THESIS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY (PhD)

EVALUATION OF THE HUNGARIAN PRIMARY CARE SYSTEM

Findings of the Hungarian-arm of European QUALICOPC Study and analysis of the structure

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1. LIST OF ABBREVIATION

CSAKOSZ- Hungarian Research Association of Family Physicians

CME- continous medical education

EU- European Union

FM- Family Medicine

FP-Family physician

GP- General Practitioner

ICT- information and computer technology

WHO- World Health Organization

WONCA- World Organization of Family Doctors

Keywords: general practice, health services, Hungary, family medicine, primary care

2. INTRODUCTION

Nobody remembers who the first doctor in the history of mankind was. In the historic age there were people who had much wider knowledge about different symptoms, illnesses and had experience in treatments using herbs. Everybody knows the name of Hippocrates although he taught his followers the empirical way that he experienced. The first medical education in Europe started possibly in Bologna (Italy) in the 12th Century. Later, a systematic education was introduced in almost every country in the continent.

The specialisation within medicine started at the end of the 19th Century; firstly the "*manual*" specialties became the pioneers, later these were followed by the *diagnostics* (X-ray, laboratory). Majority of the physicians treated the population at different levels, based on the knowledge of doctors but also based on people's needs and their economic or social circumstances. Some preventive tasks were also expected from the physicians, focusing to the infectious diseases. The types of reimbursement were different. In the developed countries many doctors were employed by the authorities, while the remuneration of others was based on the fee for the services.

Doctors in the early 20th Century were mainly generalist and many of them worked in communities, in cities or in rural settings. In the last decades of this century more and more doctors specialised andeducated in their respective fields and therefore specific education for generalists become urgent.

2.1. Definition of primary care - international context

The recognition of family medicine as an independent specialty started in the seventies and it was followed by establishing the education of family medicine and residency programs. Canada was among the first [1].

The *Declaration of Alma Ata* was a milestone in there cognition of primary care. In 1978, the WHO organized a conference in the former Soviet-Union (recently Kazahstan), where experts from many countries of the World declared the importance of primary health care in population health and described their expectations toward the improvement of this system worldwide [2]. The *World Organization of National Colleges, Academies and Academic Associations of General Practitioners/Family Physicians*, abbrevated as WONCA was funded in 1972 by member organizations of 18 countries, to improve international professional cooperation. WONCA now has 118 Member Organizations in 131 countries, including the Hungarian CSAKOSZ (*Hungarian Research Association of*

FamilyPhysicians) [3].There were wide gap between countries how these expactations were fulfilled in there centdecades [4]. In 2008 the WHO in its yearly reports focused again toward primary care and the achievements and goals were summarized again [5].

Primary care's (PC) traditional tasks and relationshipsare longitudinal and comprehensive care for the individual, using the resources in the family network and its context, mobilising sources of community support, advocacy both for and against governance as the personal and particular circumstances require [6, 7]. Many studies proved that in countries where primary care system is stronger, the healthcare system performs better [8, 9, 10, 11].

A major challenge in health services research is to show what configurations of primary health care are associated with better outcomes, in terms of quality, equity and costs. This requires data collection on essential features of the organisation and delivery of services in general practice in many countries [12, 13, 14]. There is a big variation in the organisation of primary health care in Europe and analyses of the relationship between primary care service provision and outcomes are crucial [12, 13, 14, 16, 17, 18, 19, 20].

2.1.1. The European Definition

In 2002, the *European Definition of General Practice/Family Medicine* was published, and revised later in 2005 by the expert taskforces of the WONCA to inform policy makers, funding organisations and others outside the field about the essential role of family medicine within health systems at both national and pan-European levels. This definition is very comprehensive: GPs are well trained specialist. During their speciality training they complete placements in several different hospital departments or wards to gain the required competences for licensing and to meet the requirements of the GP training programme. General practitionerstreat all common medical conditions and refer patients to hospitals and other medical services for urgent and specialist treatment. Their key responsibility and focus are on the general heath and care of the population regardless of the patients age, sex, or ethnicity. GPs have very important role looking after patients in their community. Due to the size ofthe GP practise, they can build a much more personal relationship with their patients than doctors working in hospitals. They know the patients family background, culture, social andfinancial situation which information is often very useful during the diagnosis and helps toprovide truly personalized care to their patients. General practitioners have a very important role in their community and

therefore they must act as a role model with their own lifestyle. In addition to the treatment of illnesses, GPs have a crucial role in promoting health andpreventing disease. They also work closely with other healthcare professionals andproviders. Like other specialists, general practitioners are also continuously train themselves by taking part in professional lectures and different training sessions in order to maintain their competency and to provide the highest level of care to their patients [21].

The European definition describes eleven essential characteristics of the discipline and translates them into six core competencies, as depicted in the well-known "*WONCA Tree"* in **Figure 1**.

The interrelation of these core competencies, implementation areas and essential features characterises the discipline and underlines the complexity of the specialty; this should guide and influence the agendas for teaching, research and quality assurance in GP/FM in Europe:

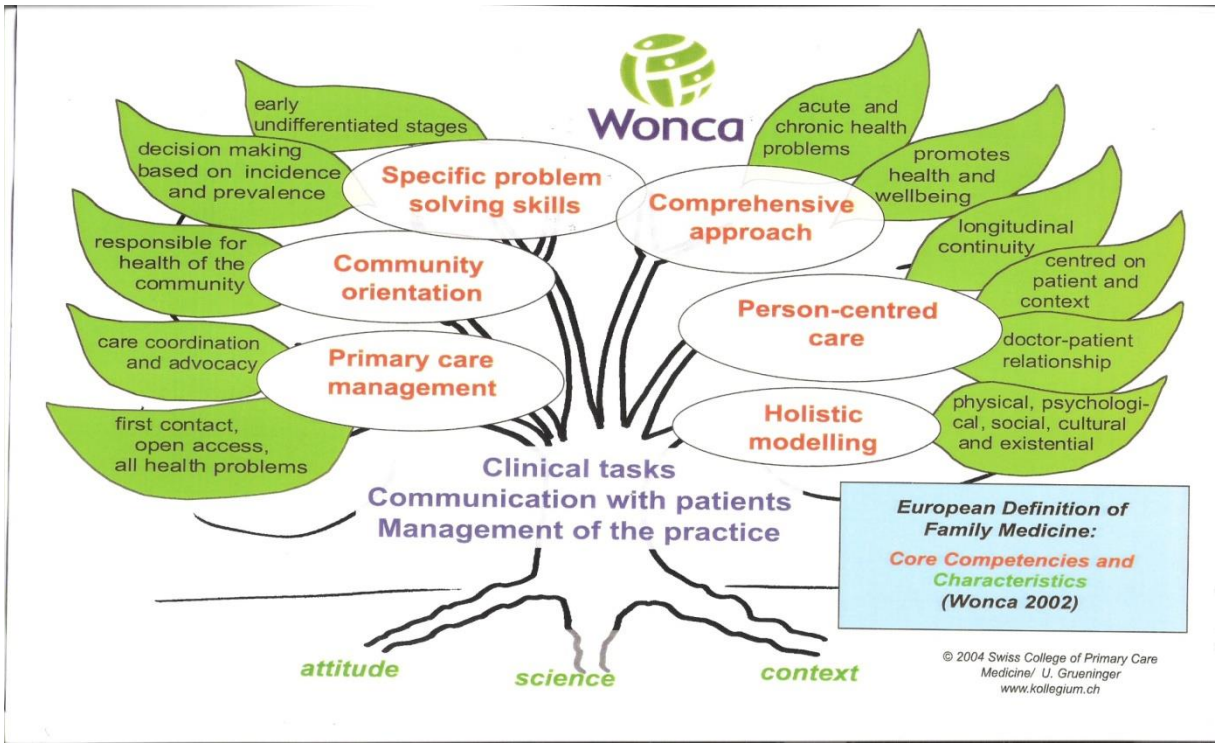

Figure 1. Core competencies and characteristics of family medicine according to European Definition[22]

The following six core competencies were described:

"*1. Primary care management* (first contact, open and unlimited access, care for all health problems; efficient use of resources through co-ordinating care, working with other

professionals in the primary care setting, managing the interface between generalist and specialist care, and taking an advocacy role for the patient when needed, i.e. protecting patients from harm which may ensue through unnecessary screening, testing and treatment).

2. Person-centred care (orientated to the individual, his/her family, establishing a relationship over time, effective communication, longitudinal continuity of care).

3. Specific problem-solving competency (specific decision making determined by the incidence and prevalence, need to manage simultaneously in individual patients both acute and chronic health problems in all stages, a wide spectrum of complaints and diseases, co- and multi-morbidity).

4. Comprehensive approach (managing illness presenting in an undifferentiated way, managing risk and uncertainty, health promotion and prevention as well as cure, care, and palliation).

5. Community orientation (responsibility for the health of the community)

6. Holistic approach (health problems in their biomedical as well as psychological, social, cultural and existential dimensions)" [22, 7].

The other 11 leaves grow from the twigs of the tree. All of them prop on the corpulent stock of the tree. The tree is supported by three of its important roots.

The output of primary care significantly affects public health indicators. If special attention is paid to preventive activities in general practice, they can significantly reduce the risk of developing chronic diseases, infectious diseases or even injuries from accidents. The treatment of diseases of public health importance, and the patient's inability to work, represent a significant financial burden on both the individual and the society. Based on the results of several studies, it can be said that it is much more profitable to provide additional funding for preventive services preserving the health of the population, instead of treating diseases that may become serious [23, 24, 25].

2.2. Literature review

2.2.1. Recent challenges in primary care worldwide

Primary care in Europe is facing high expectations from the society, including people and governments as well. Primary care can

- help health systems become more responsive to changing health needs of different generations and people living among different social circumstances,
- offer more integrated health care delivery,
- increase the efficiency of the health care system overall.

Decision-makers are expected to search for models to redesign the respective primary care systems in line with these goals. Available international comparative information on the structure, process and outcomes of primary care in Europe are limited.

This is not only a unique European problem: the health care system of the developing part of the World also has other challenges [26, 27].

Health sector reforms in many European countries have been driven by common challenges related to changing health threats and morbidity, workforce developments and growing possibilities of technology. All of them are strongly related to the financial constraints even in the richest countries. The most relevant key points are:

2.2.2. Changing demands of the population

These have often originated from the ageing of the populations in most European countries, including Hungary**.** Although the effect of ageing on health care demand is important, it should not be overestimated. People today and in the future will not just become older than the previous generations; but they could also reach higher ages in good health. So, data on age-related morbidity should not simply be extrapolated**.** There is a growing prevalence of non-communicable diseases in the older and also in the middle-aged generation, resulted a higher rate of multi-morbidity and the increase of more complex demand in services as well. Health care providers have been traditionally designed to manage acute episodes of one illness; they need more integrated provision of services [28].

Beside visible improvement in curative care, prevention and health promotion will become more important to increase healthy life years. If primary care maintains a continuous relationship with patients and an orientation towards the community, it may be well positioned to provide preventive services and health promotion.

2.2.3. Lack of manpower

The shortages of health workforce become universal. Migration of trained nurses and doctors could only partially to improve this phenomenon. In Europe, the migration of healthcare workers have typically 2 ways:

1. from the newer member countries to the (founder) countries that joined earlier. (for example, from Hungary to Germany or to the UK, from Romania to France and Italy),

2. healthcare workers arrive from outside the EU (for example, from India and Pakistan to the United Kingdom and from West Africa or from the Maghreb countries to France) [29].

There are important issues influencing its effect: the formal recognition of foreign education and communication problems that arising from different languages or cultures.

Enhanced primary care requires new skill-mixes and professionals capable to fulfill new tasks in a coherent structure. Multidisciplinary team practice is a response to the need for new models of care delivery**.** The enhancement of the role of nurses and extension of primary care teams, either in shared premises or in networks. New tasks for nurses can be transferred from other health professionals and physicians; monitoring of chronic disease, delivering prescriptions as specified in protocols and medical procedures beside community health or prevention [30].

In almost all the EU countries, the increase in the average age of GPs become serious. Where the population is typically served by independent, one-handed practices, the lack of doctors will soon cause many problems. Family medicine should be more attractive to medical students and young doctors, otherwise they choose other specialties. This can be achieved with a career model in which private life and professional life are balanced and they do not have to work alone. When opportunity is offered for (young) GPs to work in groups it can help to solve deficiencies [31].

2.2.4. Development in technology

Over the past decades computers and information and computer technology (ICT) applications have drastically changed the work in healthcare. Advanced information technologies will enable medical record systems to create enormous database ofthe population. It could be relevant in prevention, and more integrated collaboration with the public health sector and health service planning as well. The impact of medical technology has been so far most dominant not only in hospitals and in secondary or primary care offices, but even in the home care and self-recorded data of patients as well.

The varieties of the Point of Care (PoC) devices have also increased: specialised test, replacing laboratory measurements, portable pulmonary function testing and ultrasound devices become even smaller with smarter inbuilt technology. ECGs could be easily linked to informatic networks offering options for remote diagnostics together with pictures and images. Telemedicine can facilitate access to the primary care practice of specialists' advice in real time, which will improve service delivery not only in the rural areas. Patient's empowerment, new electronic resources and the Internet may reduce the information asymmetry between professional and patient. In general, patients were move from relatively passive recipients of care to more active and well-informed care consumers. The role of hospitals has also been changed. Due to the technological innovation, hospital stays become shorter providing more complex services [32].

2.2.5. Financial constrains

Increasing health costs and demand of the population are the main reasons why governments have targeted to focus on primary care worldwide. Although financial constraints have been a recurring issue in all health care systems, the effects of the financial and economic crisis since 2008 become more visible. By then, many countries reduced or froze their health care expenses (in amount or in percent of GDP), mainly in the public health sector [33]. In the previous years these trends were changed in most of the countries.

2.2.6. Historic points of the Hungarian primary care

2.2.6.1. The 20th Century

Hungary has a great tradition in medicine. Origin of many famous doctors of the Austro-Hungarian Empire were Hungarian, and some of them moved abroad and became internationally recognized. Before the Second World War, medicine was practiced at a similar level in Hungary as in the Western part of Europe, although there were differences in the quality of health care within regions of the country. In this period, there was no social and general insurance, doctors were mostly paid directly by patients, less often by insurance companies. After the Second World War, Hungary was occupied by the Soviet Union. At that time, major changes took place in our healthcare system, the Soviet-type (Semashko) healthcare system were implemented. Medical professionals were rather underpaid, the reigning power placed much more emphasis on the financial and moral

recognition of the working class. Access to the healthcare system became free for all citizens. At the time, primary care was called the “district doctor” system. The staff were employed by local (urban) municipalities or health centers (polyclinics or hospitals), and in some institutions by the state itself. Doctors worked in geographically well-defined areas and patients did not have the opportunity to choose a family doctor. Similar to primary care, patients in secondary health care could only receive health care in designated locations.

Despite the adverse circumstances, the population continued to show respect and appreciation for doctors and health workers. The hierarchy within medical professions placed district doctors at the bottom. Doctors often came to the districts without professional experience, or qualifications. It was a big breakthrough when family medicine became an optional subject at medical universities in the 1980s. In 1975, general practitioners could take a board specification exam in “general medicine” it was replaced by “family medicine” in 1994. Working in primary care was often an escape from the hospital, this job was accepted without other options or as an opportunity to move to other locations of residency. In larger settlements (mainly in cities), pediatric primary care was provided by pediatricians, in a system organized similarly to adults. In smaller locations (mainly in villages), general practitioners were expected to treat the entire population [34].

After the change of the political system (1990), the economic system and legal circumstances have changed significantly as well. There were initiatives for privatization also in the health care system. Family physicians were the first among health care workers, who got a right to establish their own enterprises based on 2 contracts: one with the *National Health Insurance Fund* for financing and other with the local municipalities for provision of primary care within a geographically defined area.

A new primary care system was introduced in 1992. At this time the government declared a priority of primary healthcare and established the *National Institute of Family Medicine* in 1992, reorganized in 1997 as the *National Institute of Primary Care* [35]. In the upcoming decades, a good cooperations were formed between the Institute and departments of family medicine offering a basement for sctructural and scientific improvement [36].

Thereafter the district doctors were called as family physicians (FP). Patients were allowed to choose their FP, and got a right to change doctors, without any legal or financial consequences. The enrolment into a practice became an easy process; the GPs

were obliged to register and treat all the local inhabitants living within this area and were entitled to accept or refuse others from outside their designated area.

The financing of primary care system was also changed, FPs got a right to form their own private or company enterprises. Instead of fixed budget and salary, the capitation based system was introduced. Financing was modified by the age cohort of patients (using a multiplier between 1 to 4) and the other qualifications of the doctor was honored by a multiplier of 1.0-1.2, later on increased to 1.3. In financing, the differences of geographical regions were also considered, favoring rural to urban areas. This financing came directly from the *National Health Insurance Fund* (NHIF). Financial rules were regulated by the government; there was no free market [34]. This opportunity led a high ratio of family physicians to establish their own enterprises in the belief that they could manage their expenses better and in a more rational way. In the middle of nineties family medicine became very popular; many specialist wanted to change for general practice and young doctors started their training in this field. It seemed as a good perspective both professionally and economically because the private enterprise had many advantages over the underpaid employment status. By now, almost all of practices have been functionally (partially) privatized. It means that the ownership of the buildings, ambulatories and valuable medical equipments remain to the local municipalities but the furniture and some equipment are purchased by the doctors themselves.

The first department of family medicine was established at the Semmelweis Medical University in 1992. Over the following years, the other three medical universities in Hungary Szeged (1996), Debrecen and Pécs (1998), established their own departments. Family medicine was the first medical specialty in Hungary that prescribed the continuous medical education (CME) for doctors. Only after 2000 became CME mandatory for other specialists as well [37].

According to a law issued in 2000, the number of family practices were finalised. The doctors had the right to sell their practices to other qualified colleagues if they wanted to retire or move to another city. In case the doctor has died, this right could also temporarily be transferred to family members. This system has been supervised by the local Health Officer, but this structure has changed in the previous decade [37].

In September 2021, there were 5895 primary care practices in Hungary theoretically covering all the primary healthcare needs of the population: 1359 of these GPs were paediatricians, primarily working in urban areas, 1497 GPs cared for a mixed population,

and the remaining treat adults only. The number of permanently vacant GP districts was 565 [38, 39].

2.2.6.2. Starting the 21st Century

In 2007, a health reform focusing to the insurance system was planned, initiated and forced by the coalition parties who were in power at the time. This reform was poorly communicated to the public, to health professionals and it was also criticised by the opposition parties. Because of political reasons this initiative failed.

One of the important elements of this health reform was the introduction of a symbolic fee, called "*visitation fee"* which was a type of service charge (HUF 300, c. EUR 1.1- using exchange rate at that time). Patients -with many exemptions - had to pay this fee directly to the healthcare provider for every consultation or each day spent in hospital. It was considered as an additional income of the providers [34].

The administrative tasks of GPs increased continuously shortening the time available for consultations and curative procedures [40]. Although all the practises use computers, (with many, mostly incoherent primary care software) the requirements for the parallel data supply for the health authorities and for the *Health Insurance Fund* remained.

Unfortunately, there are no available and accessable prevention programmes for expected lifestyle modification of patients which could decrease the burden in primary care. The Swiss Contribution Programme SH/8/1. (operated 2013-2017) offered also programmes for prevention and lifestyle modifications was successfull, but the model programme had been finished, its financial resources runned out.

Beside and because of the visible deterioration of inpatients and outpatients' services, many new investments were made by financial investors, building new clinics as well. One of its reasons was the traditional tipping system confusing influence on the rational and economic use of financial and human resources. Due to the recent governmental law, after 2021 it has been abolished [41].

2.2.7. Primary care workforce

There is an ageing population of doctors; in almost all medical specialties (the average age of GPs is over 58). The situation is similar for other healthcare professionals as well. There is a lack of young doctors, rather than a turnover in generation, as many young and

middle-aged doctors moved abroad, in the hope of finding better-paid position and working conditions [34, 42].

The most important steps of the last decade to be mentioned:

- 2012, nationalization and centralisation of hospitals and outpatient's secondary care
- 2015, a new Law on Primary Care [43]
-2017, introduction of the governmental electronic health databases system (EESZT)
-2020, Health Service Legal Relations Act [41]
-2021, partnership of practices, Community of practice [44]

2.2.8. International cooperation

Enthusiastic Hungarian GPs, mostly faculty members of departments of family medicine had been regular participants at the conferences of the special interest groups under the umbrella of the WONCA Europe, like EGPRN (*European General Practice Research Network*), EURACT (*European Academy of Teachers in General Practice/Family Medicine*), EQuiP (*The European Society for Quality and Safety in Family Practice*) and EURIPA (*European Rural and Isolated Practitioners Association*) [45,7].

2.2.9. How to evaluate primary care provision?

All countries have been evaluating continuously their own systems. National regulations and reforms are usually based on these findings [12]. Appropriate comparable methods and benchmarking is necessary for the systematic evaluation. Unfortunately, only a few countries have appropriate research infrastructure for this purpose. One of the most professional European research centres is the NIVEL (*Netherlands Institute of Health Services Research*), focusing mostly on international comparisons and professional analysis [46]. NIVEL has been involved in many international primary care projects dedicated to comparison and benchmarking, besides helping countries who needs this kind of support [47].

One of a European-wide project was the PHAMEU (*European Primary Care Activity Monitor*) supported by the WHO and by the governments of some participating countries.

PHAMEU evaluated, analysed and systematically compared the primary healthcare systems in all of the 27 the EU member states, and also in Turkey, Switzerland, Norway and Iceland in 2009/10 [31]. Hungarian data were also presented and compared to those

of others [48]. The methodology of this project was a simple collection of the best available data, using international databases, such as from the OECD (*Organisation for Economic Co-operation and Development*) and WHO, beside national resources, publications. In the absence of written sources, opinions of experts could be used instead.

The conceptual framework of the evaluation was based on the experience that "primary care can be conceived as a sub-system of the overall health care system, with a special focus on the facilitation of the access and utilization of coordinated services for the benefit of a population's health. For reasons of measurability, this general characterization should be elaborated. Based on the results of a systematic review, primary care has been unravelled into 10 essential ingredients, called dimensions, which have been ordered into three groups: those related to the structure, to the process and to the outcome of care respectively" [14].

The **structure** dimension refers to the basic conditions that enable a good functioning of primary care, consisting of relevant policies and regulations as well as the availability of financial, human, and material resources.

The **process** of primary care includes dimensions relevant to the services that are delivered.

A core **outcome** is improved health of the population, but efficiency and equity are also considered. An overview of the three groups of dimensions has been provided in **Fig. 2.**

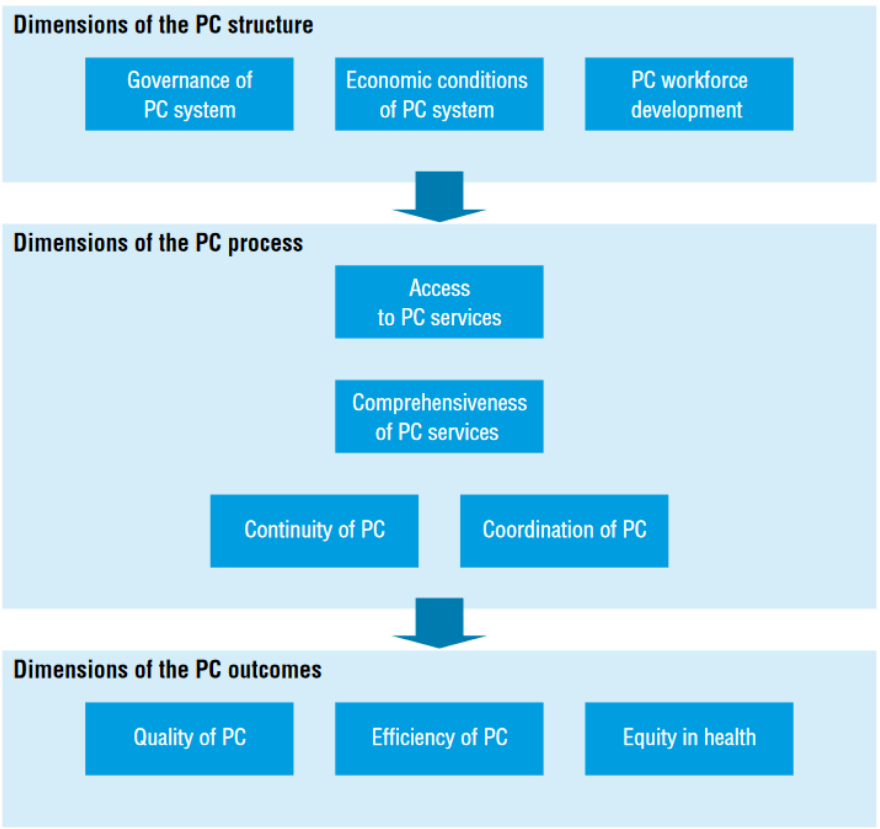

Figure 2. Groups of dimensions [31]

"The **structure** group of dimensions includes:

• *governance* (e.g., governmental vision of primary care; pro-primary care regulations).

• *economic conditions* (e.g., expenditure on primary care; incentives and remuneration systems).

• *workforce development* (e.g., position of primary care workers; professional associations).

The dimensions at **process** level include:

• *access to services* (e.g., geographical distribution, physical access to the facilities).

• *continuity of care* (e.g., patient–GP relationship; continuity over time).

• *coordination of care* (e.g., gatekeeping role for GPs; teamwork).

• *comprehensiveness of care* (e.g., available medical equipment; breadth of service profile).

The dimensions related to **outcomes** include:

• *quality of care* (e.g., prescribing behaviour; chronic disease management).

• *efficiency of care* (e.g., practice management).

• *equity in health* (e.g., differences related to social status or gender)" [14, 48].

2.2.10. Need for more complex evaluation. The QUALICOPC study.

The findings of the PHAMEU realised that more complex and detailed evaluations are needed in European countries. That was the basic idea for planning the QUALICOPC (*Quality and costs of primary care in Europe*) project.

Since the Declaration of Alma Ata, many European countries shared the goal of initiating or sustaining a strong PC system as part of their health care system. As a result, there is a demand for benchmark information and a growing tendency to learn from foreign experiences. The QUALICOPC project aims to evaluate PC systems in whole Europe against criteria of quality, equity, and costs. QUALICOPC looks at what a strong PC system entails and aims to provide an answer to the question: What an effect has the strength of a primary care system on the performance of health care systems?

Finally, in the QUALICOPC survey data were collected between 2011 and 2013 among 7183 PC physicians and 69,201 patients in 31 European countries (EU 27 – except France – plus Iceland, Norway, the Republic of Macedonia, Turkey, and Switzerland) and three non-European countries (Canada, New Zealand, and Australia).

In each country, a sample of around 220 PC physicians completed a questionnaire, except for the smaller countries (Cyprus, Iceland, Luxembourg, and Malta) where this was around 75 PC physicians. In Canada, Belgium, and Spain, larger samples were taken to represent different regions. In most countries, a random sample of PC physicians was invited to participate [18].

3. RESEARCH AIMS

The aim of my research was to present the country-specific findings of the QUALICOPC project and to highlight and investigate the strength and weaknesses of the Hungarian primary care system from the perspectives of the patients and from the healthcare professionals. For this investigation I have used the survey data collected in Hungary as part of a large international study on primary care, the QUALICOPC study. In order to improve our primary care system, I have found it crucial to investigate and analyse the feedback and expectations of the patients on the healthcare system and services of the providers. For the assessment of the quality and efficiency of the primary care services, I have studied and will present also the experiences of patients focusing the tendencies of attending services. I have also analysed the data of the questioners filled out by the GPs about their service profile, opening hours, available equipment, and financial situation, remuneration [48].

4. METHODOLOGY

The QUALICOPC study was co-funded by the European Commission under the so-called '*Seventh Framework Programme'* and is carried out by a consortium of six research institutes from Belgium, Germany, Italy, the Netherlands, and Slovenia. The study is coordinated by NIVEL, (*The Netherlands Institute for Health Services Research*). Data were collected in 32 European countries (27 EU countries, Iceland, Norway, Turkey, Switzerland, and Macedonia). Furthermore, research units from Australia, Canada and New Zealand have joined the study. Data collection focused on three levels: the health care system, the GP practice, and patients. Data on the health care system are derived from existing sources (e.g., the Primary Health Care Activity Monitor database). New information was collected through surveys among GPs (seen as the main providers of primary care), their patients and fieldworkers visiting GP practices. Answers to the questionnaires provided insight into the professional behaviour of GPs and the experiences of patients. Furthermore, for comparison, data from a 1993 European study on the task profiles of GPs were available [13, 49].

The questionnaires were translated in the national languages of all countries involved via an official forward- and back-translation procedure and in some languages of large ethnic minority groups [13, 18]

Ten dimensions were chosen as indicators to measure primary health care: governance and economic conditions of the PC system; PC workforce development (structure); access to PC services, continuity, coordination and comprehensiveness of PC services (process); quality and efficiency of PC and equity in health (outcome indicators).

The researchers of the QUALICOPC Consortium have developed four questionnaires. A questionnaire for GPs, another to describe the infrastructure and technical provision of services (*Practice questionnaire*), filled by fieldworkers and 2 others for PC patients: *Patients values,* and *Patients' experiences* [13]. Because of the project aims to provide insight into GP care as a whole, the GP questionnaire included questions beyond the scope of the tasks of the GP. The questionnaire about what patients find important is added to weigh against their experiences. Development of the questionnaires consisted of four phases: a search for existing questionnaires, the classification and selection of relevant questions (including formulation of inclusion and exclusion criteria), shortening of the

questionnaires and the pilot survey. An overview of the development process is presented in **Figure 3.**

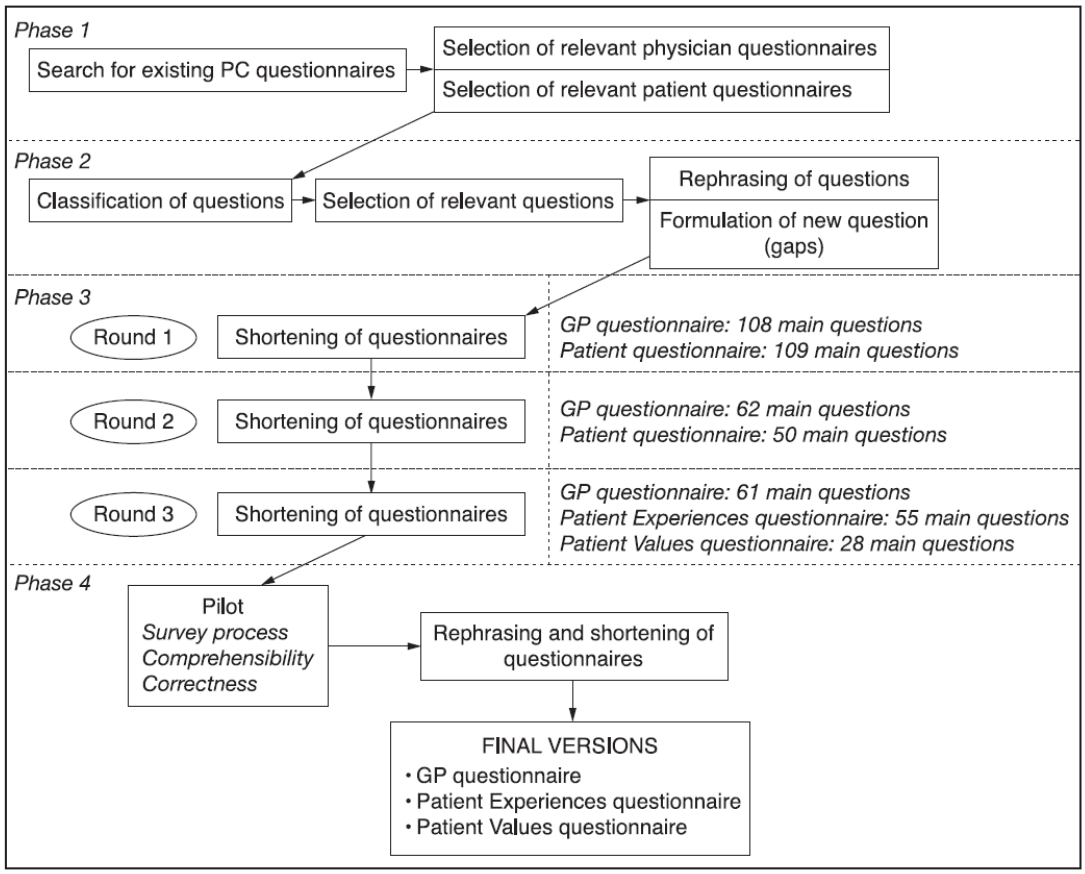

Figure 3. Phases in the development of the questionnaires [15].

4.1. Patients values questionnaire

"Measuring what patients consider important enables the weighting of their experiences. The *Patient Values* questionnaire contains 19 questions (seven of which have three or more sub questions). Most questions are statements with multiple choice answers. A few questions ask the patient to choose from a list what they consider most important and fill in a number. The 12 questions asking about the patient's background are similar to those in the Patient Experiences questionnaire. Three questions contain statements asking patients about the importance of certain aspects of care (e.g., 'How important is it that the practice has extensive opening hours?'). Finally, four questions focus on communication between GPs and patients. The statements in these questions were developed by the GULiVer partnership based on their research on 'tips' from lay

people on how medical consultations could become more successful from their perspective.

4.2. Patient Experiences questionnaire

It is dealing with the experiences of the patients with their GP (see Appendix, contains 41 multiple choice questions (10 of which have two or more sub questions). Many questions ask to what extent the patient agrees with a statement. The questionnaire is meant to be completed in the GP's waiting room by patients after consultation with their GP. The 18 questions which concentrate on the patient's background concern the patient's socio-economic status, perceived health, reason for visiting the GP, and visits to medical specialists and hospitals. Six questions deal with measuring experiences with "continuity of care", e.g., the use of medical records. "quality of care" as experienced by patients is measured in 13 questions (e.g., about the satisfaction of care needs in connection to the patient's relationship with the GP, aspects of communication, safety, complaint handling and preventive activities). As in the GP questionnaire, the 14 questions about the "accessibility of care" can be divided into physical and financial access. These questions also include the time the GP has available for the patient, the availability of home visits and waiting times. Three questions pay attention to "equity in access" and one question to "equity in treatment". "Coordination" is measured with five questions on experiences of coordination in the case of referral and on treatment by a practice nurse. To mirror the questions in the GP questionnaire about autonomy, patients are asked about their involvement in decision making and referrals. "Comprehensiveness of services" is mirrored in a question about patients' views on the breadth of the clinical task profile of services offered by the GP. Finally, two questions were included specifically related to avoidable hospitalisation. Major sources for this questionnaire were the Consumer Quality Index for GPs, the EUROPEP, several international Commonwealth Fund questionnaires and the Adult Primary Care Assessment Tool [13]. Questions were formed about the domains of equity in process and treatment and about of patients' autonomy as well.

4.3. Practice questionnaire

A 12 question practice questionnaire was developed to record the response rate among patients during the implementation of the survey and to measure practice-related

indicators regarding the communication of opening hours, and equity in access (e.g., for handicapped persons). Most questions were based on the European Practice Assessment indicators [13].

4.4. GP questionnaire

It contained 60 questions (pre-structured multiple choice answers and options of numerical answers), on background, additional professional activities and time allocation of the GP, characteristics of the practice, workforce development, efficiency, job satisfaction, economic conditions, equity in accesses, continuity of care, accessibility of care, disciplines working in the practice, coordination and cooperation, referral, medical record keeping, quality and comprehensiveness of services, available equipment, task profiles, use of guidelines and feedback from colleagues or authorities.

"The final GP questionnaire (see Appendix) contains 60 questions (25 of which have two or more sub questions). The majority of the questions have pre-structured multiple-choice answers. In 13 questions, GPs are also asked to fill in numerical answers (e.g., a percentage or a number of hours).

Three questions focus on the background of the GP and four on the characteristics of the practice (e.g., the composition of the practice population).

"Efficiency" is measured by seven questions for instance on time allocation of the GP.

Within the theme ''workforce development'' there are four questions, from additional professional activities of GP and disciplines working in the practice to job satisfaction.

Five questions focus on "economic conditions" (payment of the GP and co-payment for patients).

"Equity in access" is reflected in questions about restrictions in access and availability of care for uninsured patients.

To gain insight into the relationship between GPs and the broader contacts of primary care, there are 12 questions about "coordination and cooperation" between GPs and other disciplines.

Eleven questions were about the "continuity of care" provided by the GPs concentrate on disease management and on referrals and information exchange. Special attention is paid to medical record keeping.

"Quality of care" is measured with three questions regarding the use of guidelines and feedback from colleagues or authorities.

"Comprehensiveness of care services" is reflected in 12 questions, dealing with the available equipment and the GPs' task profiles (e.g., the range of problems for which the GP is the first point of contact).

Finally, nine questions covering "accessibility of care" can be divided into those about physical access (distance to the practice and opening hours) and those about financial access to care services.

The European study on GP Task Profiles, carried out in 30 European countries in 1992–93, was a major source for the GP questionnaire [49]. Several questions were copied from this questionnaire. Other important sources are, for example, international surveys by the Commonwealth Fund (questions about financial incentives, guideline use and medical record keeping) and Starfield's Primary Care Assessment Tool (question about care for uninsured persons) [49, 50].

For several topics, no examples of existing questions were found, and new questions had to be formulated. These topics were involvement of GPs in disease management programmes, equity in access and patient involvement in the decision-making process" [15].

4.5. The Hungarian arm of the QUALICOPC study

In each country, the response target was 220 GPs and 2200 patients, less in the smallest European countries. The study centre of the Hungarian arm of QUALICOPC project was established at the Department of Family and Occupational Medicine, University of Debrecen, in the city of Debrecen, Hungary. In cooperation with the other 3 Hungarian Departments of Family Medicine (Budapest, Pécs, Szeged) an advertisement was issued in the whole country to recruit participating GPs.

More than 300 GPs applied for participation. During the selection we tried to creat a sample regarding territorial distribution of the practice location. While it was unknown that time, the age of the GPs were not considered.

Following the study protocol, only one GP per practice or health center was eligible to participate, but there were no other instruction. The building where more GPs worked was considered as "health center".

The English version of the questionnaires were sent to the Principal Investigator of the Hungarian Arm, he translated them into Hungarian and this version was translated back to English by professional interpreters to compare and check the validity.

The 4 questionnaires were printed in the study centre and were transported to the practices by the fieldworkers. They had other tasks as well; to recruit persons, asking to fill the 2 questionnaires for patients, to fill the Practice questionnaire and they distributed the GPs questionnaires to the family physicians who posted back to the study centre after completing them [51].

The patients were recruited by the trained fieldworkers in the waiting room of the participating GPs. They were mainly medical students employed by a Debrecen based student-company. Our staff provided education for them accoding to the study protocol. They were instructed to invite 10 patients above 18 years consecutively. One of them filled the Patient's Values questionnaire and the other nine patients completed the of Patient's Experiences questionnaire about the consultation had just occurred. If any of the patients refused to answer, they asked other person to reach the expected number. Fieldworkers were also asked to fill the Practice questionaire, to evaluate the physical and enviromantal circumstances of practices, including infrastructure.

4.6. Data processing

All of the questionnaires completed were sent by postal way to the QUALICOPC Center in the NIVEL (Netherlands Institute for Health Services Research) to Utrecht. The identical structure of the questionnaire made possible the electronic processing. After finishing, each national (descriptive) datasets were sent back to the national centre for further processing and analysis.

4.7. Ethics

The Hungarian Research Ethical Committee in Medicine (TUKEB) approved the Hungarian arm of the study assigning the number: 20024/2011-EKU (643/PI/11.). The Hungarian professional community was informed about the start of the project [52; 53].

5. RESULTS

5.1. Patient Values questionnaire

Questionnaire was filled by 215 patients (139 male, 75 female) with an average age of 47.2 years old (SD±17.6). Almost all participant 96.7% [94.4-99.1%] and their mothers 95.4% [92.5-98.2%] were born in Hungary. In the same household, 78.6% [73.1-84.1%] of the responders lived with adult family members and 33.5% [27.2-39.8%] of them have lived with children (below 18y).

Their estimated income was around 62% [55.4-68.4%], below 30% [24.1-36.4%] or above 8% [4.3-11.5%] the average national figures. Regarding employment status of the participant, 43% [36.2-4.4%] of them have worked in the civil service, 10% [6.2-14.3%] as self-employed, 23% [17.2-28.4%] retired, 9% [5.0-12.6%] student and 8-8% [4.3-11.5%] were disabled or unemployed.

Most participants rated their health as good 39.7% [33.2-46.3%] or fair 38.3% [31.8-44.8%]. Significantly fewer people described their health as very good 13.1% [8.6-17.6%] or poor 8.9% [5.1-12.7%]. 43.5% [36.8-50.1] of the respondents have chronic disease.

There were questions, focusing to the expected circumstances, services, including behaviour and consultation's skills of family physicians. Answers options *important* and *very important* were merged into one column in **Table 1.**

How important are the following to you?	**Important + very important [%]**	**CI [%]**
That this doctor has my medical records at hand	65.6	59.2-71.9
That this doctor is polite	87.5	83.0-91.9
That this doctor asks questions about my health problem	90.2	86.3-94.2
That I understand clearly what this doctor explains	90.7	86.8-94.6
That this doctor involves me in making decisions about treatment	83.3	78.3-88.2
That this doctor asks about possible other problems besides the one I come	65.6	59.2-71.9

How important are the following to you?	**Important + very important [%]**	**CI [%]**
That people at the reception desk are polite and helpful	86.0	81.4-90.7
That this doctor knows important information about my medical background	89.3	85.2-93.4
That this doctor knows about my living situation	60.0	53.5-66.5
That I feel able to cope better with my health problem/illness after this visit	81.4	76.2-86.6
That this practice has extensive opening hours	71.6	65.6-77.7
That I can get an appointment easily at this practice	75.4	69.6-81.1
That I know how to get evening. night and weekend services	89.3	85.2-93.4
That this practice is close to where I live or work	79.1	73.6-84.5
That I have a short waiting time on the phone when I call this practice	84.7	79.8-89.5
That I don't need to tell a receptionist or nurse about details of my health problem before seeing my doctor	59.5	53.0-66.1
That the doctor has prepared for the consultation by reading my medical notes (# it was rated as one of the most important)	# 73.5	67.6-79.4
That I have prepared for the consultation by keeping a symptom diary or preparing questions	66.5	60.2-72.8
That I can bring a family member/friend to the consultation if I think this is useful	58.6	64.1-76.3
That I know which doctor I will see	80.0	74.7-85.3
That I keep to my appointment	80.5	75.2-85.8
During the consultation		
That the doctor makes me feel welcome by making eye contact	82.8	77.7-87.8
That the doctor listens attentively	95.4	92.5-98.2

How important are the following to you?	**Important + very important [%]**	**CI [%]**
That the doctor does not give me the feeling to be under time pressure	89.3	85.2-93.4
That the doctor is aware of my personal. social and cultural background	71.2	6.5.1-77.2
That the doctor is not prejudiced because of my age, gender. religion or cultural background (# it was rated as one of the most important)	#82.3	77.2-87.4
That the doctor treats me as a person and not just as a medical problem	91.2	87.4-95.0
That the doctor is respectful during physical examination and by not interrupting me	86.5	81.9-91.1
That the doctor takes me seriously	93.5	90.2-96.8
That the doctor understands me	86.5	81.9-91.1
That the doctor asks me if I have any	81.9	76.7-87.0
That the doctor asks if I have understood everything	83.7	78.8-88.7
That the doctor knows when to refer me to a medical specialist	83.3	78.3-88.2
That the doctor avoids disturbances of the consultation by telephone calls etc.	72.6	66.6-78.5
That the doctor gives me additional information about my health problem e.g., leaflets	59.1	52.5-65.6
That the doctor informs me about reliable sources of information e.g., websites	43.7	37.1-50.4
That I tell the doctor what I want to discuss in this consultation	68.8	62.6-75.0
That I am prepared to ask questions and take notes	36.3	29.9-42.7
That I am honest and not feel embarrassed to talk about my health problem	76.8	71.1-82.4

How important are the following to you?	Important + very important [%]	CI [%]
That I am open about my use of other treatments. such as self-medication or alternative medicine	44.7	38.0-51.3
That psychosocial issues (for example personal worries) can be discussed if needed	52.6	45.9-59.2
After the consultation		
That the doctor gives me all test results. even if they show no abnormalities	78.1	72.6-83.7
That the doctor offers me to have telephone or email contact if I have further questions	60.0	53.5-66.5
That the doctor gives me clear instructions on what to do when things go wrong (# it was rated as one of the most important)	#92.1	88.5-95.7
That I adhere to the agreed treatment plan	89.3	85.2-93.4
That I inform the doctor how the treatment works out	86.5	81.9-91.1
That I can see another doctor if I think it is necessary	71.6	88.5-95.7

Table 1. Experiences and expectations of patients regarding circumstances, services provided, information, behaviour, and consultation's skills of family physicians.

5.2. Patient Experiences questionnaire

The nine questionnaires from each practice were filled by altogether 1934 people; 679 of them were male 36% and 1234 of them were female 64%. The average age of the group was 49.6 (SD ±16.7) years.

Almost all participant 97.2% [96.5-97.9%] and their mothers 96.3% [95.4-97.1%] were born in Hungary. In the same household 77.2% [75.3-79.1%] of them have lived with adult family members and 33.4% [31.3-35.5%] of them lived with children under the age of 18.

Regarding the employment status of the participants, 37% [34.9-39.2%] worked in civil service, 8% [6.8-9.2%] as self-employed, 29% [27.0-31.0%] retired,7% [5.8-8.1%] student and 8-8% [6.8-9.2%] were disabled or unemployed.

52 % [49.8-54.2%] of the participants estimated their income at around the national average while 42.6% [40.4-44.8%] of them estimated it below the national average.

Majority of patients 84.1% [82.4-85.7%] visited their own, registered family physician. They were asked about the presence of chronic or longstanding conditions (high blood pressure, diabetes, depression, asthma, etc.) and to describe their own health in general. Answers are presented in **Table 2.**

	Age cohort			**Education/qualification**			**Sex**	
Own health	**<35y N:465 CI [%]**	**35-60y N:930 CI [%]**	**>60y N:539 CI [%]**	**No N:412 CI [%]**	**Post-sec. N:377 CI [%]**	**Upper sec. N:1080 CI [%]**	**Female N:1238 CI [%]**	**Male N:686 CI [%]**
Fair	56.2 [51.6-60.6]	55.2 [52.0-58.4]	34.1 [30.1-38.1]	48.0 [43.2-52.9]	37.6 [32.8-42.6]	44.8 [41.8-47.8]	45.6 [42.9-48.4]	41.8 [38.1-45.5]
Good	17.2 [13.8-20.6]	18.4 [15.9-20.9]	46.6 [42.4-50.8]	15.9 [12.5-19.6]	43.7 [38.8-48.8]	36.3 [33.4-39.2]	33.5 [30.9-36.2]	31.9 [28.4-35.4]
Very good	1.6 [0.4-2.6]	1.4 [0.6-2.2]	13 [10.1-15.8]	5.1 [3.0-7.2]	13.1 [9.6-16.4]	6.2 [4.8-7.6]	5.4 [4.2-6.7]	10.9 [8.6-13.3]
Poor	25 [21.0-28.9]	25.0 [22.3-27.8]	6.3 [4.3-8.4]	31 [26.6-35.5]	5.6 [3.3-7.9]	12.7 [10.7-14.7]	15.5 [13.5-17.5]	15.4 [12.7-18.2]
Chronic condition	76.9 [73.2-80.8]	79.4 [76.8-82.0]	32.4 [28.5-36.4]	73.7 [69.5-78.0]	43.2 [38.2-48.2]	52.1 [49.2-55.1]	54.4 [51.6-57.1]	55.8 [52.1-59.5]

Table 2. Rating own health and presence of chronic condition. Distribution by age cohorts, education, and sex [in percent]

Frequency of consultation with family physicians in the previous half year was also questioned and presented in **Table 3.**

In the last 6 months, how often have you visited or consulted a GP?								
	Education			**Age cohorts**			**Sex**	
Frequency of visits	No qualification N=412	Post-secondary N=377	Upper secondary N=1080	<35y N=465	35-60y N=930	>60y N=539	Female N=1238	Male N=686
5 times or more before	45.1 [40.3-50.0]	18.9 [14.9-22.8]	27.6 [24.9-30.3]	40.9 [36.4-45.3]	42.6 [39.4-45.8]	18.0 [14.8-21.2]	31.6 [29.0-34.2]	27.5 [24.2-30.9]
2 to 4 times before	30.5 [26.1-35.0]	37.5 [32.5-42.3]	36.0 [33.2-38.9]	42.4 [37.9-46.9]	36.9 [33.8-40.0]	33.2 [29.2-37.2]	36.3 [33.6-38.9]	33.0 [29.4-36.5]
Once before this visit	11.5 [8.3-14.5]	23.1 [18.8-27.3]	19.8 [17.4-22.2]	7.6 [5.1-9.9]	11.7 [9.7-13.8]	25.0 [21.4-28.7]	17.3 [15.2-19.4]	20.3 [17.3-23.3]
This was the first visit	7.8 [5.2-10.4]	17.6 [13.7-21.3]	13.8 [11.7-15.9]	7.6 [5.1-9.9]	6.5 [4.9-8.0]	19.6 [16.3-23.0]	11.5 [9.7-13.2]	15.8 [13.0-18.5]

Table 3. Frequency of consultation with GPs in the last 6 months [percent]

Patients in the lowest educational category visited more often their GPs, females consulted frequently as well, proved by regression analysis. For sex, correlation coefficient: 0.13, standard error: 0.04, p value: <0.001 and 95% confidence interval: [0.06; 0.20]. Consultation in the past year above primary care level with specialist was also questioned and answered according to the figures in **Table 4.**

How many times in the past 12 months, have you consulted a medical specialist for yourself?								
	Age cohort			**Sex**		**Education**		
Frequency of consultation	<35y N=465	35-60y N=930	>60y N=539	Female N=1238	Male N=686	No qualification N=412	Post-secondary N=377	Upper secondary N=1080
None	0.0 [0.0-0.0]	42.6 [39.4-45.8]	18.0 [14.8-21.2]	7.7 [6.2-9.2]	9.6 [7.4-11.8]	8.2 [5.6-10.9]	5.9 [3.5-8.2]	8.7 [7.0-10.4]
Once or twice	17.2 [13.8-20.6]	36.9 [33.8-40.0]	33.2 [29.2-37.2]	30.4 [27.8-32.9]	33.4 [29.9-36.9]	21.3 [17.4-25.3]	35.6 [30.7-40.4]	33.7 [30.9-36.5]
3 to 5 times	23.4 [19.6-27.3]	11.7 [9.7-13.8]	25.0 [21.4-28.7]	29.5 [26.9-32.0]	27.8 [24.5-31.2]	26.3 [22.0-30.5]	35.2 [30.5-40.1]	27.9 [25.2-30.5]
6 to 10 times	23.4 [19.6-27.3]	6.5 [4.9-8.0]	19.6 [16.3-23.0]	15.3 [13.3-17.3]	14.8 [12.2-17.5]	20.6 [16.7-24.5]	11.3 [8,2-14,6]	14.6 [12.5-16.7]
More than 10 times	35.9 [31.6-40.3]	6.5 [4.9-8.0]	19.6 [16.3-23.0]	17.0 [14.9-19.1]	14.5 [11.8-17.1]	23.6 [19.4-27.6]	11.8 [8.4-14.9]	15.1 [13.0-17.2]

Table 4. Frequency of consultation with specialists in the last 12 months [percent]

The main reason of the practice visits and agreement about the listed statement were questioned, based on the answer options presented in **Table 5**.

What was the main reason for your visit to the GP today?	**Yes**	**CI [%]**
Because you were ill or didn't feel well	30.7	28.7-32.8
For a medical check up	24.4	22.5-26.3
To get a repeat prescription	42.9	40.7-45.1
To get a referral	9.8	8.5-11.2
To get a medical certificate	6.9	5.7-8.0
For a second opinion	12.4	10.9-13.9
Other reason	16.7	15.0-18.4
Do you agree with the following?		
The doctor had my medical records at hand	78.9	77.1-80.7
The doctor was polite	96.8	96.0-97.6
The doctor listened carefully to me	95.1	94.1-96.1
The doctor asked questions about my health problem	90.9	89.6-92.2
I couldn't really understand what the doctor was trying to explain	20.5	18.7-22.3

Do you agree with the following?	**Yes**	**CI [%]**
The doctor took sufficient time	92.9	91.8-94.1
The doctor involved me in making decisions about treatment	84.3	82.7-85.9
I would recommend this doctor to a friend or relative	89.0	87.6-90.4
The doctor asked about possible other problems besides the one I just came for	64.8	62.7-66.9

Table 5. The main reasons of encounter, statements, and opinion about the doctor [percent]

Experiences regarding the actual visit, content of the consultation and agreement about the listed statements were questioned in **Table 6.**

Do you agree with the following?	**Yes (%)**	**CI [%]**
He/she knows important information about my medical background	85.1	83.5-86.7
He/she knows about my living situation	63.1	60.9-65.2
This doctor doesn't just deal with medical problems but can also help with personal problems and worries	42.9	40.7-45.1
After this visit, I feel I can cope better with my health problem/ illness than before	62.7	60.6-64.9
In the past 12 months, has a GP from this practice talked to you about how to stay healthy? (For instance, about diet, alcohol or smoking)	65.9	63.8-68.0
In past 2 years, has a GP from this practice ever asked you about all the medications you take (also those prescribed by other doctors)?	79.5	77.7-81.3
Do you agree with the following?		
The opening hours are too restricted	15.8	14.2-17.4
If I need a home visit, I can get one	79.0	77.2-80.8
The practice is too far away from where I am living or working	17.4	15.7-19.1
When I called this practice, I had to wait too long to speak to someone	9.2	7.9-10.5
I know how to get evening, night, and weekend services	73.0	71.0-75.0
People were polite and helpful at the reception desk	91.9	90.7-93.1

Table 6. Experiences regarding the actual visit, statement about the access [percent]

Patients were asked about the time spent with travelling between their home and the GP's office. In 71.8% [69.8-73.8%] of the cases, it was less than 20 minutes. Also 21% [19.2-22.8%] of patients made an appointment, 85% [81.5-88.5%] of them got it easily, 29% [24.6-33.5%] of them booked it on the same day, 37% [32.3-41.6%] of them a day before, while 19% [15.2-22.8%] of them had to wait for 2-7 days for their appointment. One third of patients had to wait less than 15 minutes, 29% [27-31%] of them waited 15-

30 minutes. Negative experiences of patients were also explored. There were only few, as listed in **Table 7.**

	Yes (%)	**CI [%]**
Do you think it is too difficult to see a GP during evenings, nights and weekends?	10.9	9.5-12.3
In the past 12 months, has one of the following happened to you in this practice?		
The doctor or staff acted negatively to you	4.0	3.1-4.9
Other patients were treated better than you	3.1	2.3-3.9
The doctor was too much concerned about money	2.2	1.6-2.9
The doctor or staff showed disrespect because of your ethnic background	3.5	2.7-4.3
The doctor or staff showed disrespect because of your gender	4.1	3.2-5.0
I thought tests or examinations were repeated unnecessarily	2.5	1.8-3.2
I thought I got the wrong medication or wrong dose	3.7	2.9-4.6
I thought I got incorrect results of a test or X-ray	2.1	1.5-2.8
If you are unhappy with the treatment you received, do you think this doctor would be prepared to discuss it with you?	82.6	80.9-84.3

Table 7. Negative experiences and feelings of patients [percent]

Altogether 507 persons had cancelled or missed their appointment. The reasons are presented in **Table 8.**

N=507	**Yes (%)**	**CI [%]**
In the past 12 months, did you postpone or abstain from a visit to the GP when you needed one?	24.9	21.1-28.6
What was the most important reason why you did not visit a GP?		
I did not have insurance	2.8	1.3-4.2
Other financial reasons	12.8	9.9-15.7
I could not get there (physically)	11.6	8.8-14.4
I was too busy	44.0	39.7-48.3
Other reason	34.7	30.6-38.9

Table 8. Self-reported reasons for cancellation or missed visits [percent]

Participants were expected to choose their expectations and preferences from the listed statements about the consultations with specialist, **Table 9.**

Do you agree with the following statements?	Yes (%)	CI [%]
If I visit another GP besides my own GP, he/she has the necessary information about me	22.3	20.4-24.1
When I am referred, my GP informs the medical specialist about my illness	61.1	58.9-63.3
When I am referred, my GP decides to whom I should go	47.0	44.8-49.2
After treatment by a medical specialist, my GP knows the results	84.2	82.6-85.8
It is difficult to get a referral to a medical specialist from my GP	7.0	5.8-8.1

Table 9. Expectations and preferences from the listed statements about the consultations with specialist [percent]

Six hundred fifty of the interviewed persons had personal experiences about using out of hour services or emergency departments as summarized in **Table 10.**

In the last 12 months, how often did you visit a hospital emergency department for yourself?	(%)	CI [%]
1 time	18.3	16.6-20.0
2 or 3 times	12.7	11.2-14.2
4 or more times	1.6	1.0-2.2
Why did you go to the emergency department instead of going to a GP?		
I had something GPs do not treat	46.5	44.3-48.7
There was no GP available	21.4	19.6-23.2
For financial reasons	5.7	4.7-6.7
At the emergency department, I expected a shorter waiting time	5.5	4.5-6.5
The emergency department provides better care	2.9	2.1-3.6
The emergency department is more convenient to reach	6.8	5.7-7.9
Other reason(s)	38.3	36.1-40.5

Table 10. Frequency and reasons for visiting out of hour services or emergency departments [percent]

Professional expectations from primary care services were also explored and presented in **Table 11.**

Would most people visit a GP for the following?	Yes (%)	CI [%]
Cut finger that needs to be stitched	18.5	16.8-20.2
Removal of a wart	11.6	10.2-13.0
Routine health checks	73.3	71.3-75.3
Deteriorated vision	33.0	30.9-35.1
Help to quit smoking	39.3	37.1-41.5
A child with a severe cough	66.8	64.7-68.9
Stomach pain	77.4	75.5-79.3

Would most people visit a GP for the following?	Yes (%)	CI [%]
Blood in the stool	76.1	74.2-78.0
Sprained ankle	36.5	34.4-38.7
Anxiety	43.6	41.4-45.8
Domestic violence	15.2	13.6-16.8
Sexual problems	11.7	10.3-13.1
Relationship problems	8.0	6.7-9.2
Advice for choosing the best hospital or specialist for a certain treatment	61.6	59.4-63.8

Table 11. Reasons why patients visiting family physicians [percent]

When health issues occure, some of the people wish to visit a doctor. The preferences and expectations of patients in the case of the listed symptoms are evaluated in **Table 12.**

How important would it be for you to see a doctor if you had	Extremely important + rather important [%]	CI [%]
Weight loss of more than 2 kilograms in a month when not dieting	42.7	40.5-44.9
Shortness of breath with light exercise or light work	62.5	60.4-64.7
Chest pain when exercising	77.9	76.1-79.8
Loss of consciousness, fainting or passing out	91.7	90.4-92.9
Headache for more than one day	49.2	47.0-51.5
Abdominal pain for more than one day	54.2	52.0-56.4
Severe worries for more than a month	64.1	62.0-66.3
Do you expect to benefit from a GP visit for ...?	**Yes [%]**	**CI [%]**
Stomach problems	83.8	82.2-85.5
Shoulder and neck pain	73.9	71.9-75.8
Feeling nervous	43.7	41.5-45.9
Diarrhoea	69.1	67.0-71.1
Sore throat	69.6	67.5-71.6
Headache	49.3	47.0-51.5
Feeling tired	40.5	38.3-42.7
Flu	53.5	51.3-55.7
Feeling nauseous	51.0	48.8-53.2
Would most people visit a GP for the following?	**Yes (%)**	**CI [%]**
Cut finger that needs to be stitched	18.5	16.8-20.2
Removal of a wart	11.6	10.2-13.0
Routine health checks	73.3	71.3-75.3
Deteriorated vision	33.0	30.9-35.1
Help to quit smoking	39.3	37.1-41.5
A child with a severe cough	66.8	64.7-68.9
Stomach pain	77.4	75.5-79.3

Would most people visit a GP for the following?	Yes (%)	CI [%]
Blood in the stool	76.1	74.2-78.0
Sprained ankle	36.5	34.4-38.7
Would most people visit a GP for the following?	**Yes (%)**	**CI [%]**
Anxiety	43.6	41.4-45.8
Domestic violence	15.2	13.6-16.8
Sexual problems	11.7	10.3-13.1
Relationship problems	8.0	6.8-9.2
Advice for choosing the best hospital or specialist for a certain treatment	61.6	59.4-63.8

Table 12. Preferences and request for GP services in presence of the listed symptoms [percent].

Only 22.8% of patients were examined or treated by a nurse in the GP's office. Patients have a great confidence to their GPs. The statement "*In general, doctors can be trusted*" was strongly agree by 33.5% and simple agree by 61.3% of the people participated in the questionnaire. The statement *"In general, people can be trusted*" was only agreed by 39.4% of them, while 42.6% of the participants disagreed.

5.3. Practice questionnaire

The recruitment of patients was successful, only 25% refusal was recorded. Opening hours were clearly indicated in 91% of surgeries, out-of-hours care was advertised in 88%. Eighty-eight percent of practices were located on the ground floor, 54% of them had elevators in multilevel buildings. Half of the practises offered free parking facilities for handicapped visitors and toilets accessible with wheelchair.

The cleanliness of the facilities was evaluated as very clean (45%) and rather clean (54%). The doors were usually closed in the waiting room, therefore 80% of visitors did not hear what has been said at the reception desk and 94% could not hear or see what was happening in the doctor's office.

5.4. GP questionnaire

Altogether 222 questionnaires were completed by 118 (53%) male and by 104 (47%) female family physicians/general practitioners. Answers are presented mainly according to the order of questionnaire.

The average age of the doctors was 53.4 (±10.9) years old. Ninety two percent of them were born in Hungary, others come mainly from the neighbouring countries, where high density of Hungarian population live (i.e., Ukraine, Romania).

5.4.1. Location and composition of practices

Most of the practices (31%) were in big (inner) cities, 8.6% in suburbs, 20.3% in (small) towns, 28.4%. in rural and 11.3% in mixed urban-rural locations. The average of the practice population (number of enrolled patients) was 1857, the smallest was 170, the biggest was 3253. Comparing to the average national level, they rated the ratio of *elderly* people (over 70 years) in the practice as average (46.9%), above (39.2%) or below average (9%). The ratio of *socially disadvantaged* people was estimated as average (38%), above average (42%) and below average (18.5%). A quarter of the family physician estimated that ethnic minority patients are represented closely to their national representatives, while 52% expected higher and 20% believed lower figures.

Most of the practices considered the turnover within patients as average (57%) and 37% below average.

5.4.2. Workload

Hungarian GPs are reported 37.7 [31.5-44.2] working hours weekly, most of them spent 31.5 [25-37.2] hours with direct patient consultations, home visits, and telephone consultations. The duration of the direct consultation was the longest in the suburban practices 33.2 [10.7-52.5], while it was the shortest in the inner cities of the big cities 30.0 [19.6-41.3].

The reported mean of face-to-face consultations was 50.4 [43.9-57] people per working days. The most face-to-face consultation was in the rural practices 54.5 [41.7-66.3], while the fewest occurred in suburban ones 43.7 [19.9-64.3].

Besides these, 11.7 [7.5-15.9] patients needed telephone consultations, while 0.9 [0.1-2.1] patient was contacted by e-mails. Regular patient consultations lasted for 8.2 [4.5-11.7] minutes. Male doctors spent only 7.3 [2.8-12.4] minutes with a patient, while female doctors spent 2 minutes more 9.2 [3.9-15.3].

Responders performed 14.5 [9.8-19] home visits per week, 5.7 [2.8-8.9] for elderly patients and 1.9 [0.1-3.6] institutionalized patients were visited in other settings.

In the past 3 working months they reported 4.8 [2.1-7.8] nights and 1.5 [0.1-2.9] weekend day shifts. The number of night shifts was the highest in small towns 7.3 [0.1-14] and the lowest in suburbs 0.26 [0.1-0.4]. Most of the weekend shifts was completed in rural areas 1.94 [0.1-4.7] and the fewest was in the suburbs 0.16 [0.1-0.2].

The highest part of GPs (86.5%) was working alone, or in shared accommodation with other GPs (11.3%) or medical specialist (4.1%).

GPs were rarely away from their practices. Their vacation lasted for 2.6 [0.6-4.8] weeks and they attended on conference or educational activities for 1.2 [0.2-2.9] weeks, annually. Doctors in the suburbs went on vacation for the longest time 3,11 [0,2-15.3] and the colleagues from the rural areas for the shortest time 2.43 [0,1-7.5].

Sick leave lasted for 0.45 [0.1-1.3] weeks a year and even less scientific activities were reported, 0.2 [0.1-1.3] weeks.

5.4.3. Financing

Beside their daily work in family practice, 33% of GPs had no other paid activities, while 7% worked as company doctor (occupational health) and 41% of them performed teaching activities, mainly medical education. Almost all the practicing GPs 95% [92.2-97.9%] were working as self-employed, in a contract-based system with a health insurance fund and local municipalities, orwere self-employed without contract and 5% [2.1-7.8%] were a paid employee.

The financing of GPs is based mainly on capitation. Regarding the distribution of financing, only 192 GPs answered. According to their answers the most significant part of the income comes from salary 42.6% [35.7-49.7%] and capitation based financing 39.4% [32.7-46.5%]. Fee for service activities added 5.8% [2.4-9%], performance payment 3.6% [1-6.3%], out of pocket payments were the same 3.6% [1-6.3%], while other sources 7% [3.2-10.3%]. Among the compositions of income, financing from *National Health Insurance Fund* was 89% [84.6-93.5%]

There were additional elements, represented in some extent in the financing. According to the self-reported data of GPs, for the proper diabetes care 19.4% [14.2-24.6%] of GPs get a financial bonus, while significantly more, 37.8% [31.5-44.2%] for reaching the targeted screening activities. 21.6% [16.2-27%] get additional financing for the proper referral rate, but only 5.9% [2.8-8.9%] for working in remote areas.

5.4.4. Professional competences

GPs mentioned they have informations in some extent about clinical guidelines published by disease specific bodies or organizations (chronic heart failure 70% [64.1-76.2%], asthma 65% [58.9-71.4%], diabetes 79% [73.3-84.1%] and COPD 64% [57.5-70.1%]. Many of them are widely known and used by GPs, but significantly more used the guidelines about diabetes than asthma or COPD guidelines. 7 % [3.5-10.1%] of the participants indicated that there are not up to date primary care specific guidelines available.

Feedbacks regarding prescription are usually provided by the insurance fund 73% [67.1-78.8%], less by the health authority. The reasons are usually the prescriptions, while GPs have restricted competency, mainly in case of innovative drugs, with higher price. Prescriptions issued by the specialist have a higher reimbursement rate.

In case of referrals, majority of the time 60 % [53.5-66.4%] the preference of the patients is considered, while 35% [28.9-41.4%] of the GPs prefer to have their own decision without sharing it with the patients. The available devices and equipments in the questioned practices are listed in **Table 13.**

Available devices and equipments in the practices	**[%]**	**CI [%]**
Disposable syringes	99.1	97.9- 100
Disposable gloves	99.1	97.9- 100
Refrigerator for medicines	98.7	97.1- 100
Blood glucose test set	92.3	88.8- 95.8
Electrocardiograph	96.4	93.9- 98.8
Blood pressure meter	99.1	97.9- 100
Doctor's bag for emergencies and home visits	95.5	92.8- 98.2
Infusion set	83.8	78.9- 88.6
Urine catheter	77.9	72.5- 83.4
Otoscope	71.2	65.2- 77.1
Resuscitation equipment	71.2	65.2- 77.1
Any cholesterol meter	36.5	30.2- 42.8
Set for minor surgery	28.4	22.4- 34.3
Suture set	25.2	19.5- 30.9
Defibrillator	26.1	20.3- 31.9
Ophthalmoscope	23.0	17.4- 28.5
Audiometer	23.9	18.3- 29.5
Peak flow/ PEF meter	15.8	11.0- 20.6
Spirometer	13.5	9.0- 18
Ultrasound for abdomen/ fetus	4.1	1.5- 6.6
Microscope	4.1	1.5- 6.6
Coagulometer	3.6	1.2- 6.1
Hemoglobinometer	1.8	0.1- 3.6
Blood cell counter	2.3	0.3- 4.2
X-ray	0.9	0.1- 2.1

Table 13. Available devices and equipments in practices [percent]

Regarding the accessibility of X-ray facility, it can be reached in the same building 4% [1.5-6.6%] where the practice is located, 89% [85.1-93.3%] are accessible easily, only 7% [3.8-10.6%] are too far. The nearest GP practice was in the same building 39% [32.8-

45.6%], within a distance of 10 km 55% [48.4-61.5%]. The nearest outpatient's clinic was in the same building 10% [6-13.8%], or not far than 10 km 57% [50.7-63.7%]. Half of the nearest hospitals were also within this range.

The questioned practices/centres offered 6.7% [3.5-10.1%] opening hours on weekdays. Consultations in the evening and the access to the practices after opening hours varied between practises, although 32% [25.8-38.1%] of them were still open after 6 pm. In Hungary, out of hours services are available for the population/inhabitants, but the type and involvement of GPs are different. On a rota basis were reported by between 11 and 18% of them, while 14% [9.4-18.5%] of the GPs were always available for their patients, even at weekends. Most of the hospital-based emergency and centre-based non-emergency services are run by other physicians. Services are organized in a very different way, depending on the local contracts between emergency companies and local municipalities.

Initially appointments were not routinely used in the Hungarian primary care. Nowadays 23% [17.4-28.5%] of GPs provide consultations by appointment and 59% [52,5-65,5%] of them offer a walk-in hour.

The price of the prescriptions become an issue for the Hungarian patients only in the last decade and GPs are aware it. Almost all of them prescribe the cheaper equivalent medicine and 87% [82.5-91.4%] of them provide free samples of medication, if available. Doctors estimated that 13% [8.6-17.5%] of patients frequently, 61% [54.4-67.2%] of them occasionally delayed their visits for financial reasons.

5.4.5. Enrolment into the practice

Almost half 48% [41.6-54.8%] of the new patients, entering the practices provide their medical records or it was sent by the previous GP, while 41% [34.5-47.5%] of them enrolled without handling previous medical records. In Hungary, GPs have to accept the enrolment of all inhabitants in their geographically contracted area. 43% [36.3-49.3%] of them never use any restriction, 34% [27.6-40%] refuse patients from other geographical area and 5% [2.1-7.8%] consider the past medical history of the patients. In Hungary, above certain level of enrolled patients, some financial restriction is applied; that could be the reason why 12% [7.9-16.5] of GPs consider previously the numbers at the patient's list.

Forty one percent of family physicians always accept non-insured patients, but 24% of them only in case of emergency.

5.4.6. Cooperation with other specialists, referral

The previous experience of GPs is the determining factor in case of referrals by 58% [51.6-64.6%], other points of view which are always considered: travel distance for the patients 42% [35.4-48.4%], patient's own preference 37% [30.6-43.3%], expected waiting time 39% [32.8-45.6%], comparative information on the specialist getting from other patients 22% [16.6-27.5%] and cost for the patients 46% [39.4-52.5%].

Employing a practice nurse is compulsory in Hungary, while 5% [2.1-7.8%] of GPs worked actually without practice nurse. Other health care professionals were employed in much less extent, receptionist 28% [22-33.8%], midwife 0.5% [0.1-1.3%], and laboratory assistant 2.2% [0.3-4.2%]. In the same centres where the questioned GPs worked, other professionals were also available: home care nurse 7.7% [4.2-11.2%], psychiatric nurse 1.8% [0.1-3.6%], dentist 4.5% [1.8-7.2%], pharmacists 2% [0.1-3.6%], social workers 4.1% [1.5-6.6%], and practice manager 1% [0.3-2.1%].

Practice nurses have high competence in some fields. They independently give immunization/vaccination in 70% [63.8-75.9%] of practices, provide advices regarding health promotion, lifestyle, smoking cessation in 83% [77.9-87.8%], check routinely chronically ill patients 80% [74.9-85.4%] and perform minor procedures like ear syringing or wound treatment in 83% [77.9-87.8%].

Referral letters (including details on provisional diagnosis and test results) are written by 48% [41.6-54.8%] of GPs for all, by 41% [34.5-47.5%] for most and by 10% [6-13.8] for the minority of patient. After consultation with specialist, treatment or diagnosis of the patients is told always 40% [33.6-46.5%], usually 25% [19.5-30.9%], seldom or never 25% [19.5-30.9%].

After a patient has been discharged, 81% [75.9-86.2%] of doctors receive summary/discharge report within 1-4 days, 5% [2.1-7.8%] of them within 4-5 days and the other 13% [8.6-17.5%] complained that they never or rarely get it.

Hungarian GPs are involved in the management of many chronic conditions (diabetes, hypertension, myocardial infarction, musculoskeletal problems, mental disorders and even palliative care) while services when procedures or interventions needed are usually provided by surgical specialists (urologist, ENT etc.). Some examples were offered in the questionnaire and doctors were asked how frequently they are involved in these or similar cases **Table 14.**

All Hungarian GP practices use computers, with specific primary care software. The functions and recorded data are presented in **Table 15.**

To what extent will patients in the practice population contact you as the first health care provider?	Almost always + usually CI [%]	Seldom or never CI [%]
Child with severe cough	40.5 [34.1-47]	46.9 [40.3-53.4]
Child aged 8 with hearing problem	29.7 [23.7-35.7]	57.2 [50.7-63.7]
Woman aged 18 asking for oral contraception	37.8 [31.5-44.2]	14.9 [10.2-19.5]
Man aged 24 with stomach pain	79.3 [73.9-84.6]	5.4 [2.4-8.4]
Man aged 45 with chest pain	89.6 [85.6-93.6]	3.6 [1.2-6.1]
Woman aged 50 with a lump in her breast	80.2 [74.9-85.4]	4.5 [1.8-7.2]
Woman aged 60 with deteriorating vision	56.3 [49.8-62.8]	14.0 [9.4-18.5]
Woman aged 60 with polyuria	77.5 [72-83]	5.9 [2.8-8.9]
Woman aged 60 with acute symptoms of paralysis/paresis	72.5 [66.7-78.4]	11.3 [7.1-15.4]
Man aged 70 with joint pain	91.9 [88.3-95.5]	3.6 [1.2-6.1]
Woman aged 75 with moderate memory problems	81.1 [75.9-86.2]	5.9 [2.8-8.9]
Man aged 35 with sprained ankle	46.8 [40.3-53.4]	18.0 [13.0-23.1]
Man aged 28 with a first convulsion	53.2 [46.6-59.7]	25.7 [19.9-31.4]
Anxious man aged 45	68.0 [61.9-74.2]	9.0 [5.2-12.8]

To what extent will patients in the practice population contact you as the first health care provider?	**Almost always + usually CI [%]**	**Seldom or never CI [%]**
Physically abused child aged 13	18.0 [13-23.1]	71.2 [65.2-77.1]
Couple with relationship problems	17.6 [12.6-22.6]	38.3 [31.9-44.7]
Woman aged 50 with psycho-social problems	60.8 [54.4-6.,2]	9.5 [5.6-13.3]
Man aged 32 with sexual problems	23.9 [18.3-29.5]	29.7 [23.7-35.7]
Man aged 52 with alcohol addiction problems	34.7 [28.4-40.9]	19.8 [14.6-25.1]
To what extent are you involved in the treatment and follow-up of patients in your practice population with the following diagnoses?	**Almost always + usually CI [%]**	**Seldom or never CI [%]**
Chronic bronchitis/ COPD	94.1 [91.1-97.2]	2.7 [0.6-4.8]
Hordeolum (Stye)	40.1 [33.6-46.5]	25.7 [19.9-31.4]
Peptic ulcer	94.2 [91.1-97.2]	1.8 [0.1-3.6]
Herniated disc lesion	91.4 [87.8-95.1]	2.7 [0.6-4.8]
Congestive heart failure	94.6 [91.6-97.6]	2.3 [0.3-4.2]
Pneumonia	93.2 [89.9-96.5]	0.5 [0.1-1.3]
Peritonsilar abscess	57.2 [50.7-63.7]	12.2 [7.9-16.5]
Parkinson’s disease	81.5 [76.4-86.6]	5.4 [2.4-8.4]

To what extent are you involved in the treatment and follow-up of patients in your practice population with the following diagnoses?	**Almost always + usually CI [%]**	**Seldom or never CI [%]**
Uncomplicated diabetes (type II)	97.8 [95.8-99.7]	0.5 [0.1-1.3]
Rheumatoid arthritis	83.8 [78.9-88.6]	3.2 [0.9-5.5]
Depression	86.5 [82.0-91.0]	3.2 [0.9-5.5]
Myocardial infarction	91.9 [88.3-95.5]	2.7 [0.6-4.8]
To what extent carried out in your practice population by you (or your staff) and not by a medical specialist?	**Almost always + usually CI [%]**	**Seldom or never CI [%]**
Wedge resection of ingrown toenail	13.5 [9.0-18.0]	71.2 [65.2-77.1]
Removal of sebaceous cyst from the hairy scalp	8.1 [4.5-11.7]	80.6 [75.4-85.8]
Wound suturing	14.4 [9.8-19.0]	58.6 [52.1-65.0]
Excision of warts	4.5 [1.8-7.2]	83.3 [78.4-88.2]
Insertion of IUD	0.0 [0.0-0.0]	97.3 [95.2-99.4]
Fundoscopy	1.4 [-0.2-2.9]	90.1 [86.2-94.0]
Joint injection	8.1 [4.5-11.7]	67.6 [61.4-73.7]
Strapping an ankle	3.2 [0.9-5.5]	73.4 [67.6-79.2]
Cryotherapy (warts)	0.5 [0.1-1.3]	95.1 [92.2-97.9]

To what extent carried out in your practice population by you (or your staff) and not by a medical specialist?	**Almost always + usually CI [%]**	**Seldom or never CI [%]**
Setting up an intravenous infusion	34.2 [28.0-40.5]	14.9 [10.2-19.5]

Table 14. Professional competences of GPs [percent]

Medical files normally include the following information	**[%]**	**CI [%]**
Living situation	14.0	9.4-18.5
Ethnicity	4.5	1.8-7.2
Patients' family history (e.g., depression, cancer)	86.5	82.0-91.0
Patients' weight and height	96.4	93.9-98.8
Smoking	91.4	87.8-95.1
Blood pressure	99.1	97.9-100.3
Reason for encounter	97.3	95.2-99.4
Diagnosis	98.7	97.1-100.2
Prescribed medications	99.1	97.9-100.3
Test results	99.1	97.9-100.3
Records are kept except for minor or trivial complaints	24.8	19.1-30.5
Records are kept of regularly attending patients	3.2	0.9-5.5
Records are kept unless it is too busy	3.2	0.9-5.5
Records are kept, routinely of all patient contacts	70.3	64.3-76.3
In the past 2 years, were medical record system used to list a selection of patients on the basis of age, diagnosis or risk	**[%]**	**CI [%]**
No	15.3	10.6-20.1
Yes, by age	29.7	23.7-35.7
Yes, by diagnosis or health risk	68.9	62.8-75.0
Yes, by medications they take	43.7	37.2-50.2
Yes, to send reminders for prevention or follow-up	37.8	31.5-44.2
Are medical records used for making appointments	33.8	27.6-40.0
issuing invoices	13.1	8.6-17.5

In the past 2 years, were medical record system used to list a selection of patients on the basis of age, diagnosis or risk	[%]	CI [%]
issuing drug prescriptions	99.6	98.7-100
keeping data of consultations	96.9	94.5-99.1
sending referral letters to medical specialists	82.0	76.9-87.0
storing diagnostic test results	95.5	92.8-98.2
searching medical information on the internet	88.3	84.1-92.5
sending prescriptions to the pharmacy	11.7	7.5-15.9

Table 15. Recorded data in the electronic medical system [percent]

The blood pressure of the patients is generally measured 79.3% [73.9-84.6%] as part of a routine test regardless the reason of the appointment. Smoking cessation, diet, physical activity andalcohol problems are the most frequent topics of life-style consultations; these are discussed with the patients in about 90% [86.2-94.0%] of the time. Family physicians are routinely involved in antenatal care 51% [44,3-57,5%], in immunisation 29% [22.9-34.8%], and paediatric surveillance of children, influenza vaccination 96% [93.4-98.5%] and palliative care 87% [82.5-91.4%].

Occupational health problems are rarely discussed with family physicians including work accidents. If doctors diagnose frequent respiratory problems, repeated cases of food poisoning among people living in a certain district, these are usually reported to the relevant authority.

5.4.7. Burn out

Job related stress was reported by 27% [21.2-32.9%] of GPs and 48.2% [41.6-54.8%] of them felt that they are overloaded with unnecessary administrative tasks. Half 54% [47.5-60.6%] of them considered their job as still interesting, while only 13% [8.6-17.5%] of them believed that GPs have well respected jobs and even less 2.2% [0.3-4.2%] have found a good balance between effort and reward.

6. DISCUSSION

6.1. Comparison with other participating countries

The QUALICOPC Study gave an excellent option for each participating countries to evaluate their own system and explore their country-specific problems. The huge amount of data requires a wide space to be presented. Most of them were included in the PhD Theses of the key-researcher of the NIVEL [53].

Published papers from some of the participating countries were focused only to a limited part of data, which may important for the relevant country. Patient's experiences differed between private and public sectors. Patients visiting the private sector experienced better continuity of care with more difficulty in accessing out-of-hours care [54]. Factors related to primary health care delivery were ranked as most valued by patients surveyed Greece. There is a need for an increased focus on patient-centered approaches and to prioritize quality improvement activities [55]. The public and private primary care service differ in some countries. It is a cause and effect of social inaequality [56, 57]. Primary care providers were mostly dissatisfied with their system and working conditions in Austria and Poland [58, 59, 60]. The infrastructures of practices were also compared. Accesibility for handicapped patients could be important. Regarding this option, Hungary was ranked around the median level among countries [61].

Although only one practice within a health center was surveyed, it was found that GP mono- and multi-disciplinary co-location is related to positive outcomes at a GP level, such as a broader provision of technical procedures, increased collaboration among different providers and wider coordination with secondary care. However, GP co-location, particularly in a multidisciplinary setting, is related to less positive patient experiences, especially in countries with health systems characterised by a weak primary care structure [62].

Patients had more positive experiences when their PC physician provided a broader range of services. A stronger national PC structure and higher overall health care expenditures are related to more favourable patient experiences for continuity and comprehensiveness. The study also revealed inequities: patients with a migration background reported less positive experiences. People with lower incomes more often postponed PC visits for financial reasons [63]. GPs in former communist countries and

Turkey have increased their involvement in the provision of services. Developments in Western Europe were less evident [64].

In counries where high proportion of the populations has migrant origin, experiences of both GPs and patients were compared. Patient experiences did not vary with GPs' migration status. Although experience of discrimination was uncommon, first-generation migrant patients experienced more discrimination. Primary care should provide non-discriminatory care, through GP awareness of unconscious bias and training to address this. Key messages there were large differences in percentage of migrant GPs between countries. Migrant GPs' practices had an above average proportion of people from ethnic minorities. In general, patients' experienced discrimination from GPs and practice staff was low, but first-generation migrant patients more often experienced discrimination, when they visited a native GP [65].

According to the effective legislations in Hungary, it is strictly forbidden to register the ethnic or national origin in any medical or official files. In the neighbouring Slovenia, where 6,5% of the PC population are migrants, often experiencing negative attitude from GPs [66]. In Hungary the Roma population is the “majority of minority”, representing 4-11 % of the whole population of the country. The exact ratio is unknown because of the aforementioned regulation. Because of their different lifestyle and perhaps genetic background their expectations could also be different [67].

6.2. Patient’s experiences and preferences

The list of the most preferred patient’s preferences were: easy access to services, wide scope of complains to be able to solve, availability and short waiting time, option for home visit, courteous communication, expected knowledge and good manners of doctors, no barriers to referrals, common decision making about treatment and possible options, not pressured by time during consultations and clear instructions provided here, easy to get prescriptions, updated medical records including available information by the doctor’s hand about living circumstances, social and cultural background of patients. With regards patients’ expectations the emotional and human features of the consultation and the clinical outcomes did matter for most people.

Preferences regarding circumstances, expected cleanliness in the GP’s office, adequate information about where and when to go, convenient and punctual appointments, helpful reception staff, a knowledgeable doctor, clear and easy to understand, huge experience in

a reduction in symptoms/problems, respecting patients' wishes to be involved in treatment decisions, were also mentioned.

6.3. Other national findings within international context

There are no financial or administrative restrictions on the availability of primary care services in Hungary. It can be used by all citizens, although a social insurance ID card is required before enrolment into a practice. The validity of this card depends on the legal status of the individuals. Children, students, registered unemployed people and pensioners get it free, but those who are employed or have own enterprise should pay a contribution fee, which is deducted from their salary. People without legal employed status must pay directly a contribution fee to the Health Insurance Fund, which amount is recently 8.000 HUF (ca.20 EUR), monthly.

Hungary is relatively closed country, hence almost all the participants of the study (as well their mothers) were native Hungarians, and only small percent belonged to ethnic minority. The threat of the uncontrolled immigration became a serious political issue in Europe even in Hungary after 2015. Primary care experts of some EU countries contributed to the EUR-HUMAN project within the framework of Horizon2020 Programme. An educational material was elaborated to prepare primary care staff for migrant-care [68, 69].

Walk-in accident and emergency services have been established in the Hungarian hospitals only in the last two decades; patients tend to visit them if primary care services are not available often in the late hours or at the weekends, or if the patients think that they will not receive aproppriate care for their illness in primary care. Based on the results of the survey, a third of the interviewed patients visited the emergency department at least once in the last 12 months. This ferequency is the highest in Spain, more than 40%, and the lowest in Bulgaria, approximatley 15% [63].

In the Hungarian primary care, there were no traditions of appointments; patients were served by the order of arrival. The ratio of appointments is continuously increasing due to the previous order of the Minister of Health. These scheduled services are becoming increasingly popular. The waiting time for appointment is usually longer in Canada [70] and in the Nordic countries [71], especially for older patients.

In other countries there were no apparent differences between expectations of different age groups; it was not the case that older patients are more satisfied with the care because their expectations are lower [72]. Higher scores of experiences may not illustrate better

consultations as such; it is the lower levels of initial expectations that determine the level of patient satisfaction [73]. The results revealed that patients with greater numbers of their expectations met reported significantly higher satisfaction with the consultation than those with lower numbers met [74]. Generally, the patients reported higher pre-visit expectations and post-visit met expectations, reflecting chiefly doctor-patient communication style and the doctor's approach to providing detailed information [75].

Referrals of the primary care patients to secondary care are important in all health care system. Patients were most positive if the physician had initiated the referral, which supports the gate-keeper role of the GP [76]. Although professional competence of GPs is theoretically wide, the gatekeeping is very weak in Hungary [77]. The preferences of patients are mostly respected; some specialists could be accessed without referral. Obtaining a letter of referral is often the reason why GPs are contacted; the referrals to specialist are often requested by patients, mainly in the bigger cities. The preferences and expectations of Hungarian patients were not always in agreement with their experiences and values. Findings in the literature regarding the relationship between strong primary care and the responsiveness to patient expectations and needs are inconclusive [17]. Patient satisfaction was found to be lower in countries where the access to specialist services was regulated through gate-keeping [9, 12, 19].

Not all the PC patients need a medical check-up; regular prescriptions and some consultations are done by practice nurses [78]. "Nurse practitioners" are not yet employed in the Hungarian primary care although their university level (MSc) education had been started a few years ago. Group practices do not yet exist in Hungary, so patients visit their own GP in a single-handed practice. Patient has a right to choose the GP, and GPs are obliged to accept all enrollers in the geographical area they cover. Differences in access between different practice models, like in Canada do not exist in Hungary [79]. According to a recently issued law, GPs will be allowed to co-operate with other neighbouring practices to form closer collaboration and they get higher financing if establishing this type of network [44]. Although important professional regulations are not yet published by the government, nurse practitioners could be important players within this system.

Most of the professional reasons for encounters are expected to be managed by the GPs. Patients prefer to visit their own GPs, because all of their health-related information is available here. In some countries computerized data are not always available [54].

In Hungary, smaller surgical procedures are routinely performed mainly in rural or remote practices, while in cities, GPs usually prefer referring to the surgeons. The available equipments are less advanced than in the Nordic countries [80].

In bigger villages and cities primary care offices are easy to approach. Positive behaviour of doctors is well accepted, including consultation's skills and manner. Majority of patients felt better able to cope with their health-related problem after an appointment with GP, reflecting patients' enablement [81]. Communication between doctors and patients is usually better in medium size practices [82].

Unfortunately, preventive services are not appropriately implemented in the Hungarian primary care; the reasons of visits to doctors are mostly chronic morbidities or acute complaints [83]. The new regulations perhaps allow allocating time and appropriate rewards for prevention [44]. The educational material has been elaborated before [84].

Population expectancy is influenced by local history and previous experiences [85]. An interesting finding of a survey was that a high burden of symptoms was associated with lower odds of contact the GP [86].

Hungarian GPs have traditionally been managing many social issues, including administrative tasks. In the past 60 years they were considered as the only stable points (including decades of Communism), also in the years when "reforms" were initiated in the health care system. In the future, more focus needed to person-centered care, to better involvement of patient in decision-making and appropriate delivery of preventative services [54]. Patients require equity, accessibility of care and good quality of primary care services [87].

In Hungary and in most of the participating countries the QUALICOPC study proved a high population satisfaction with the primary health care system [54, 81, 87, 88].

Questions implemented in the GP's questionnaires could have different meaning for GPs working in different national systems, especially the structure of practice, insurance system and remuneration. It could be a salary or enterprise based. Some combination also exists. After development of the questionnaires, there were no options to modify them according to national system-characteristics, therefore a critical discussion needed.

In the past 2 decades there was a visible improvement at service level and financial circumstances in the Hungarian primary care although it is far from the "West European" expectations.

The finance from National Health Insurance Fund has been traditionally based mainly on capitation, with smaller additional elements (location, circumstances, supplement for

overhead etc.) and minor quality incentives introduced a few years ago [89]. By nowadays, capitation represented about half of the monthly financing only. The new regulations in 2020 significantly improved the salaries of physicians. According to this, an extra payment was added to the financing, based on the longevity of professional experiences of doctors [41]. Due to this calculation, ratio of the capitation decreased to ca. 20-25%. Unfortunatelly the salary of nurses and midwifes did not follow this increase of the doctors' salary. It means a serious threat to the recruitment of staff at all levels in the healthcare system. Despite the improvement, the financial circumstances in Hungary remained far from the "*West European*" remuneration; its value is only about 30-40% of the income of GPs practising in the Netherlands and in the UK. Financial incentives to improve quality of service provision could be an important tool [90]. In Hungary, it represents only about 5% of remuneration, with low effectiveness [91]. The Hungarian quality indicators in primary care has not been updated in the previous years, did not reflect properly the professional performance of doctors and are depending on many patient-related factors [89, 91]. Because of the insufficient financing, many of GPs are involved in occupational health services and other business activities [92].

From the former era of socialism it was common that patients gave extra money to doctors for treatment (tipping), in the hope of receiving better care or more attention. It had higher importance in hospitals, to avoid waiting lists and to honour underpaid staff. While the new legislation banned it, threating with serious penalties even imprisonment the donors (patients) and recipients (medical staff), its consequence for patients is not yet clear [41]. Although the under the table payment resulted a high gap between income of physicians mainly in the hospitals, it has been practically disappeared from the PC system. Most of the doctors were always reluctant to this type of tipping [93].

Available instruments, devices, and professional competences [77] of Hungarian primary care providers are the same as most GPs in other EU member states, although "gate-keeping" is light, without appropriate financial interest [89, 91]. Gate keeping of rural doctors does not differ significantly from urban based practices. There are many drugs, mainly innovative and expensive medications, when prescription is allowed only for specialists.

Hungarian GPs are working usually longer than Dutch colleagues and almost the same as UK-based providers. In the past years, specific socio-demographic and work-related correlates of burnout, occupational stress was described among Hungarian doctors [94].

6.4. Limitations and strengths

Our studies were focused only on the recent Hungarian characteristics; the patients' answers about their preferences and experiences should be evaluated by taking into consideration specific national traits and the variety of primary care provision.

After translating and launching the questionnaire, there was no opportunity to clarify or explain questions having different meanings among different national circumstances. The answer-options of the questions should be often merged in the tables because of the low ratio of the respective answer option. Some of the data were not presented because of their irrelevance.

Before this study and since then no such a wide range evaluation was performed in Hungary. Due to the method and questionnaire developed for the QUALICOPC project, we were able to provide a comprehensive overview on actual state of the Hungarian primary care, in the framework of the topic questioned. Although some promising initiatives started in the last year, the structure of primary care did not change; our findings remained valid these days.

Nationally and geographically representativity was targeted, data were provided from 3% of all practicising GPs. Their mean age was 2 years less than the national average. There were minimal or no significant differences between answers, regarding time spent in practice, by age and sex of the doctors.

6.5. The QUALICOPS findings in actual context

In the last decade there was a model experiment, started in 2013. The Swiss goverment donated resources for Hungary to support different projects in the economy and also in the healthcare system [95]. A close collaboration was formed between the participating 6 practice-communities (clusters) and new actors were involved (health mediator). The service of family physicians were supported by public health specialist, dietitians and physiotherapist employed by the project [96]. Unfortunately, the project had a limited period, 27 months only; therefore its real outcome could not get appropriate professional awareness, even among health policy makers.

Later on other projects were initiated founded by the EU and the government. Declared goals were to form partnerships between practices GP cluster enforcing the single-handed practices to collaborate closer and to employ other professionals (dietitians, physiotherapist, psychologist etc). Regular health-checks and organization of community health maintenance programs were requirements as well. Participation in the

projects was based on application. Participants were supported financially, above the regular Health Insurance Fund financing, but they complained about the enormous extra administrative tasks and burocratic requirements including public procurement obligations.

In 2019, other projects were advertised entitled "*3 generations*". Although it was less burocratic, but they had shorter running period, 18 months only. Many of the ongoing projects had serious difficulties because of the COVID-19 pandemic, making impossible to complete elements which required public participations.

In 2019 and 2020 an EU funded project evaluated the structure and performance of the Hungarian primary care, including education and vocational training.

It was desribed „Hungary had the second highest preventable mortality among member states of the European Union according to the latest report of the statistical office of the European Union (Eurostat) from 2015 (418/100,000). Mortality caused by noncommunicable diseases has been extremely high in Hungary, which can largely be attributed to not perform preventive examinations at the level of primary health care (PHC). If a system built in the future will strengthen the early detection of riskfactors for chronic diseases introduces quality indicators for the management of patients with chronic diseases, the workload at the PHC level will increase significantly. Therefore, PHC service development requires a capacity increase in Hungarian PHC" [97].

Presently, a typical PHC staff consists of a family physician (who is the owner of the practice) and a nurse, who is an employee of the GP. The most imortant recommendations to form group practices where multidisciplinary teams can provide an integrated care for the population: „the team members need to be motivated financially as well as through competencies development and better, cooperative, working environment as well as more cooperative system among health care levels. Certain educational and training programmes need to be developed to increase the knowledge, skills and competencies; however, the whole system needs to be supported financially" [97].

Since the introduction of primary care system and replacing the system of „district doctors"; our neighbours, the former „*socialist*" countries have similar problems although some tried to solve them with systematic changes of their system [98].

6.6. Recommendations. How to improve Hungarian primary care?

The previous chapters served as base for recommendations for the future. There is yet a large space for improvement in the structure, conditions, and workforce development. Decision makers have to realise, that it seems imposssible to maintain the system in recent form.

Lack of human resources, reduced professional competences, whithout primary care guidelines and reliable quality indicators, enormous administrative burden are the consequences of the inappropriate health policy of the previous decades. The problems of manpower could be solved with more focus to PC in the undergraduate education and offering an attractive professional carrier with appropriate remuneration of the young medical doctors who wish to be family physicans. The requrements in vocational training could also be improved with more professional education of family physicians and during CME courses as well. It is a govermental task to improve the low health literacy of the general population, beside giving priority to PC in the health care system. Legislations in PC should be based on conceptual planning and consensus of professional bodies [42, 99, 100, 101].

Within the scope of patients (users of provision) the recent system is still working, altough the number of patients' visit is high, mainly because of the administrative tasks and formal referral to secondary care. Based on results of our survey, Hungarian patients use emergency care very often. This problem could be reduced systematic patient education, starting in schools and continouing through mass-media. The only few positive experiences of the recent pandemic, that acceptance of time-schedule (prebooking) and offical acceptance of teleconsultations, telemedicine, including e-prescriptions increased in the population, therefore it should be maintened and improved.

The problems of human resources, the turnover of staff, doctors and nurses should be solved. It requires a systematic (under and postgraduate) education of future staff members, establishing attractive working and financial conditions for them. Medical students should be encouraged to choose family medicine as a specialty [102].

In professsional terms, the outcomes of previous evaluations should be analysed, quality insurance, payments based on appropriate performance indicators should be developed. Preventive services should be appropriately implemented in the primary care. Less and rational administrative tasks are needed. The whole system should be supported by appropriate and easy to manage IT system. Clear legislations needed to improve communication between PC and specialists, which is recently often insufficient. Specific

primary care-oriented guidelines should be developed, updating the previous one. The new structures of PC provision should respect the local needs, avoiding uniformization and irrational obligations.

Policy makers are expected to form a clear vision for the future, to forget the flustered regulation experienced in the previous years, to establish a clear communication, to fill with professional content the rececently issued regulations and to realize the promises they made. PC system at a higher level could have more benefit for the whole Hungarian population.

7. SUMMARY

The recognition of family medicine as an independent specialty started in the nineteen-seventies and it was followed by introducing the education of family medicine and establishing residency programs. Primary care's (PC) have been developed in different way in the European countries. Some of them have primary care based health care systems, while other prefers the traditional hospital based model.

Researchers tryed to find an appropriate comprehensive method for comparison, initiating the QUALICOPC study (2011- 2013). Four questionnaire was developed by the international consortia, focusing to the expectations and preferences of patients, the infrastructure of practices, professional competences and working conditions of PHC providers. Hungary was also among the 34 participating countries, where the study was coordinated by the research team of the University of Debrecen.

Patients preferred:easy access to services, wide scope of complains to be able to solve, availability and short waiting time, option for home visit, courteous communication, expected knowledge and good manners of doctors, no barriers to referrals, common decision making about treatment and possible options, not pressured by time during consultations and clear instructions provided here, easy to get prescriptions, updated medical records including available information by the doctor's hand about living circumstances, social and cultural background of patients. With regards patients' expectations the emotional and human features of the consultation and the clinical outcomes did matter for most people.

Preferences regarding circumstances, expected cleanliness in the GP's office, adequate information about where and when to go, convenient and punctual appointments, helpful reception staff, a knowledgeable doctor, clear and easy to understand, huge experience in a reduction in symptoms/problems, respecting patients' wishes to be involved in treatment decisions, were also mentioned.

In Hungary and in most of the participating countries the QUALICOPC study proved a high population satisfaction with the primary health care system. Among the evaluated process indicators (access, continuity, comprehensiveness, and coordination), were rated as satisfactory, together with equity among health outcome indicators, while quality and efficiency were deteriorated in the previous years because the influence of other levels of provision (secondary care, hospitals).

According to the GP questionnaires available instruments, devices, and professional competences of Hungarian primary care providers are the same as most GPs in other EU member states, although “gate-keeping” is light. Financial incentives to improve quality of service provision could be an important tool. In the past years, specific socio-demographic and work-related correlates of burnout, occupational stress was described among Hungarian doctors.

There is yet a large space for improvement in the structure, conditions, and workforce development. Decision makers have to realise, that it seems impossible to maintain the system in recent form.

8. ÖSSZEFOGLALÁS

A családorvoslás önálló szakterületként való elismerése az 1970-es években kezdődött, és ezt követte a háziorvostan képzés és a rezidensprogramok kialakítása. Az alapellátás hagyományos feladatai és kapcsolatai az egyén longitudinális és átfogó ellátása, a családi kapcsolatokban és az előzetes ismeretekben rejlő erőforrások felhasználásával. Az egészségügyi szolgáltatások kutatásának egyik fő kihívása annak bemutatása, hogy az egészségügyi alapellátás mely konfigurációi vezetnek jobb eredményekhez a minőség, a méltányosság és a költségek tekintetében.

A QUALICOPC projekt célja az európai alapellátási rendszerek minőségi, méltányossági és költség kritériumok szerinti értékelése. A QUALICOPC megvizsgálja, hogy mit takar egy erős alapellátási rendszer és választ kíván adni arra a kérdésre: Milyen hatással van az alapellátó rendszer ereje a teljes egészségügyi ellátórendszer teljesítményére?

Az adatgyűjtés három szintre összpontosult: az egészségügyi ellátórendszerre, a háziorvosi praxisra és a betegekre. Vizsgálataink csak a közelmúlt hazai jellemzőire koncentráltak; a betegek preferenciákra és tapasztalatokra adott válaszait az eltérő nemzeti sajátosságok és az alapellátás változatos felépítésének figyelembevételével kell értékelni. Az eredmények reprezentatív áttekintést adtak a magyar alapellátás jelenlegi helyzetéről a vizsgált témakör keretében. Magyarországon és a legtöbb résztvevő országban a QUALICOPC vizsgálat magas lakossági elégedettséget igazolt az egészségügyi alapellátó rendszerrel kapcsolatban. A folyamatmutatókat (elérhetőség, folytonosság, átfogóság és koordináció) kielégítőnek minősítették, az egészségügyi kimeneti mutatók egyenlőségével együtt, míg a minőség és a hatékonyság romlott az előző években, mert az ellátás más szintjei (szakellátás, kórházak) is romlottak. A háziorvosi kérdőívek szerint a hazai alapellátók műszerei, eszközei és szakmai kompetenciái megegyeznek a többi EU tagállam háziorvosainak többségével, bár a „kapuőr” funkció gyengébb. A szolgáltatás minőségének javítását célzó pénzügyi ösztönzők fontos eszközt jelenthetnek. Az elmúlt években a kiégés, a foglalkozási stressz specifikus társadalmi-demográfiai és munkával összefüggő összefüggéseit magyar orvosokon is leírták. A struktúrában, a feltételekben és a munkaerő-fejlesztésben még komoly fejlesztési lehetőségek rejlenek. A döntéshozóknak meg kell érteniük, hogy jelenlegi formájában a rendszer hosszú távon fenntarthatatlan.

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9. KEYWORDS

General practice, Health services, Hungary, Family medicine, Primary care, QUALICOPC study

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11. APPENDIX

11.1. Publications related to the dissertation

11.2. Patient Experiences questionnaire

1. Hogyan tudná a saját egészségi állapotát általánosságban leírni?	❒ nagyon jó ❒ jó ❒ elfogadható ❒ rossz
2. Van-e önnek **régóta** fennálló tartós betegsége, mint magas vérnyomás, diabetes, depresszió, aszthma ?	❒ igen ❒ nem
3. Van-e önnek olyan **saját** orvosa (pl. háziorvos) akivel általában meg tudja beszélni az egészségügyi problémáit?	❒ Igen, ezt az orvost látogatom most meg ❒ Igen, de az egy másik orvos a rendelőn belül ❒ Igen, de másik orvos, másik rendelőben ❒ Nem, nekem nincs saját orvosom
4. Az **utóbbi 6 hónap**ban hányszor látogatta meg a háziorvost? (ugyanezt, vagy egy másikat?)	❒ Ez az első alkalom az utóbbi 6 hónapban ❒ Korábban egyszer ❒ 2 - 4 alkalommal ❒ 5 vagy több alkalommal ❒ nem tudom
5. Mi volt a fő oka mai látogatásának? (egyél több válasz is lehet)	❒ beteg volt vagy nem jól érezte magát ❒ orvosi vizsgálat ❒ ismételt gyógyszerfeliratás ❒ szakorvosi beutalás ❒ orvosi igazolás ❒ korábbi leletről való konzultáció ❒ egyéb ok
6. Gondoljon a mostani vizsgálatra/konzultációra Egyetért-e a következőkkel? 1. Az orvosnál voltak az én orvosi leleteim 2. Az orvos udvarias volt 3. Az orvos figyelmesen meghallgatott engem 4. Az orvos felém fordult, miközben beszélgettünk 5. Az orvos érdeklődött az egészségügyi problémáimról 6. Nem teljesen értettem meg, amit az orvos megpróbált elmagyarázni 7. Az orvos megfelelő időt fordított rám 8. Az orvos bevont engem a kezelésemmel kapcsolatos döntésbe 9. Az orvost tudnám ajánlani barátaimnak vagy rokonaimnak 10. Az orvos más lehetséges problémáimról is kérdezett, nemcsak amiért most eljöttem	igen nem ❒ ❒ ❒ ❒ ❒ ❒ ❒ ❒ ❒ ❒ ❒ ❒ ❒ ❒ ❒ ❒ ❒ ❒
	❒ nekem sohasem kell tolmács

7. ha önnek tolmácsolásra volna szüksége, hogy az orvossal beszéljen, rendelkezésre állt-e	❒ igen, ő mindig elérhető ❒ igen, ő általában elérhető ❒ nem, ő nem megfelelő, vagy nem érhető el ❒ nem tudom
8. Gondoljon arra az orvosra, akivel ma találkozott Egyetért-e a következőkkel? 1. ő ismeri a fontos információkat az én jelenlegi egészségi állapotommal és kórelőzményemmel kapcsolatban 2. Ő ismeri az én életkörülményeimet 3. A doktor nemcsak az orvosi problémáimmal foglalkozik, hanem segít személyes gondjaimban is 4. Ezután a látogatás után úgy érzem, hogy jobban meg tudok majd birkózni egészségügyi problémáimmal, betegségemmel, mint korábban	igen nem nem tudom ❒ ❒ ❒ ❒ ❒ ❒ ❒ ❒ ❒ ❒ ❒ ❒
9. Az elmúlt 12 hónapban beszélt-e az orvos önnek arról, hogyan maradjon egészséges? (pl. étrendről, dohányzásról vagy alkoholfogyasztásról)	❒ igen ❒ nem ❒ nem tudom
10. Az elmúlt 12 hónapban az orvos megkérdezte-e öntől, hogyan és milyen gyógyszereket szed, beleértve azt is, amit másik orvos írt fel?	❒ igen ❒ nem ❒ nem tudom
11. Gondoljon arra a rendelőre, ahol ön ma volt. Egyetért-e a következőkkel? 1. a nyitvatartási idő túl kevés 2. ha ön otthonába hívná ki az orvos, kimenne-e? 3. a rendelő túl messze van az én otthonomtól vagy munkahelyemtől 4. amikor telefonon hívtam a rendelőt, túl sokat kellett várni, amíg tudtam beszélni valakivel 5. Én ismerem az esti, éjszakai és ügyeleti ellátás elérhetőségét 6. az engem fogadó munkatárs (nővér) udvarias és segítőkész volt	igen nem nem tudom ❒ ❒ ❒ ❒ ❒ ❒ ❒ ❒ ❒ ❒ ❒ ❒ ❒ ❒ ❒ ❒ ❒ ❒
12. Általában mennyi időt tölt utazással otthonából a rendelőig?	❒ kevesebbet, mint 20 percet ❒ 20-40 percet ❒ 40-60 percet ❒ 1 óránál is többet ❒ nem tudom
13. Kért-e ön időpontot az orvoshoz a **mostani** látogatásához?	❒ igen ❒ nem → folytassa a 16. kérdéssel
14. Könnyű volt előjegyzést kapnia?	❒ igen ❒ nem

15. Hány napot várt erre a vizit-előjegyzésre?	❒ korábban, de **ma** kértem időpontot ❒ tegnap kértem az előjegyzést ❒ 2-7 napot vártam ❒ 1 hétnél többet vártam ❒ nem tudom
16. Mennyi időt kellett ma várnia megérkezésétől (a **kapott időponttól**) kezdve a konzultációra?	❒ kevesebbet, mint 15 percet ❒ 15-30 percet ❒ 30-45 percet ❒ 45-60 percet ❒ 1 óránál is többet ❒ nem tudom
17. Úgy gondolja-e, hogy túl nehéz elérni az orvost este, éjjel, vagy a hétvégén?	❒ igen ❒ nem ❒ nem tudom
18. Az elmúlt 12 hónap során, megtörtén-t önnel ebben a rendelőben, hogy: 1. Az orvos vagy a személyzet negatívan állt önhöz? 2. Másik beteget jobban kezeltek, mint önt? 3. Az orvos túl sok figyelmet fordított a pénzre? 4. Az orvos vagy a személyzet nem volt tekintettel az ön etnikai hovatartozására? 5. Az orvos vagy a személyzet nem volt tekintettel az ön nemére?	igen nem nem tudom ❒ ❒ ❒ ❒ ❒ ❒ ❒ ❒ ❒ ❒ ❒ ❒ ❒ ❒ ❒
19. Az elmúlt 12 hónapban volt-e Önnek olyan tapasztalata ebben a rendelőben, hogy: 1. azt gondoltam, hogy a vizsgálatot feleslegesen ismételték meg 2. azt gondoltam, hogy rossz gyógyszert, vagy nem jó adagot írtak fel nekem 3. azt gondoltam, hogy nem volt megbízható a vizsgálat vagy a röntgen eredménye	igen nem nem tudom ❒ ❒ ❒ ❒ ❒ ❒ ❒ ❒ ❒
20. Ha ön elégedetlen az önnél alkalmazott kezeléssel, úgy gondolja-e, hogy az orvos kész lenne-e ezt önnel megbeszélni?	❒ igen ❒ nem ❒ nem tudom
21. Az elmúlt 12 hónapban előfordult-e, hogy elhalasztotta látogatását, vagy el sem ment háziorvosához, amikor pedig szüksége lett volna?	❒ igen ❒ nem → folytassa a 23 kérdéssel
22. Mi volt a legfontosabb ok, ami miatt nem ment el az orvoshoz? (egynél több válasz is lehetséges)	❒ nem volt rendben a biztosításom (TAJ) ❒ egyéb anyagi oka volt ❒ képtelen voltam rá fizikailag ❒ túl elfoglalt voltam ❒ egyéb ok
23. Az elmúlt 12 hónapban hány alkalommal konzultált egészségügyi szakemberrel, vagy vizsgálták Önt?	❒ nem ❒ 1-2 alkalommal ❒ 3 -5 alkalommal ❒ 6-10 alkalommal

	❒ több, mint 10 alkalommal

24.Egyetért-e a következő állításokkal?	igen	nem	nem tudom	nem tudom értelmezni
1. Ha én másik háziorvost keresek fel és nem a sajátomat, ő rendelkezik rólam a szükséges információkkal	❒	❒	❒	❒
2. Amikor szakorvoshoz utal, háziorvosom tájékoztatja őt az én megbetegedésemről	❒	❒	❒	❒
3. Amikor szakorvos utalnak, a háziorvosom határozza meg, hogy kihez kell mennem	❒	❒	❒	❒
4. Másik szakorvos kezelése után, az én háziorvosom megismeri az eredményeket	❒	❒	❒	❒
5. Az én háziorvosom nehezen küld el szakorvoshoz	❒	❒	❒	❒

25. Az elmúlt 12 hónapban hány alkalommal kereste fel a (kórházi) sürgősségi osztályt?	❒ soha→ folytassa a 27 kérdéssel ❒ 1 alkalommal ❒ 2 -3 alkalommal ❒ 4 vagy több alkalommal
26. Miért ment Ön a sürgősségi osztályra, ahelyett, hogy háziorvosát kereste volna fel?	❒ Nem akartam, hogy háziorvos kezeljen ❒ nem volt a háziorvos elérhető ❒ pénzügyi okokból ❒ a sürgősségi osztályon rövidebb várakozási időre számítok ❒ a sürgősségi osztályon jobb ellátást kapok ❒ a sürgősségi osztályt könnyebben el tudom érni ❒ egyéb okból
27. Az elmúlt 12 hónapban vizsgálta vagy kezelte-e önt a körzeti ápoló/nővér?	❒ igen ❒ nem ❒ nem tudom

28. Ön szerint a betegek a háziorvost keresik-e fel a következők miatt?	igen	talán igen	talán nem	nem	nem tudom
1. elvágott ujj összevarrása	❒	❒	❒	❒	❒
2. szemölcs eltávolítás	❒	❒	❒	❒	❒
3. rendszeres egészségügyi vizsgálat	❒	❒	❒	❒	❒
4. látásromlás	❒	❒	❒	❒	❒
5. tanács, a dohányzás elhagyására	❒	❒	❒	❒	❒
6. erősen köhögő gyerekkel	❒	❒	❒	❒	❒
7. gyomorfájdalom	❒	❒	❒	❒	❒

8. ha vért lát a székletében	❒	❒	❒	❒	❒
9. bokaficam	❒	❒	❒	❒	❒
10. szorongás	❒	❒	❒	❒	❒
11. családon belüli erőszak	❒	❒	❒	❒	❒
12. szexuális problémák	❒	❒	❒	❒	❒
13. párkapcsolati problémák	❒	❒	❒	❒	❒
14. tanácsért, hogy a legjobb kórházat vagy szakorvost ajánlja, egy bizonyos kezelésre	❒	❒	❒	❒	❒

29 Mennyire fontos önnek, hogy orvoshoz forduljon, ha a következő tüneteket észleli saját magán?	nagyon fontos	meglehetősen fontos	valamennyire fontos	nem fontos
1. ha egy hónap alatt 2kg-ot fogyok, anélkül, hogy diétáznék	❒	❒	❒	❒
2. Légszomjat érzek egy kis séta, vagy könnyű fizikai munka alkalmával	❒	❒	❒	❒
3. Mellkasi fájdalom sportolás közben	❒	❒	❒	❒
4. Eszméletvesztés, összeesés	❒	❒	❒	❒
5. Egy napnál régebben fennálló fejfájás esetén	❒	❒	❒	❒
6. Egy napnál régebbi hasfájás esetén	❒	❒	❒	❒
7. Hónapok óta fennálló szorongás esetén	❒	❒	❒	❒

30. Úgy gondolja, hogy hasznos-e elmenni a háziorvoshoz, a következők miatt:	igen	nem	nem tudom
1. gyomorpanaszok miatt	❒	❒	❒
2. Háti és nyaki fájdalom miatt	❒	❒	❒
3. Idegesség miatt	❒	❒	❒
4. Hasmenés	❒	❒	❒
5. Torokfájás	❒	❒	❒
6. fejfájás esetén	❒	❒	❒
7. Kimerültség esetén	❒	❒	❒
8. Nátha	❒	❒	❒
9. Hányinger esetén	❒	❒	❒

31. Egyetért-e a következő állításokkal?	erősen egyetértek	egyetértek	nem értek egyet	erősen **nem é**rtek egyet
1. Általában, az orvosban meg lehet bízni	❒	❒	❒	❒
2. Általában, az emberekben meg lehet bízni	❒	❒	❒	❒

Befejezésül, kérjük válaszoljon néhány, önre vonatkozó kérdésre

32. Az ön neme?	❒ férfi ❒ nő
33. Írja be melyik évben született	születési év: 19__
34. Ön hol született?	❒ Magyarországon ❒ Másik EU-s országban ❒ Másik Európai országban, amelyik nem EU tag ❒ Észak Amerika, Ausztrália vagy Új Zéland ❒ Másik országban

35. Hol született az ön édesanyja?	❒ Magyarországon ❒ Másik EU-s országban ❒ Másik Európai országban, amelyik nem EU tag ❒ Észak Amerika, Austrália vagy Új Zéland ❒ Másik országban
36. Van-e az ön háztartásában másik felnőtt (beleértve a 18 évnél idősebb gyermeket is)	❒igen ❒ nem
37. Van-e 18 évesnél fiatalabb gyerek az ön háztartásában? ?	❒ igen ❒ nem
38. Hogyan tudná leírni az ön jelenlegi foglalkoztatási állapotát? (egynél több válasz islehetséges)	❒ alkalmazott (közalkalmazott) ❒ válalkozó, vagy családi vállalkozás ❒ hallgató, diák ❒ munkakereső(munkanélküli) ❒ munkaképtelen, betegség vagy rokkantság miatt nyugdíjas ❒ főleg háztartásbali (gyereket nevel, GYES, GYED)
39. Mi az ön legmagasabb iskolai végzettsége, szakmája?	❒ nincs szakmám, osztályt végeztem az általános iskolában ❒ középiskolát végeztem ❒ főiskolát /egyetemet végeztem
40. Mennyire jól beszéli a magyar nyelvet?	❒ folyamatosan / anyanyelvi szinten ❒ kielégítően ❒ mérsékelten ❒ gyengén ❒ egyáltalán nem
41. Összehasonlítva az országban szokásos, átlagos jövedelemmel, mit tud mondani az ön háztartási jövedelméről?	❒ átlag alatti ❒ átlag körüli ❒ átlag fölötti

Köszönjük, hogy kitöltötte a kérdőívet!

11.3. Patient Values questionnaire

13.2. Kérdőív a betegek számára (elvárások)

1. Hogyan tudná a saját egészségi állapotát általánosságban leírni?	❒ nagyon jó ❒ jó ❒ elfogadható ❒ rossz			
2. van-e önnek régóta fennálló tartós betegsége, mint magas vérnyomás, diabetes, depresszió, aszthma?	❒ igen ❒ nem			
3. Mennyire fontosak a következők az ön számára?	nem fontos	valamennyire fontos	fontos	nagyon fontos
1. A (házi)orvosomnál vannak orvosi leleteim	❒	❒	❒	❒
2. Az orvos udvarias	❒	❒	❒	❒
3. Az orvos érdeklődik az egészségi problémáim iránt	❒	❒	❒	❒
4. Én világosan megértem, amit ez az orvos elmagyaráz nekem	❒	❒	❒	❒
5. Ez az orvos bevon engem a kezelésemmel kapcsolatos döntésekbe	❒	❒	❒	❒
6. Az orvos érdeklődik más problémáim iránt is, nemcsak amiért idejöttem	❒	❒	❒	❒
7. A recepciós személyzet (nővér) kedves és segítőkész	❒	❒	❒	❒
4. Mennyire fontosak a következők az ön számára?	nem fontos	valamennyire fontos	fontos	nagyon fontos
1. **Az orvos** fontos információkat tud az én korábbi betegségeimről?	❒	❒	❒	❒
2. Az orvos ismeri az életkörülményeimet	❒	❒	❒	❒
3. Én úgy érzem, hogy ezután a vizit után képes lettem jobban foglalkozni a saját egészségügyi problémáimmal	❒	❒	❒	❒
5. Mennyire fontosak a következők az ön számára?	nem fontos	valamennyire fontos	fontos	nagyon fontos
1. A rendelésnek kiterjesztett nyitvatartási ideje van	❒	❒	❒	❒
2. Könnyen kapok előjegyzést rendelési időpontra	❒	❒	❒	❒
3. Tudom, hogyan vehetem igénybe az esti, éjszakai és a hétvégi ügyeleti szolgáltatásokat	❒	❒	❒	❒
4. Ez a rendelés közel van az én lakó/munkahelyemhez	❒	❒	❒	❒
5. Ha ide telefonálok rövid várakozás után kapcsolatba tudok kerülni a praxisban	❒	❒	❒	❒
6. Mennyire fontosak a következők az ön számára? **Mielőtt** még találkozik az orvossal?	nem fontos	valamennyire fontos	fontos	nagyon fontos
1. Az orvossal való találkozás előtt nem kell a recepciósnak, vagy a nővérnek részletesen beszámolnom egészségi problémáimról	❒	❒	❒	❒
2. Az orvos felkészült a velem való találkozásra elolvasván kartonomat	❒	❒	❒	❒
3. Fel tudok készülni a konzultációra felkészülve kérdéseimre és feljegyezve panaszaimat, tüneteimet	❒	❒	❒	❒
4. El tudom hozni magammal valamelyik családtagomat, barátomat, ha úgy gondolom, hogy ez hasznos lehet	❒ ❒ ❒	❒ ❒ ❒	❒ ❒ ❒	❒ ❒ ❒

5. Tudom, hogy melyik doktorral fogok találkozni, melyik fog vizsgálni 6. Be tudom tartani az előjegyzési időmet 7. Az előbbi 6 tételből, melyik az ön számára a legfontosabb?	a legfontosabb számomra: ___ (írja be kérdés számát)
7. Mennyire fontosak a következők az ön számára? <u>Az irvossal való beszélgetés, konzultáció **közben**</u> 1. Az orvos üdvözöl azzal, hogy szemkontaktusban van velem 2. Az orvos láthatóan figyel rám 3. Az orvos nem érzetteti velem, hogy időkényszerben van 4. Az orvos figyelemmel van az én személyes, szociális és kulturális körülményeimmel 5. az orvosnak nincs előítélete az én életkorom, nemem, vallásom vagy kulturális helyzetem miatt 6. Az orvos úgy kezel, mint egy személyt és nem úgy mint egy orvosi problémát 7. Az orvos tekintettel van rám a fizikális vizsgálat során és nem szakít engem félbe 8. Az orvos komolyan vesz engem 9. Az orvos megért engem 10. Az orvos kérdez engem, ha kérdésem van 11. Az orvos megkérdezi, hogy megértettem-e mindent? 12. Az orvos tudja, hogy mikor küldjön engem szakorvoshoz 13. Az orvos megkérdezi, hogyan szeretném a kezelést? Az orvos megkérdezi, hogyan szeretném a kezelést? 14. Az előző 13 témából melyik az amelyik az ön számára a legfontosabb?	nem fontos / valamennyire fontos / fontos / nagyon fontos ❒ a legfontosabb számomra: ___ (írja be kérdés számát)
8. Mennyire fontosak a következők az ön számára? <u>Az orvossal való beszélgetés, konzultáció során</u> 1. Az orvos kerüli a konzultáció alatti zavaró tényezőket (pl. telefonálás) 2. A z orvos kiegészítő információkat is ad nekem egészségügyi problémáimról, pl. szórólapot, ismertetőt 3. Az orvos tájékozat engem a megbízható további információ-forrásokról, pl. honlapokról 4. Én közlöm az orvossal, hogy miről akarok vele konzultálni 5. Felkészültem arra, hogy kérdezek és jegyzeteljek 6. Hálás vagyok és nem érzem magam zavarban, hogy az egészségügyi problémáimról beszéljek 7. Nyitott vagyok másik kezelés alkalmazására is, mint pl. ön-mediáció vagy alternatív orvoslás	nem fontos / valamennyire fontos / fontos / nagyon fontos ❒

8. A lelki gondokat és a többi emberrel való problémákat is meg tudjuk beszélni 9. Az előző 8 kérésből melyik az amelyik az ön számára a legfontosabb?	a legfontosabb számomra: ___ (írja be kérdés számát)

9. Mennyire fontosak a következők az ön számára?	nem fontos	valamennyire fontos	fontos	nagyon fontos
<u>Az orvossal való beszélgetés, konzultáció **után**</u>				
1. Az orvos minden vizsgálati eredményemet, leletemet odaadja nekem, még akkor is ha nem kórosak.	❒	❒	❒	❒
2. Az orvos lehetőséget ad nekem a telefonos vagy e-mailos konzultációra, ha más kérdésem is lenne még	❒	❒	❒	❒
3. Az orvos világos tanácsokat adott nekem, mit tegyek ha rosszabbodik az állapotom	❒	❒	❒	❒
4. Tartom magam a megbeszélt kezeléshez	❒	❒	❒	❒
5. Tájékoztatom az orvost, hogy mennyire eredményes a kezelés	❒	❒	❒	❒
6. Más orvoshoz is tudok menni, ha úgy érzem szükséges	❒	❒	❒	❒
7.Az előző 6 kérésből melyik az amelyik az ön számára a legfontosabb	a legfontosabb számomra: ___ (írja be kérdés számát)			

Végül szeretnénk még néhány kérdést feltenni az ön körülményeiről	
10. Az ön neme?	❒ Férfi ❒ Nő
11. Írja be születési idejét, kérem írja be	születési ideje: 19__
12. Hol született ön?	❒ Magyarországon ❒ Másik EU-s országban ❒ Másik Európai országban, amelyik nem EU tag ❒ Észak Amerika, Ausztrália vagy Új Zéland ❒ Másik országban
13. Hol született az ön édesanyja?	❒ Magyarországon ❒ Másik EU-s országban ❒ Másik Európai országban, amelyik nem EU tag ❒ Észak Amerika, Ausztrália vagy Új Zéland ❒ Másik országban
14. Van-e az ön háztartásában másik felnőtt személy beleértve a 18 évnél idősebb gyermeket is)	❒igen ❒ nem

15. Van-e 18 évesnél fiatalabb gyerek az ön háztartásában?	❒ igen ❒ nem
16. Hogyan tudná leírni az ön jelenlegi foglalkoztatási állapotát? (egynél több válasz is lehetséges)	❒ alkalmazott (közalkalmazott) ❒ vállalkozó, vagy családi vállalkozás ❒ hallgató, diák ❒ munkakereső(munkanélküli) ❒ munkaképtelen, betegség vagy rokkantság miatt nyugdíjas ❒ főleg háztartásbeli (gyereket nevel, GYES, GYED)
17. Mi az ön legmagasabb iskolai végzettsége, szakmája?	❒ nincs szakmám, osztályt végeztem az általános iskolában ❒ középiskolát végeztem ❒ főiskolát /egyetemet végeztem
18. Mennyire jól beszéli a magyar nyelvet?	❒ folyamatosan / anyanyelvi szinten ❒ kielégítően ❒ mérsékelten ❒ gyengén ❒ egyáltalán nem
19. Összehasonlítva az országban szokásos, átlagos jövedelemmel, mit tud mondani az ön háztartási jövedelméről?	❒ átlag alatti ❒ átlag körüli ❒ átlag fölötti

Köszönjük, hogy kitöltötte a kérdőívet!

11.4. GP questionnaire

13.3. Háziorvosi kérdőív

1. Az ön neme ?	❒ Férfi ❒ Nő
2. Kérem írja be melyik évben született	Születési év: 19__
3. Magyarországon született?	❒ igen ❒ nem
4. Hogyan tudná jellemezni azt a helységet, ahol jelenleg dolgozik?	❒ Nagy(bel)város ❒ Külváros ❒ (Kis) város ❒ Kevert városi-falusi ❒ Falusi
5. Mekkora az ön praxisának bejelentkezett beteg-biztosított / létszáma?	betegek száma: ____

6. Összehasonlítva az ön betegei közötti arányt az országos átlaggal, mennyiben gondolja jellemzőnek a következőket:	átlag alatti	átlagos	átlag fölötti	nem tudja megítélni
1. idős emberek (70 év fölött)	❒	❒	❒	❒
2. Szociálisan hátrányos helyzetű emberek	❒	❒	❒	❒
3. Etnikai kisebbség	❒	❒	❒	❒

7. Mennyiben véli úgy, hogy az Ön praxisában a betegek cserélődése más praxisokkal összehasonlítva	átlag alatti	átlagos	átlag fölötti	nem tudja megítélni
	❒	❒	❒	❒

8. Hetente hány órát dolgozik háziorvosként? Ne számítsa ide egyéb tevékenységét és az ügyeletben töltött időt	hetente: _____ óra
9. Ennek az időnek mekkora részében van kapcsolatban betegeivel? (Konzultáció, betegvizsgálat, otthoni vizit, telefonos tanácsadás)	hetente: _____ óra
10. Egy átlagos heti **munkanapon** hány beteggel van kapcsolatban?	
1. Személyes találkozás a rendelőben	___ fő /naponta
2. Telefonon	___ fő /naponta
3. E-mail kapcsolat	___ fő /naponta
11. Egy átlagos, megszokott orvos beteg találkozásnak mennyi az időtartama az ön rendelőjében?	___ perc

12. Egy átlagos munka**héten**, hány beteget lát el?

1. A beteg otthonában — hetente: _____ fő
2. Kórházban — hetente: _____ fő
3. Idősek ápolási otthonában — hetente: _____ fő
4. Egyéb intézményben — hetente: _____ fő

13. Az utóbbi 3 hónap során (szabadságot, távollétet ide **nem** számítva) milyen gyakran és milyen időtartamban vett részt az ügyeletben: este, éjszaka és hétvégén?

1. Esti ügyelet (készenlét) — ___ alkalommal; összesen ___órában
2. Éjszakai ügyelet — ___ alkalommal; összesen ___órában
3. Nappali ügyelet hétvégén — ___ alkalommal; összesen ___órában

14. Az ön háziorvosi munkája mellett, van-e egyéb fizetett munkája, szakmai feladata? (több választ is bejelölhet)

❒ nincs
❒ igen, magánrendelés
❒ igen, bentlakásos intézményben (Pl. ápolási otthon, börtön stb.)
❒ igen, vállalati orvos
❒ igen, oktatás, orvosképzés, foglalkozás-egészségügy
❒ igen, egyéb

15. Háziorvosi munkáját vállalkozóként, vagy alkalmazottként végzi?

❒ Fizetett alkalmazott, rendelőintézetben, hatóságnál vagy önkormányzatnál
❒ Másik háziorvos fizetett alkalmazottja
❒ Vállalkozásban, szerződésben eü. szolgáltatóval, biztosítóval vagy önkormányzattal
❒ Vállalkozásban, szerződés nélkül

16. Kérem, becsülje meg, hogy a következő tételek milyen arányt képviselnek az Ön háziorvosi jövedelmén belül

❒ fizetés __ %
❒ beteglétszám arányos díjazás (kártyapénz) egy állandó összeg egy bizonyos időtartamra vonatkoztatva__ %
❒ díjazott szolgáltatás, amelyet harmadik személy fizet __ %
❒ a beteg által fizetett díjak __ %
❒ bizonyos célok teljesülése miatti külön díjazás (indikátorok alapján) __ %
❒ egyéb források __ %

17. Kap-e ön külön kiegészítő díjazást a következőkért?

	igen	nem	nem tudom
1. Diabeteszesek kezeléséért	❒	❒	❒
2. Hypertoniások kezeléséért	❒	❒	❒
3. Bizonyos célértékek eléréséért a szűrés és prevenció során	❒	❒	❒
4. Szakorvosi ellátásra való továbbküldési arány	❒	❒	❒
5. Fogyatékosok kezeléséért	❒	❒	❒
6. Távoli munkahelyen való munkáért	❒	❒	❒

18. Egyedül dolgozik-e ön, vagy más háziorvosokkal, szakorvosokkal való közös elhelyezésben?

❒ egyedül _____FTE
❒ közösen __ (fő) számított ___FTE
másik háziorvosi praxissal megosztva
❒ közösen __ (fő) számított ___FTE
másik szakorvossal, közös elhelyezésben

Kérem számítsa ki és írja be az Idő-Ekvivalencia értékét (*Full Time Equivalents (FTE*).
például egyik doktor heti 5 napot dolgozik= 1 FTE
másik hetente 2,5 napot (5 fél-műszak) = 0,5 FTE
ez mindösszesen = 1.5 FTE

19. A következők közül mely szakemberek dolgoznak még az ön (ök) rendelőjében?

tegyen **X**-et a megfelelő hely(ek)re

1. Recepciós / orvosírnok (titkár) ❒
2. Körzeti nővér ❒
3. Közösségi / otthoni ápoló
4. Psychiátriai nővér ❒
5. Praktizáló nővér (az orvos és nővér közötti szakmai jogosítványokkal) ❒
6. Laboratóriumi asszisztens ❒
7. Külön rendelői manager (nem orvos) ❒
8. Szülésznő ❒
9. Fizioterápeuta (gyógytornász) ❒
10. Fogorvos ❒
11. Gyógyszerész ❒
12. Szociális munkás ❒
❒

20. Használ-e (hivatalos) klinikai kezelési útmutatót a következő megbetegedéseknél?

	igen	nem	útmutató nincs hozzá
1.Idült szívelégtelenség	❒	❒	❒
2. Aszthma	❒	❒	❒
3. COPD	❒	❒	❒
4. Diabétesz	❒	❒	❒

21. Az elmúlt 12 hónap során részt vett-e a következő krónikus betegségek kezelési programjaiban?
(Ezek a programok kidolgozott protokollok alapján, a praxison kívűl, több szakmának együttműködését igénylik

	igen	nem
	❒	❒
	❒	❒
	❒	❒
1.Idűlt szívelégtelenség	❒	❒
2. Asthma		
3. COPD		
4. Diabetesz		

22. Az elmúlt 12 hónap során előfordult-e az ön praxisának vonatkozásában?

	igen	nem
1. A gyógyszerfelírásra vonatkozó visszajelzés, az eü. hatóságtól, eü. ellátótól, egészségbiztositótól?	❒	❒
2. Másik háziorvostól való visszajelzés, vagy praxisának felkeresése auditálás céljából?	❒	❒
3. Betegeinek megelégedettségével kapcsolatos vizsgálat?	❒	❒

23. Szakorvosi beutalás szükségessége esetén, ki dönti el, hogy a beteg hová legyen beutalva?

❒ én, mint orvos
❒ a beteg önmaga

❒ közös döntés eredménye

24. Szakorvosi beutalás esetén, milyen mértékben veszi figyelembe a következő szempontokat?

	Mindig	Néha	Soha
	❒	❒	❒
1. A beteg igényét, hogy hová szeretne menni	❒	❒	❒
2. S beteg utazási távolságát	❒	❒	❒
3. Az ön korábbi tapasztalatait az illető szakorvosra vonatkozóan	❒	❒	❒
4. A szakorvos teljesítményének összehasonlító értékelését	❒	❒	❒
5. A beteg várakozási (előjegyzési) idejét	❒	❒	❒
6. A beteg költségeit			

25. Kérem **X**-elje be az ön praxisában az ön, vagy munkatársa(i) által használt eszközöket

Laboratórium
❒ Hemoglobinometer
❒ vércukor meghatározó
❒ cholesterin meghatározó
❒ vérsejt számláló

Képalkotó
❒ Ophthalmoscop
❒ Proctoscop
❒ Otoscop
❒ Gastroscop
❒ Sigmoidoscop
❒ Rtg
❒ Hasi / magzati ultrahang
❒ Microscop

Functiók vizsgálata
❒ Audiometer
❒ Kerékpár ergométer
❒ Szem tonométer
❒ Áramlásmérő/ PEF meter
❒ Spirométer
❒ EKG
❒ Vérnyomásmérő
❒ Infúziós készlet
❒ Orvosi sürgősségi táska

Egyéb
❒ Húgycsőkatéter
❒ Alvadásmérő /Coagulometer
❒ Sebészeti készlet
❒ Varróanyagok és készlet
❒ Defibrillátor
❒ Egyszerhasználatos fecskendők
❒ Egyszerhasználatos kesztyűk
❒ Hűtőszekrény gyógyszerek számára
❒ Újraélesztési szett

26. Milyen a laboratórium elérhetősége önnél?

❒ a mi praxisunkban /rendelőnkön belül
❒ könnyű hozzáférés rendelőn kívül
❒ nem megfelelő a hozzáférés

27. Milyen az rtg. vizsgálatok elérhetősége?

❒ a mi praxisunkban /rendelőnkön belül
❒ könnyű hozzáférés rendelőn kívül
❒ nem megfelelő a hozzáférés

28. Milyen távolságra van közúton az ön praxisának épülete a következőktől?

	ugyanazon épületben	kevesebb 10 km-nél	11-20 km	több, mint 20 km
1. A legközelebbi háziorvosi rendelő (nem az ön(ök) csoportpraxisa	❒	❒	❒	❒
2. A legközelebbi szakorvosi /szakrendelői intézet	❒	❒	❒	❒
3. A legközelebbi kórház	❒	❒	❒	❒

29. Egy átlagos munkanapon hány munkaórát van nyitva a betegek számára az ön(ök) praxisa (leszámítva az ebédszünet miatt zárvatartást)?

____ óra hosszat munkanaponkon

30. lehetséges-e az ön betegei számára, hogy felkeressék rendelését

1. Legalább egyszer hetente 18 ó után? ❒ igen ❒ nem
2. Hétvégén, legalább egyszer havonta? ❒ igen ❒ nem

31. Esténként, éjszakánként vagy hétvégén van-e az ön betegeinek hozzáférése **nem sürgősségi** orvosi ellátáshoz?

❒ nem értelmezhető (én mindig elérhető vagyok betegeim számára)
❒ én elérhető vagyok más háziorvosokkal közösen kialakított forgó beosztásban
❒ én nem vagyok elérhető, de beosztás alapján másik háziorvos elérhető
❒ másik (nem házi) orvos biztosítja az ügyeleti szolgálatot
❒ egyéb megoldás

32. Szombaton és vasárnap van-e az ön betegeinek hozzáférése **nem sürgősségi** orvosi ellátáshoz?

❒ nem értelmezhető (én mindig elérhető vagyok betegeim számára)
❒ én elérhető vagyok más háziorvosokkal közösen kialakított forgó beosztásban
❒ én nem vagyok elérhető, de beosztás alapján másik háziorvos elérhető
❒ másik (nem házi) orvos biztosítja az ügyeleti szolgálatot
❒ egyéb megoldás

33. Az ön beteg konzultációnak / vizsgálatainak mekkora része történik előjegyzés alapján?

kb _____%

34. Kínál-e ön nyitott rendelést? (ahol bárki, bármikor megjelenhet?)

❒ Igen ❒ Nem

35. Az elmúlt 12 hónapban segítette-e hátrányos helyzetű betegeit a következők közül valamelyikkel?
❒ Igen ❒ Nem

1. Ingyenes gyógyszer (orvosi minta) átadásával? ❒ Igen ❒ Nem
2. A legolcsóbb ekvivalens gyógyszer felírásával? ❒ Igen ❒ Nem
3. Eltekintett-e /lemondott-e a beteg elvárt pénzügyi hozzájárulását ól? (co-payment)

36. Az elmúlt 12 hónapban milyen gyakran észlelte, hogy betege anyagi okokból elhalasztotta az orvos felkeresését?
❒ gyakran ❒ néha ❒ soha

37. Amikor új beteg jelentkezik be az ön praxisába megkapja-e a korábbi dokumentációt az őt megelőzően kezelő orvostól?
❒ igen, mindig vagy általában
❒ alkalmanként
❒ ritkán vagy soha

38. Milyen korlátozásokat alkalmaz ön, amikor új beteg jelentkezik be praxisába? (több választ is bejelölhet)
❒ nincs korlátozás, mindenkit elfogadok
❒ a maximált létszám fölött már nem vállalok új beteget
❒ bizonyos életkor fölötti betegeket nem vállalok
❒ működési területemen (földrajzi határokon) kívüli beteget nem vállalok
❒ új beteg felvételénél várakozási időt alkalmazok
❒ a bejelentkezés elfogadása függ a beteg kórelőzményétől
❒ a bejelentkezés elfogadása függ a beteg biztosítási (jog)viszonyától

39. Ellát-e olyan betegeket, akiknek ellátását senki sem finanszírozza? (pl. nincs biztosítása, illegális emigráns)
❒ igen, (szinte) mindig
❒ igen, de csak sürgősség esetén
❒ igen, néha
❒ nem
❒ ilyen emberek nem fordulnak elő praxisomban
❒ nem értelmezhető (országunkban ezt is díjazzák)

40. Az ön által vezetett orvosi dokumentáció általában tartalmazza a következő információkat (jelölje be az ide vonatkozókat)
❒ élet (lakás) körülmények
❒ etnikum
❒ a beteg családi anamnézise (pl. depresszió, tumor)
❒ a beteg súlya és magassága
❒ dohányzás
❒ vérnyomás
❒ a megjelenés oka
❒ diagnózis
❒ felírt gyógyszerek
❒ vizsgálati eredmények (labor)

41. Hogyan vezeti ön az orvosi dokumentációt? (jelölje be az ide vonatkozókat)
❒ a kis jelentőségű vagy triviális panaszok kivételével mindent feljegyzek
❒ csak a rendszeresen megjelenő betegekről vezetek feljegyzéseket

42. Az utolsó 2 évben használta-e orvosi feljegyzéseit a betegek életkor, diagnózis vagy rizikó alapú listázására, rendszerezésére? (jelölje be a megfelelőt!)

❒ feljegyzem, kivéve ha túl sok
❒ mindent feljegyzek rutinszerűen minden beteggel való találkozásról
❒ nem tudom
❒ Nem
❒ igen, életkor alapján (pl. 50 év felettieket)
❒ igen, diagnózis vagy egészségügyi rizikó alapján (pl. diabetes vagy hypertonia)
❒ igen, gyógyszerelés alapján (pl. a több féle gyógyszert szedő betegeket)
❒ igen, emlékeztetőt küldeni prevenciós vagy ellenőrző vizsgálat céljából

43. A felsoroltak közül milyen célra használja praxisában a komputert?

(jelölje be a megfelelőt!)

❒ nem értelmezhető (nem használok komputert)
❒ időpont előjegyzést készíteni
❒ számlát kiállítani
❒ receptet írni
❒ a vizsgálatok dokumentálására
❒ a szakorvosoknak beutaló küldésére
❒ vizsgálati eredmények tárolására
❒ orvosi információ keresésére az interneten
❒ gyógyszer felírást küldeni a gyógyszertárba

44. Milyen gyakran találkozik személyesen a következő szakemberekkel (szakmai vagy társasági környezetben):

	Ritkán vagy soha	Minden 1-3 hónapban	Többször, mint havonta egyszer
1. Másik háziorvos	❒	❒	❒
2. Körzeti ápolónő	❒	❒	❒
3. Szakember a szakorvosi rendelőben	❒	❒	❒
4. Kórházi egészségügyi szakember	❒	❒	❒
5. Gyógyszerész	❒	❒	❒
6. Háziápoló	❒	❒	❒
7. Szülésznő	❒	❒	❒
8. Gyógytornász	❒	❒	❒
9. Szociális munkás	❒	❒	❒
10. Dietetikus	❒	❒	❒

45. Milyen gyakran kér tanácsot (pl. telefonon) a következő egészségügyi szakemberektől?

	Ritkán vagy soha	Minden 1-3 hónapban	Többször, mint havonta egyszer
1. Gyermekgyógyász	❒	❒	❒
2. Belgyógyász	❒	❒	❒
3. Nőgyógyász	❒	❒	❒
4. Sebész	❒	❒	❒
5. Neurológus	❒	❒	❒
6. Bőrgyógyász	❒	❒	❒
7. Geriáter	❒	❒	❒
8. Psychiáter / lelki egészségügyi szakember	❒	❒	❒
9. Radiológus	❒	❒	❒

46. Az ön körzeti ápolónője vagy asszisztense nyújt-e önállóan

❒ Nem alkalmazható (Nincs ápoló a praxisomban)

1. Immunizációt (védőoltás) ❒ igen ❒ nem
2. Egészségfejlesztési tanácsot (pl. életmódi vagy, dohányzásról leszoktató tanácsot) ❒ igen ❒ nem
3. Krónikus betegek rutinszerű vizsgálatát, gondozását (Pl. diabetes) ❒ igen ❒ nem
4. Kisebb beavatkozásokat (fülmosás, sebkezelés) ❒ igen ❒ nem

47. Milyen gyakorisággal készít ön beutalókat, referáló leveleket betegeinek szakorvoshoz való továbbirányítása alkalmából, amely az eddigi leleteket és a feltételezett diagnózist tartalmazza?

❒ minden betegnél, akit beutalok
❒ a legtöbb betegnél, akit beutalok
❒ a betegek kisebb részénél
❒ ritkán vagy soha

48. Milyen mértékben tájékoztatják önt a szakorvosok, miután az ön betegének kivizsgálását, vagy kezelését befejezték?

❒ (szinte) mindig
❒ gyakran
❒ alkalmanként
❒ ritkán vagy soha

49. Miután az ön betegét elbocsátották a kórházból általában mennyi ideig tart, amíg zárójelentést kap a kórháztól?

❒ 1- 4 nap
❒ 5-14 nap
❒ 15-30 nap
❒ több mint 30 nap
❒ én ritkán vagy sohasem kapok zárójelentést

50. Az ön betegei közül,(akik általában önhöz járnak háziorvosi ellátásra is) mennyire gyakran keresik meg önt, mint elsődleges ellátót, a következő egészségügyi problémák jelentkezése esetén?

(Ez csak az első ellátásra vonatkozik, nem a későbbi diagnózis vagy kezelés esetére).

	(szinte) mindig	általában	alkalmanként	ritkán/ soha
1. Erősen köhögő gyermek	❒	❒	❒	❒
2. 8 éves gyermek hallászavarral	❒	❒	❒	❒
3. 18 éves nő orális fogamzásgátlás miatt	❒	❒	❒	❒
4. 24 éves férfi gyomorfájdalommal	❒	❒	❒	❒
5. 45 éves férfi mellkasi fájdalommal	❒	❒	❒	❒
6. 50 éves nő, csomóval a mellében	❒	❒	❒	❒
7. 60 éves nő látásromlással	❒	❒	❒	❒
8. 60 éves nő polyuriával	❒	❒	❒	❒
9. 60 éves nő heveny paralysis/paresis tüneteivel	❒	❒	❒	❒
10. 70 éves férfi izületi fájdalommal	❒	❒	❒	❒
11. 75 éves nő enyhe memóriazavarral	❒	❒	❒	❒
12. 35 éves férfi bokaficammal	❒	❒	❒	❒
13. 28 éves férfi ez első konvulzióval	❒	❒	❒	❒
14. 45 éves szorongó férfi	❒	❒	❒	❒

15. 13 éves fizikálisan bántalmazott gyerek	❒	❒	❒	❒
	❒	❒	❒	❒
16. Pár, párkapcsolati problémákkal				
17. 50 éves nő psycho-szociális problémákkal	❒	❒	❒	❒
18. 32 éves férfi sexuális problémákkal	❒	❒	❒	❒
19. 52 éves férfi alkohol addikcióval	❒	❒	❒	❒
	❒	❒	❒	❒

51. Milyen mértékben van ön bevonva praxisában a következő betegségek kezelésébe és után-követésébe? (praxis alatt azokat értik, akik általában az ön alapellátási körzetébe tartoznak)

	(szinte) mindig	általában	alkalmanként	ritkán/ soha
1. Chronicus bronchitis/ COPD	❒	❒	❒	❒
2. Árpa	❒	❒	❒	❒
3. Fekélybetegség	❒	❒	❒	❒
4. Discus hernia	❒	❒	❒	❒
5. Pangásos szívelégtelenség	❒	❒	❒	❒
6. Pneumonia	❒	❒	❒	❒
	❒	❒	❒	❒
7. Peritonsillaris abscessus				
8. Parkinson betegség	❒	❒	❒	❒
9. Szövődménymentes diabetes (2-es típus)	❒	❒	❒	❒
10. Rheumatoid arthritis	❒	❒	❒	❒
11. Depresszio	❒	❒	❒	❒
12. Myocardialis infarctus	❒	❒	❒	❒
	❒	❒	❒	❒

52. Milyen gyakran végzi el Ön vagy munkatársa a következő beavatkozásokat praxisában más egészségügyi szakember bevonása nélkül?
(praxis alatt azokat értik, akik általában az ön alapellátási körzetébe tartoznak) Pl. a fundoskópiát szinte mindig ön végzi, **x**-elje be a megfelelő kockát!

	(szinte) mindig	általában	alkalmanként	ritkán/ soha
1. Benőtt köröm csücskének kimetszése	❒	❒	❒	❒
	❒	❒	❒	❒
2. faggyúcysta eltávolítása a hajas fejbőrről	❒	❒	❒	❒
3. seb varrat	❒	❒	❒	❒
4. szemölcseltávolítás	❒	❒	❒	❒
5. IUD felhelyezése	❒	❒	❒	❒
6. Fundoscopia	❒	❒	❒	❒
7. Izületi injekció	❒	❒	❒	❒
8. Bokarögzítás, sinezés	❒	❒	❒	❒
9. Cryotherapia (szemölcs, hólyag)	❒	❒	❒	❒
10. Intravénás infúzió bekötése				

53. Mikor mér ön vagy munkatársa vérnyomást? (egynél több válasz is lehetséges)

- ❒ Megfelelő állapottal összefüggésben
- ❒ Igény esetén
- ❒ Rutinszerűen a rendelőben jelentkezőknél, függetlenül a megjelenés okától
- ❒ felnőtteknél, akiket ezért hívtunk be

54. Mikor határozza meg ön vagy munkatársa a cholesterin szintet? (egynél több válasz is lehetséges)

- ❒ Megfelelő állapottal összefüggésben
- ❒ Igény esetén
- ❒ Rutinszerűen a rendelőben jelentkezőknél, függetlenül a megjelenés okától
- ❒ felnőtteknél, akiket ezért hívtunk be
- ❒ Nem végzünk ilyen vizsgálatot

55. Milyen mértékben van ön bevonva a következő témákkal kapcsolatos egészségügyi felvilágosításba?
egynél több válasz is lehetséges)

	nem vagyok bevonva	a normális beteg-kapcsolattal összefüggésben	csoportfoglalkozások vagy különleges események esetén
	❒	❒	❒
	❒	❒	❒
1. Dohányzás	❒	❒	❒
2. Étrend	❒	❒	❒
3. Problémás alkoholfogyasztás			
4. Fizikai aktivitás			

56. Ön vagy praxisának munkatársa részt vesz-e a következő tevékenységekbe?

	részt vesz	nincs
1. Rutinszerű, szülést megelőző gondozás	❒	❒
2. Gyermekek immunizálása (program alapján)	❒	❒
3. gyermekgyógyászati szűrővizsgálatok, 4 évesnél fiatalabb gyermeknél	❒	❒
	❒	❒
4. Influenza vakcináció (program alapján)	❒	❒
5. Palliativ gondozás		

57. Az elmúlt 12 hónapban tartott-e ön külön ellátást, tanácsadást a következő betegcsoportok részére?

	Igen	Nem
1. Diabeteszes betegek	❒	❒
2. Hypertoniás betegek	❒	❒
3. Terhesek	❒	❒
4. Idősek	❒	❒

58. Amennyiben ön a betegellátás során a következő problémákkal szembesül, készít-e jelentést erről (pl. a hatóság számára?)

	igen	talán igen	talán nem	nem	nem tudom
1. Ismételt balesetek ipari környezetben	❒	❒	❒	❒	❒
2. Gyakori, ismétlődő légzőszervi panaszok egy bizonyos üzem környékén	❒	❒	❒	❒	❒
3. Ismételt ételmérgezés egy bizonyos körzetben élő emberek körében	❒	❒	❒	❒	❒

59. Az elmúlt 12 hónapban hány hetet volt távol praxisától a felsorolt okok miatt?

- 1. Konferencián, vagy más képzésben való részvétel ___ hét
- 2. Tudományos tevékenység, kutatás ___ hét
- 3. Nyaralás ___ hét
- 4. Betegség ___ hét

60. Mennyire ért egyet a következő állításokkal?	teljesen egyetértek	egyetértek	nem értek egyet	egyáltalán nem értek egyet
1. Úgy érzem, hogy a munkám egy része értelmetlen	❒	❒	❒	❒
2. Az én munkám még mindig érdekel engem, annyira mint korábban	❒	❒	❒	❒
3. A munkám túlterhelő a szükségtelen adminisztrációs terhelések miatt	❒	❒	❒	❒
4. Túl sok stressz é jelenlegi munkakörömben	❒	❒	❒	❒
5. Háziorvosnak lenni elismert munka	❒	❒	❒	❒
6. Munkámban jó egyensúly van a teljesítés és a díjazás között	❒	❒	❒	❒

Köszönjük, hogy kitöltötte ezt a kérdőívet!

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Candidate: Anna Nánási
Doctoral School: Doctoral School of Health Sciences

List of publications related to the dissertation

1. Rurik, I., **Nánási, A.**, Jancsó, Z., Kalabay, L., Lánczi, L., Móczár, C., Semánová, C., Schmidt, P., Torzsa, P., Ungvári, T., Kolozsvári, L. R.: Evaluation of primary care services in Hungary A comprehensive description of provision, professional competences, cooperation, financing, and infrastructure, based on the findings of the Hungarian-arm of the QUALICOPC Study. *Prim. Health Care Res. Dev. 22*, 1-8, 2021.
   IF: 1.458 (2020)

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   Prim. Health Care Res. Dev. 22, 1-7, 2021.
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List of other publications

3. Giménez-Legarre, N., Santaliestra-Pasías, A. M., Cardon, G., Rurik, I., Iotova, V., Kivelä, J., Liatis, S., Makrilakis, K., Mavrogianni, C., Milenkovic, T., **Nánási, A.**, Tankova, T., Timpel, P., Willems, R., Manios, Y., Moreno, L. A., Feel4Diabetes-Study Group: Cross-Sectional Associations Between Mothers and Children's Breakfast Routine-The Feel4Diabetes-Study. *Nutrients. 13* (3), 1-16, 2021.
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