacies

At the end, there was an open section where respondents were asked to mention relevant legal aspects that may have recently changed in their countries, conditioning accessibility to health care or to medicines.

This survey was pre-tested by asking expert opinion on the content, format and wording used; three experts were involved practicing in different settings and representing a range of specialties. The final version can be found as electronic supplementary material to this paper. The information collected by the survey was then enriched and triangulated through an additional literature search, direct contact by email with pharmacists' bodies, including the Pharmaceutical Group of the European Union in Brussels (PGEU), and clarification of some answers from respondents. The respondent from Iceland also referred to a report from the Boston Consulting Group (2011) where part of the data could be found.[15]

Survey data were collected in the "Google docs" platform, which allows extraction by Microsoft Excel, version 2012. This database was then imported into the Statistical Package for Social Sciences (SPSS) version 19, for analysis.

**Results**

Data were collected between March and April 2013. Contact persons in 25 European countries were approached (Belgium, Bosnia, Croatia, Czech Republic, Denmark, England, Finland, Germany, Hungary, Iceland, Ireland, Italy, Malta, Northern Ireland, Norway, Poland, Portugal, Scotland, Serbia, Slovenia, Spain, Sweden, Switzerland, The Netherlands, and Wales). Of these, 17 contact persons responded to the survey and two additional countries were reached using a snowballing technique (Bulgaria and Macedonia). Responses obtained represent 19 countries and respondents worked either in professional associations representing community pharmacies or pharmacists or in the pharmacy practice department of universities (See table 1). The response rate in the study was 70.4%. However, if one considers that the snowball technique was expected to cover all European countries (n = 50, the United Nations), the response rate was only 38%.

*Health Care System*

Table 1 summarizes some features of the healthcare systems of European countries, including the predominance of the public or private sector, funding, coverage and accessibility for citizens.

For the purpose of this paper, we have referred to "State organised", which does not necessarily mean public. Public means organised so that the health care is accessible for everyone. State organised means that the state has organised the health care structure, but not necessarily the access. In the UK National Health Service' (NHS) the healthcare organization, with different models of organisations across England, Scotland, Wales and Northern Ireland, funding is through direct taxation.

Many professionals are state employees, and most health care institutions are state-owned, which may include hospitals, local health centers and tertiary care units. However, community pharmacy is often private, or corporately owned, with services being State remunerated or paid out of pocket by the patient.

In the 'Public System', the state (or a state insurance) organizes and pays for healthcare services, but healthcare professionals are not necessarily state employed, and healthcare institutions are largely private. In the 'Private System', the state organizes and controls care, but citizens must be privately insured and the insurance companies pay for the care to the private institutions and care providers. There may be a state contribution directly to the insurance companies.

In most respondent countries, there is a state regulated remuneration or insurance system, and co-payments may exist. Co-payments can be for non-remunerated or partially remunerated

services and goods. In the Netherlands and Switzerland there is no state health insurance, but having a private health insurance is mandatory. In Ireland there is a mixed system, depending on the income of the citizen.

Population coverage has been reported as 'universal', meaning for everyone in a country without limitations, as 'all citizens', meaning for every person living in a country and having the nationality of the country, and 'all residents', meaning all people who live officially in a country (but may have a different nationality).

*Please insert Table 1 here*

*Community Pharmacy*

The regulation of community pharmacies ownership varies across Europe. In 3 of the 19 countries in the sample, ownership is restricted to pharmacists (Denmark and Italy, multiple pharmacies; Spain, restricted to one). In most countries, ownership is open to any individual or entity, but there can be limitations. In, for instance, Portugal and Sweden, producers of medicinal products or Market Authorization Holders (MAH), and prescribers of medicinal products cannot own a pharmacy. The most common situation is the possible ownership of multiple pharmacies by any individual/entity (n=16).

In almost all the European countries surveyed, explicit criteria exist for the founding of new pharmacies. Ten countries (England, Portugal, Spain, Croatia, Malta, Italy, Belgium, Hungary, Denmark, Serbia) have criteria based on distance between pharmacies or number of people served. In Norway and Sweden a permit from the authorities is required before one can open a pharmacy, but the criteria for this permit focus more on solvency and the business model[16]. Macedonia, Iceland, and Ireland indicated that there are criteria, but which criteria were not clear. Only Switzerland and the Netherlands indicated to have no explicit criteria. In

Belgium there currently is a moratorium on the opening of new pharmacies. No answer on this aspect was received from Bulgaria.

The number of inhabitants per pharmacy was not reported by all. Therefore, data were supplemented with information from the PGEU from 2013. Denmark is the country with the greatest number of inhabitants per pharmacy (25.000) as opposed to Bulgaria (1750) (see figure 1). One should consider, however, that one pharmacy in Denmark may have several outlets.

*Please insert Figure 1 here*

*Quality Management*

A quality management system (QMS) is a set of policies, processes and procedures required for planning, implementing and performing tasks in community pharmacies, which may lead, after an independent audit, to the accreditation of the pharmacy. Quality Management System for community pharmacies were reported to be available in 15 of the 19 responding countries. Countries reporting not to have a QMS for pharmacy were England, Macedonia, Ireland and Malta.

Some countries indicated to have guidelines for the provision of pharmaceutical care in the pharmacy, such as the Netherlands, Hungary and Serbia. Examples in these countries include guidelines for diabetes, hypertension, dyslipidemia, obesity, asthma, chronic obstructive pulmonary disease (COPD), rhinitis, upper respiratory tract treatment (over-the counter, ahead referred to as OTC), dermatology (OTC and on prescription), gastro-intestinal tract disorders, benign prostate hyperplasia (BHP), pregnancy, back pain and geriatric medication management therapy.

*Products available at the pharmacy*

There are various categories of medicines available in pharmacies. The category of Prescription Only Medicines (POM), defined as a medicine which can only be sold through a pharmacy and for which a prescription is required, exists in all responding countries.

Over-the-counter medicines, commonly known as OTC, are also available in all countries, but with some differences regarding the subcategories these include.

Pharmacy Medicines (PM), defined as medicines only to be sold in pharmacies but without a prescription and under the (distant) supervision of a pharmacist, exist in all 19 responding European countries, except for Ireland and Portugal. In the latter country, however, a dispatch has been published that this category will be introduced soon, but the list is not ready yet. The non-prescription medicines may now be displayed and advertised, but cannot be purchased as a self-service good since they must be placed behind the counter in a reserved area where only the pharmaceutical team can reach (this is true in pharmacies and in non-prescription medicines outlets, which may be in a specific area inside a supermarket or a petrol station.

The category General Sales List (GSL) refers to medicines that are supposed to be relatively safe and can be sold in pharmacies, supermarkets and other places by non-pharmacist staff, and is available in 9 out of 19 countries (Table 2). In Macedonia, Spain, Bulgaria, Malta, Belgium and Serbia, medicines in general cannot be purchased outside of OTC points of sale, representing 31.6% of the participating countries.

Other products that may be found in all European pharmacies are cosmetics, food supplements and medical devices. In most countries (17 out of 19), homeopathic products may also be available, reading glasses in 14 out of 19 countries and didactic toys in 7 out of the 19 responding countries (Table 2).

*Please insert table 2 here*

**Education and training of pharmacists**

In Northern Ireland and Italy only pharmacists may practice in pharmacy. However, in most countries the team is composed by pharmacists and pharmacy technicians. In Norway, it additionally includes assistants and nurses. In Sweden, there are also prescriptionists (Table 3). The required qualifications for each team member are also described in Table 3. Please note that the requirements for technicians are usually expressed in years of education at a high school/college level, and often include practice work. Auxiliary staff preparation varies from short education to training on-the-job.

**Licenses**

The registration of pharmacists in most countries depends on Societies. In a few countries, the pharmacist societies are also the regulatory bodies, meaning that they control the licenses to practice and check the premises. However, this survey focused on their activity within a community pharmacy. These are generally subject to laws imposed by the national regulatory bodies (equivalent to EMA). Also, as small and medium sized companies that employ personnel, they may additionally be subject to the general work laws.

Requirements for license renewal are requirements imposed by the competent bodies, which may include a minimum number of continuous professional development (CPD) credits (or hours), or an exam, to demonstrate competence in practice or others. The type of requirements varies widely and may include the simple registration with the Society, continuous professional development required by law and continuous professional development defined by the Pharmaceutical Society (or equivalent), where the latter may have various possible formats (Table 3). Additionally, there are several possible specializations in pharmacy, according to the sector of practice, and their recognition by the Pharmaceutical Societies (or equivalent) varies widely across Europe (Table 3).

There are some exceptions where the boundaries between the Pharmaceutical Society and the Department of Health are different from most European countries. Since 2010, the registration of pharmacists in Great Britain is with the General Pharmaceutical Council (GPhC), the regulator for registered pharmacists, pharmacy technicians and pharmacy premises. In Northern Ireland, registration is with the Pharmaceutical Society of Northern Ireland, which also has a forum to support and develop professional activities: functions that are undertaken across Great Britain by the Royal Pharmaceutical Society (RPS). Pharmacy premises in hospital are regulated by the Care Quality Commission which regulates all hospital premises.

Requirements for maintenance on the register in Great Britain include recording a minimum number of continuous professional development (CPD) entries. This is currently being reviewed by the GPhC as the revalidation of other health professionals is implemented, nominally called Continuing fitness to practice (CFtP). The support, development and recognition afforded by the RPS is widely regarded as a quality mechanism to demonstrate continuing fitness to practice, especially regarding the blend of self and peer assessment of advanced practice. Mechanisms to recognise specialisms and specialization and are also being developed in GB and across the UK.

*Please insert table 3 here*

**Services available in community pharmacy**

Dispensing of medicines was universal across all the countries. Apart from this, the services more widely available in European pharmacies are smoking cessation programmes (93.8%, n = 15), followed by drug waste management programmes (81.3%, n = 13) and pharmaceutical

care programmes (77.8%, n = 14). The least implemented services mentioned were drug administration (26.3%, n = 5) and prescription services (26.3%, n = 5) (Table 4).

*Please insert Table 4 here*

In 47% of the participating countries there is some sort of remuneration for pharmaceutical services, namely in Belgium, Denmark, England, Hungary, Ireland, Netherlands, Northern Ireland, Portugal, and Switzerland.

## Discussion

The results of this study indicate that health care and pharmacy seem to be converging into one format, in which public funding is complemented by private funding (in the form of co-payments of supplement insurances). Many new rules or laws are implemented by decisions made in the EU. Member countries must follow such directives, and thus the systems in EU countries converge. Privatization of healthcare only seems to be complete in the Netherlands and Switzerland, although some form of state-funding and control still exists.

Community pharmacy ownership is no longer protected in most countries and currently there are only three countries where only pharmacists can own pharmacies, different to what was observed in Europe a decade ago. Interesting to note that in a few countries, physicians can own a pharmacy, although it seems to be discouraged if not absolutely necessary. Among countries where ownership is open to non-pharmacists, there are some where restrictions to ownership exist. In Portugal, for example, pharmacies may not be owned by pharmaceutical companies, wholesalers or medical doctors. In Sweden, medical doctors explicitly cannot own a pharmacy.

The number of inhabitants served by pharmacies also seems to be converging, although it is still possible to observe a split between northern European countries and all others, with the first having larger pharmacies covering a larger number of inhabitants. There were only two countries that reported to have no demographic criteria for the establishment of new pharmacies (Switzerland and the Netherlands), a finding consistent with PGEU data (PGEU, 2010).

The results about QMS for countries belonging to the United Kingdom should be carefully read as in these countries, pharmacists have had to be accredited. This accreditation enables the provision of specific services, which may be commissioned, *i.e.*, requested by primary care doctors[13].

The technical staff of pharmacies comprises pharmacists in all countries and technicians in all except two countries (Italy and Northern Ireland). The inclusion of other categories is less clear, where in Sweden we may find prescriptionists, in Norway nurses, and in 6 countries (31.6%) auxiliary technicians. The prescriptionist is an individual with functions of medicines' dispensing, with an equivalent role to the pharmacist, although with a lower qualification, as the course is 3-years.[17]

As described in Directive 2005/36/EC of the European Parliament and of the Council of 7 September 2005 on the recognition of professional qualifications, training the pharmacist is at least 5 years, with a minimum of 4 years of theoretical and 6 months of practical training in community pharmacy or hospital pharmacy, consistent with the information collected in the study[18].

The areas of specialization in England and Northern Ireland are hard to compare, as prescribing is an area of specialization but then the NHS also recognizes career paths, which

may be seen as areas of specialization, such as the consultant pharmacists within hospital or pharmacists with special interests within community.

Services implemented in community pharmacies across Europe are perhaps the domain of the survey where most variation was found. While some countries seem to be quite conservative and offer few services, others are even expanding to services traditionally embraced by other health care professions, such as immunization in Portugal or prescribing in England, Northern Ireland and Ireland. Indeed, this aspect is interesting and may possibly be related to various aspects, namely the accessibility of care in its traditional format, mostly in primary care[19], which also includes the appropriate workforce to meet societal needs, but also eventually lobbying activities. However, the survey did not directly explore for the link between health care services available and arising community pharmacy services.

The pharmaceutical services most widely disseminated in Europe, were dispensing (100.0%; n=19), smoking cessation (93.8%; n=15), and drug waste management programmes (81.3%; n=13), which is similar to the findings reported by Kanavos et al[20]. These authors also studied 17 European countries and reported that these two services were available in all countries. The two services, however, clearly fall under the health promotion category. This indicates the relevance of the pharmacist's role within the public health arena, but it also indicates that pharmacy (or pharmacist) specific services other than dispensing are more difficult to implement.

Pharmaceutical care was the third more commonly reported service, indicated by 77.8% of the participating countries (n =14). However, one did not explore what components of pharmaceutical care were being delivered in each of the responding countries, perhaps an aspect worth further exploring in future work. Additionally, the level of implementation in the country was not assessed, neither was the understanding of the term pharmaceutical care

assessed, a term that may encompass many clinical fields[21], and these are two important limitations. It is important to reflect on the validity of the reported level of service provision, as it is much higher than what has been reported elsewhere[15]. In fact, the reported figure for this study is quite surprising given that pharmaceutical care services demand much more investment from the pharmacy human resources as it requires close patient monitoring, documentation, interaction with physicians and other members of the health care team.

In only 47% of the responding countries there is remuneration (by the state or insurance) for pharmaceutical services. In other countries, the patient may be asked to pay (all or part of) the costs of the service. But this has not been explored in this study. Sometimes the implementation of some services on a larger scale becomes limited due to lack of remuneration, a barrier also to pharmaceutical care services previously identified.[2223]

This study, like many studies in Europe, suffers from the fact that not all Europeans speak the same language. This means that questions are sometimes not understood correctly, or in the same manner, which may influence answers obtained. The research team have tried to deal with this by contacting respondents whenever such difficulties were obvious, and asking for additional explanations.

This study also illustrates the difficulty to obtain information about community pharmacy in two big countries, France and Germany. In these two countries, the national bodies have limited information on the details of real practice and key data. Only the regional organisations detain this information. Hence, information about these countries is relatively hard to obtain, and validation of information is extra complicated.

The quality of the information, which could not be triangulated, is a limitation. However, much of the information was checked and double-checked.

Detailed information on remunerated services was lacking on this study, and this should be an interesting area to be further researched in the future, with particular interest in enhanced services, such as medication review and pharmaceutical care.

## Conclusion

In general, all citizens have access to health care in European countries. The general features of community pharmacy across Europe are quite homogeneous, regarding products available and even regulations in place. The wider variability was found for services available in community pharmacies.


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## Declaration of Conflicting Interests

The Authors declare that there is no conflict of interests.


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Figure 1
Click here to download Figure: Figure 1 Average number of people served per pharmacy.docx
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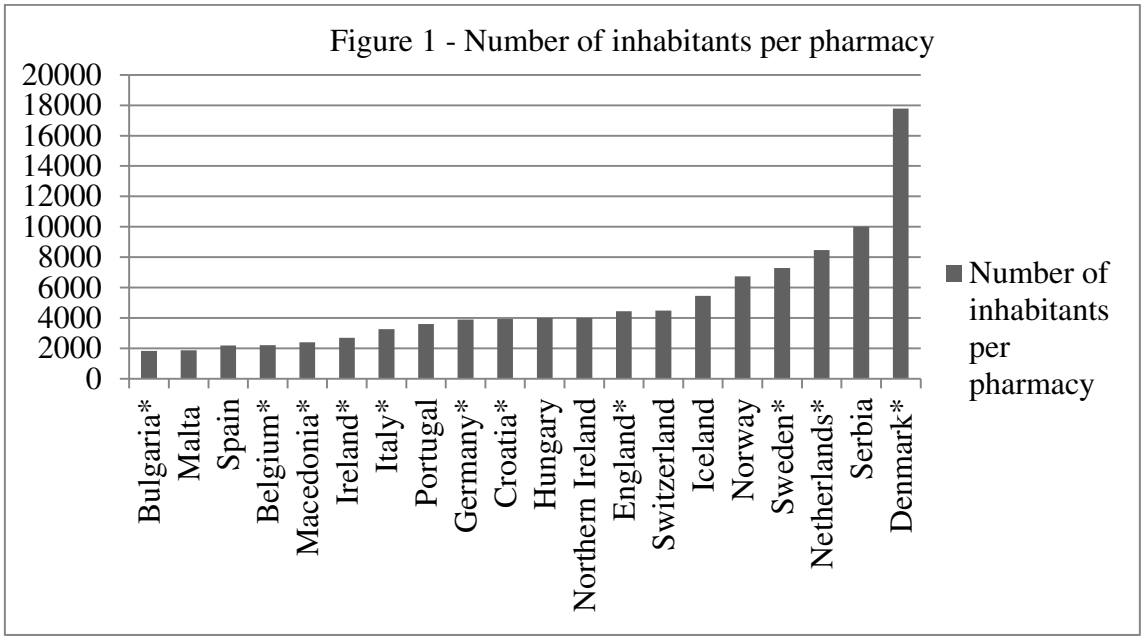


*Fig. 1 Average number of people served per pharmacy (* = numbers according to PGEU)*[1]

[1] PGEU (2011). PGEU database 2011.

table 1
Click here to download table: Table 1 Characteristic of health care systems 97-2003.doc

*Table 1 Basic financial characteristic of health care systems in a number of European countries*

| | **Nature of health service** | **Financing of Health service** | **Population coverage** | **Private health insurance** |
|---|---|---|---|---|
| Belgium | State organized | Taxes plus personal premiums based on income and employment | All citizens | Optional |
| Bulgaria | State organized | Taxes and premiums | Universal | Optional |
| Croatia | State organized | Taxes and premiums, co-payments | All citizens | Optional |
| Denmark | State organized | Taxes | All citizens | Optional |
| England | State organized | Taxes and co-payments | All citizens | Optional |
| Hungary | State organized | Taxes and co-payments | Universal | Optional |
| Ireland | State organized and private | Co-payments depend upon income | All citizens | Optional |
| Iceland | State organized | Taxes | All citizens | Optional but rare |
| Italy | State organized | Taxes and co-payments | All residents | Optional |
| Macedonia | State organized | Taxes | Free for employed or officially unemployed. | Optional |
| Malta | Public and private | Taxes and private | All citizens | Optional |
| Netherlands | Private | Partially private, partially taxes with co-payments | All citizens | Compulsory |
| N. Ireland | State organized | Taxes | All citizens | Optional |
| Norway | State organized | Taxes | All citizens | Optional, but rare |
| Portugal | State organized | Taxes and co-payments | Universal | Optional |
| Serbia | State organized | Taxes | All citizens | Optional |
| Spain | State organized | Taxes | Universal | Optional |
| Sweden | State organized | Taxes | All residents | Optional |
| Switzerland | Public and private | Partially private, partially taxes with co-payments | All citizens | Compulsory |

table 2
Click here to download table: Table 2 Products sold in pharmacies 97-2003.doc

*Table 2 Products sold in pharmacies*

| | OTC | PM | POM | GSL | Other products sold in pharmacies | | | | | | Sale of medicines outside pharmacies |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Cosme-tics | Food Supple-ments | Medical devices | Homeo-pathic products | Reading Glasses | Didactic Toys | |
| **Belgium** | Y | Y | Y | N | Yes | Yes | Yes | Yes | Yes | No | No |
| **Bulgaria** | Y | Y | Y | N | Yes | No | Yes | Yes | No | No | No |
| **Croatia** | Y | Y | Y | N | Yes | Yes | Yes | Yes | Yes | No | Yes |
| **Denmark** | Y | Y | Y | Y | Yes | Yes | Yes | Yes | Yes | No | Yes |
| **England** | Y | Y | Y | Y | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| **Hungary** | Y | Y | Y | N | Yes | Yes | Yes | Yes | No | No | Yes |
| **Ireland** | Y | N | Y | Y | Yes | Yes | Yes | Yes | Yes | No | Yes |
| **Iceland** | Y | Y | Y | Y | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| **Italy** | Y | Y | Y | Y | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| **Macedonia** | Y | Y | Y | N | Yes | No | Yes | Yes | No | No | No |
| **Malta** | Y | Y | Y | N | Yes | No | Yes | No | Yes | Yes | No |
| **Netherlands** | Y | Y | Y | N | Yes | Yes | Yes | Yes | No | No | Yes |
| **N. Ireland** | Y | Y | Y | Y | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| **Norway** | Y | Y | Y | Y | Yes | Yes | Yes | Yes | Yes | No | Yes |
| **Portugal** | Y | N | Y | N | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| **Serbia** | Y | Y | Y | N | Yes | Yes | Yes | Yes | Yes | Yes | No |
| **Spain** | Y | Y | Y | N | Yes | Yes | Yes | Yes | Yes | Yes | No |
| **Sweden** | Y | Y | Y | Y | Yes | Yes | Yes | No | Yes | No | Yes |
| **Switzerland** | Y | Y | Y | Y | Yes | Yes | Yes | Yes | Yes | Yes | Yes |

Y = Yes N=No

table 3
Click here to download table: Table 3 Qualifications.docx

*Table 3: Staff working in a pharmacy, with required qualifications and Type of Licenses and licensing for pharmacists*

| | Technical team of pharmacy | | | | | Requirements to keep the license to practice | | | Recognized Areas of Specialization | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Pharmacists | Pharmacy Technicians | Pharmacy auxiliary staff | Nurses | Prescriptionists | Registration with the Society | Continuous professional development required by law | Continuous professional development defined by the regulatory body | Hospital Pharmacy | Clinical Analysis | Pharma-ceutical Industry | Community Pharmacy | Regulatory Affairs | Prescribing |
| Belgium | Yes [a)] | Yes | No | No | No | Yes | No | No | Yes | No | Yes | No | No | No |
| Bulgaria | Yes [a)] | Yes [f)] | No | No | No | Yes | No | Yes | No | Yes | Yes | No | No | No |
| Croatia | Yes [a)] | Yes | No | No | No | No | Yes | Yes | No | No | No | Yes | No | No |
| Denmark | Yes [a)] | Yes [f)] | No | No | No | - | - | - | - | - | - | - | - | No |
| England | Yes [b)] | Yes [h)] | Yes | No | No | No | No | Yes | SC | No | No | SC | No | Yes |
| Hungary | Yes [a)] | Yes [d)] | No | No | No | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No |
| Ireland | Yes [b)] | Yes [d)] | Yes | No | No | Yes | Yes | Yes | No | No | No | No | No | No |
| Iceland | Yes [a)] | Yes | Yes | No | No | UD | UD | UD | UD | UD | UD | UD | UD | No |
| Italy | Yes [a)] | No | No | No | No | Yes | No | Yes | Yes | No | No | No | No | No |
| Macedonia | Yes [a)] | Yes [g)] | No | No | No | No | Yes | No | Yes | No | No | No | Yes | No |
| Malta | Yes [a)] | Yes | Yes | No | No | No | No | Yes | No | No | No | No | No | No |
| The Netherlands | Yes [a)] | Yes [e)] | Yes | No | No | No | Yes | No | Yes | No | No | Yes | No | No |
| Northern Ireland | Yes [b)] | No | No | No | No | Yes | No | Yes | No | No | No | No | No | Yes |
| Norway | Yes [a)] | Yes | Yes | Yes | Yes | No | No | No | Yes | No | No | Yes | No | No |
| Portugal | Yes [a)] | Yes [g)] | Yes [h)] | Yes | No | Yes | Yes | Yes | Yes | Yes | Yes | No | Yes | No |
| Serbia | Yes [c)] | Yes [h)] | No | No | No | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No |
| Spain | Yes [a)] | Yes [d)] | Yes | No | No | Yes | No | No | Yes | Yes | Yes | No | No | No |
| Sweden | Yes [a)] | Yes [h)] | Yes | Yes | Yes | No | Yes | Yes | No | No | No | No | No | No |
| Switzerland | Yes [a)] | Yes | Yes | No | No | Yes | Yes | Yes | Yes | Yes | No | Yes | No | No |

[a)] 5 years university education including 6 months practice;*
[b)] 5 years university education including 1 year practice;
[c)] 6 years education including 1 year practice
[d)] 2 years course
[e)] 2-3 year course, partially in practice
[f)] 3 year course
[g)] 4 years course
[h)] other

UD = Undefined SC= Special Case, see discussion

* The Bologna Declaration of 19 June 1999

table 4

Click here to download table: Table 4 Services available in community pharm 97-2003.doc

*Table 4 Services available in community pharmacies in Europe*

| Country | Home care support | Administration of medicines e.g. injectable drugs) | Administration of vaccines | Medical appointments (e.g.Nutrition) consultations | Measurement of biological and biochemical parameters | Pharmaceutical care programmes | Smoking cessation programme | Needle Exchange programme | Medication Review | Drug waste management programme | Prescribing | Provision of Written Standardized Information |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Belgium | Yes[a)] | No | No | No | No | Yes a) | Yes a) | Yes a),c) | No | Yes a),c) | No | Yes a),c) |
| Bulgaria | No | No | No | Yes a) | Yes a) | Yes a) | Yes a) | - | Yes [a)] | - | No | Yes a),f) |
| Croatia | No | No | No | Yes a) | - | No | Yes a) | - | No | Yes [a)] | No | No |
| Denmark | Yes [a)] | No | No | No | Yes c) | Yes a),c) | Yes a),c) | No | Yes [a)] | Yes a),c) | No | No |
| Spain | No | No | No | Yes e) | Yes | Yes a) | Yes a) | Yes [a)] | Yes [a)] | Yes [a)] | No | Yes [a)] |
| Netherlands | Yes [a)] | No | No | Yes a) | Yes | Yes a) | Yes a) | Yes | Yes [a)] | Yes | No | Yes |
| Hungary | No | No | No | Yes a) | Yes | Yes a) | Yes a) | No | Yes [a)] | Yes a),c) | No | No |
| England | Yes [a)] | Yes [a)] | Yes a) | Yes a) | Yes | Yes a) | Yes a) | Yes | - | Yes | Yes | Yes |
| Ireland | No | - | Yes a) | - | Yes a),c) | No | - | Yes [a)] | No | Yes | Yes | No |
| N. Ireland | No | No | Yes a) | No | No | Yes a) | Yes a) | Yes [a)] | Yes [a)] | Yes [a)] | Yes a) | No |
| Iceland | No | No | Yes d) | Yes | Yes | No | Yes | No | No | Yes | No | No |
| Italy | Yes [a)] | No | Yes a) | Yes a) | Yes | Yes a) | Yes a) | Yes[a)] | Yes [a)] | Yes [a)] | No | Yes [a)] |
| Macedonia | No | Yes [a),c)] | No | No | Yes c) | No | No | No | No | No | No | No |
| Malta | No | No | No | Yes | Yes a) | No | No | Yes [a)] | No | No | No | No |
| Norway | No | No | No | Yes a) | No | Yes a) | Yes a) | Yes | Yes[a)] | Yes | No | Yes |
| Portugal | Yes [a)] | Yes [a)] | Yes a)d) | Yes e) | Yes a) | Yes a) | Yes a) | No* | Yes[a)] | Yes a),c) | No | Yes a),c) |
| Serbia | No | No | No | No | No | Yes a) | No | No | Yes[a)] | No | No | Yes |
| Sweden | Yes a),b) | No | No | No | No | Yes a),b) | Yes a),b) | No | Yes[a),b)] | Yes a),b) | No | Yes a),c) |
| Switzerland | Yes[d)] | Yes [a)] | No | Yes[d)] | Yes a) | Yes a) | Yes | Yes | No | Yes[d)] | No | Yes[d)] |

[a)] Service provided by pharmacists; [b)] Service provided by prescriptionists;
[c)] Service provided by pharmacy technicians [d)] Service provided by nurses
[e)] Service provided by nutritionists as part of the service ; [f)] Service provided by other professional;
*) yes, since 1993; suspended during 2014, expected to restart in 2015