

**PHC: WESTERN EUROPEAN BEST PRACTICE OF
INSTITUTIONAL RESPONSIBILITIES**

Juan Gérvas and Antonio Durán

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INTRODUCTION

Globally, there is an agreement that governments want to improve equity, efficiency, effectiveness, and responsiveness of their health systems. There is no agreement however regarding what constitutes optimum structures, content, and ways to deliver cost-effective services to achieve optimal health gain for the population. Nor there seems to be satisfactory solutions to correctly identify need in different population segments and offer programmes to meet these needs to address inequalities in access and health outcomes.

It is also a known fact that the political and economic dimensions of health systems shape the governance and organization of service delivery in general and of primary health care (PHC) services in Europe in particular. Furthermore, it is clear that the position of PHC and general practice¹ is stronger in some countries than in others. The strength of a country's PHC depends of the balance of health policy power of different actors, mainly governments, insurers and professionals.

This paper has been commissioned by Oxford Policy Management Ltd for DfID in the context of the Georgia Health Sector Reform Programme - CNTR 02 4201, Primary Health Care. We will review here the role of different actors and in its interactions in countries of the European Union (EU) where general practice is strong. The reasons why PHC has a key role in the organization of the national health services will also be explored. The objective is to identify the major components of a modern institutional map for the professions of general practitioners, nurses, managers and other professionals as seen in European PHC.

The three questions this paper intends to answer are:

- Who (and why) is involved in the organization and delivery of PHC services and what are their respective roles?; how they use their formal or informal policy power?;
- What services are provided, by whom using what resources in PHC?; are there inter-countries differences, and why?;
- How PHC relates to the wider health care system?, what methods have empirically proved to be effective in improving the coordination role of PHC?.

Given the policy nature of this paper, historical questions, such as the role of international agencies, and national social organizations, will also be considered.

This document is not an academic research paper. Some explicit major characteristics of it are: a) it is an applied analysis of different ways of organising PHC, as a response to the intellectual challenge of understanding and translating into practice best practice models, focus on its scientific base b) it has a teaching style, by means of extensive use of examples and a case study (more studies are included in a parallel document), and c) it has a neutral approach to any policy initiative.

¹ In Europe, family medicine is synonymous with general practice and the latter term is used in the remainder of this paper since is the term used in the countries included in this analysis. The same applies to general practitioner *versus* family physician.

1. UNDERSTANDING PHC IN THE EUROPEAN UNION.

1.1 Health and health services

Implicit in the literature on PHC is a questioning that hospital care is inappropriate as a first port of call for the health services consumer. The terms primary health care, primary care and general practice are used interchangeably although primary care and general practice usually refer to primary medical care. The meaning of PHC in organisational and socio-political terms has been explored in the literature and varied definitions of PHC exist (see below). As it will be shown in this paper, a systematic assessment of the empirical evidence for 'advantages and disadvantages of the health care system based on PHC compared to that based on specialists' has shown that there are substantial benefits for PHC based systems. International studies show that the strength of a country's primary care system is associated with improved population health outcomes for all-cause mortality, all-cause premature mortality, and cause-specific premature mortality from major respiratory and cardiovascular diseases.

This relationship is significant after controlling for determinants of population health at the macro-level (GDP per capita, total physicians per one thousand population, percent of elderly) and micro-level (average number of ambulatory care visits, per capita income, alcohol and tobacco consumption). Furthermore, increased availability of primary health care is associated with higher patient satisfaction and reduced aggregate spending on health care. Health systems with a strong primary care orientation tend to be more pro-poor, equitable and accessible. At the operational level, the majority of studies comparing services that may be delivered either by primary health care or specialists showed no adverse outcomes in quality of care or patient outcomes for primary care physicians but primary care physicians had reduced costs, and increased patient satisfaction.

Furthermore, the majority of studies analysing substitution of some services from secondary to primary care showed such shifts to be more cost-effective, but not in all cases. Expansion of primary health care services may not always reduce costs because unmet need is identified, access improved, and service utilisation has a tendency to expand. On balance, the available evidence demonstrates advantages for health systems that rely on PHC and general practice in terms of relatively better population health outcomes, improved equity more appropriate utilisation of services, health user satisfaction and consequent lower cost in health systems. Findings support policies that encourage a shift of services away from specialist care to PHC as the substitution lowers cost and yet does not adversely affect quality. Yet there is too little research in PHC in all countries, compared with other fields of medicine (1). Ignorance and illusions abound.

In 2003, the WHO insisted that a basic feature of a health care system based on primary care is to "continuously assess and strive to improve performance" (2). In Europe, the WHO Ljubljana Charter emphasized the same principles, with emphasis on PHC (3).

Research has shown that the greatest factors influencing the health of any population are national wealth and its distribution. In fact, the interrelationships between health and

social class in particular have been extensively studied in Europe. Health and ill health are not equally distributed. For the sake of conceptual clarity is it worth emphasizing that health systems cannot “create” health but rather improve or optimise it and prevent avoidable a) suffering, b) morbidity and c) mortality. Also that health is not a “human right” (if so, morbidity and mortality should be “inhuman and illegal”)². Another key influential determinant of health is the genetic structure (the other determinants recognized by the seminal Lalonde Report in Canada in 1976, namely social and physical environment, individual behaviour and health services, are superimposed on the genetic structure) (4).

It is also known that health services are not “artificial” structures that can easily be set up or dismantled at will by the policy makers of the day, as they are inextricably involved in the economics and politics of society. Each national health system is rooted in national history, that is linked with political and cultural philosophies and beliefs.

In fact, the roots of Primary Health Care and General Practice in Europe explain its present configuration. From Middle Age, workers in Europe have had some kind of “general practitioners” who took care of the different professional groups (workers and their dependents) and were paid a monthly fixed amount *per capita*. At that time City councils also organized with general practitioners, paid by salary, the care of the poor and the care provided in hospitals (mainly places for pilgrims and terminal patients, or people affected by specific diseases, such as leprosy). During the XIX century workers began to organize labour unions, and under their pressures business leaders realized that it was in their own self-interest to develop “sickness funds” (later on Bismarck would pioneer a sickness funds national plan). At the end of the XIXth century and beginning of the XXth, Europe had thousands of those sickness funds, clubs and worker groups, organizations which somehow could be seen as today Health Maintenance Organizations (HMO) in the USA.

In short, in Europe general practice was, and still is, popular amongst policy makers and the population. For example, general practice became a common feature in the German sickness funds from 1860, in the Spanish “Instituto Nacional de Previsión” from 1908, in the Dutch mandatory “sickfund system” in 1942, and in the British National Health Service from 1948. Historically, the three main collective policy actors, governments, insurers and professionals, have supported PHC.

Almost 60 years before the WHO Alma Ata Declaration, in 1920, the landmark Dawson Report in the United Kingdom introduced the concepts of “primary” and “secondary” care, setting out the future concept of health centres³ and PHC. With a clarity and specificity unequalled since, the report argued the case for the bottom-up or population based approach to health services organization, the allocation of resources, the generation of essential records and statistics and the training of health personnel for both environment and personal health services. The Dawson report stressed that the elements of a logical system should be suitable, correlated and available to all.

Health systems are thus historical products and thus are different from each other. But in a way all health systems can be considered to have to face similar basic needs and

² There is continuous confusion between “health as a human right” and “the right to health care”.

³ Health centers, however, could be state owned (Greece, Finland, Portugal, Spain, Sweden), or owned by the general practitioners (Denmark, Ireland, Italy, the Netherlands, the UK).

requirements. There is wide consensus that in order to ensure a rational use of resources there have to be four levels of care:

- self care (personal and familiar),
- primary professional care (general practitioners, nurses, others),
- specialist care, and
- super-specialist care.

Each health system then has to decide how each level should operate and how each should relate to others, for acute and chronic conditions. Each level has to have its own understandable roles supported by resources, organization, education/ training and supervision. For example, collective disease prevention, as it is the case with immunization, could be organised separately from PHC, as in Finland, Italy, and the Netherlands. It is also well known that health services in areas where social and economic disadvantage is intense need more resources.

Health systems in Europe face enormous challenges: demographic changes (emigration and immigration, aging of the population), increasing population mobility, health inequalities, growing social exclusion, costly new diagnostic and therapeutic techniques, and rising public demands and expectations. As a result, public spending is always under tight constraints. Health care is expensive and has to be paid for.

Also, in Western Europe, and linked to the above, a major change has been the growing prevalence of chronic conditions and co-morbidity⁴ resulting from the ageing of populations and the improving efficacy of medical care. The increasing recognition of the multiple causes of illness, the predominance of co-morbidity and the dangers of medical interventions all challenge the biological model of “one disease at a time” and the model of health services with poor coordination between service providers and health care delivery levels. The coordinative capacity of many health care systems is inadequate to enable the flexible involvement of various health care services and providers, and to cope with demand for different long-term care arrangements (5).

As a consequence, policy makers have to make explicit choices in spending public money, which involves defining priorities, equitably allocating resources, rationing and placing concerns with value for money high on the agenda. Possible solutions to increase such coordinative capacity within the health service institutions are:

- 1) transferring coordination power to general practitioners, and
- 2) expanding or merging organizational units as health centres (or hospitals) in order to internalise previous inter-units actions.

A coherent PHC, with general practice as its integrative core, has the potential to improve cost-effectiveness of care as well as coordination and responsiveness, while at the same time reducing the adverse effect on health of lack of equity. Nevertheless, the truth is that in almost all developed countries, with the USA in a leading position, specialist care has expanded much more than PHC, without any scientific base

⁴ Co-morbidity is the norm in people with an illness. That is, more people have multiple diagnosis that can be accounted for by random distribution in the population. Although there is increasing morbidity with increasing age, the extend of co-morbidity in children is much greater than expected at random than in the case in older people.

justifying such an expansion. The rapid growth of the health services techno-structure has almost irrevocably altered the course of medical practice, making it increasingly hospital-centred and dominated by specialists.

Apparently, PHC is cheap, as it requires less expensive technologies, workforce and capital expenditure than hospital. But, as noted, some kind of PHC has always existed in Western Europe, to the point that we cannot even consider the experience of developed European countries without general practice. The critical question: “is PHC cost effective in Europe?” cannot therefore be answered in full because there is not any control group. Of course, much of what is provided in hospitals and by specialists is also unproven (and expensive). The only point raised here is that if health care reforms should include emphasis on PHC, as recommended by the WHO Ljubljana Charter (3), then policy goals must be clearly articulated and the knowledge base informing efficient delivery of care must be improved.

In short, no country can now escape the conflict between increasing demands and costs of health care and what people can afford. A coherent PHC could be the choice not only because it is apparently cheap (the cost), but because of its potential of coordination and management of chronic conditions (and co-morbidity) and its impact in reversing the effect on health of economic and social lack of equity.

1.2 The contribution of PHC to quality of care, health system costs, and health outcomes in Europe

Paradoxically enough, most studies about effectiveness of PHC have been conducted in the USA, where PHC almost does not exist, and general practice itself is under threat. As an illustration, general practice is considered in the USA just as family medicine and even “general practice” as well as “general practitioners” are not *MeSH* terms in MEDLINE, which is an expression of its low scientific and social value. But the results from studies of the commercialised health care system in the USA may not be generalisable to Europe. In the USA costs are easier to find than in Europe in the form of claims from doctors and hospitals to health insurance organizations. The shortage of studies of European health systems implies that health care policy, to a great extent, is acting without knowing (6). In short, is PHC in Europe taken for granted?

In a pioneering study, in 1991, comparing 10 countries, seven European, [Australia, Belgium, Canada, Denmark, Finland, Germany (former *Federal Republic*), the Netherlands, Sweden, the UK, and the USA (fee for service, private practice sector)], a close association was found between ranking of primary care, the overall ranking of 12 public health indicators and the satisfaction/cost ratio (the inhabitants’ satisfaction with their health care system divided by the *per capita* cost of the health care system of that country) (7).

Also, an analysis to assess the effectiveness of general practitioners in PHC, in 2001, found evidence that 1) increased accessibility to physicians working in PHC contributes to better public health as expressed through different health parameters and to a lower consumption of medical care, leading to lower cost in the health care system (at least, to slowing the growth rate in health care costs), 2) compared to other specialists, general practitioners can take care of many diseases with the same quality, and often lower cost, and 3) the way in what PHC is organized has a great impact on outcomes, and those

effects are enhanced by reimbursement by capitation, group practice, personal continuity, and having generalists as PHC physicians. In other words, general practitioners are generally able to obtain similar health outcomes as those obtained by other specialists in the case of frequent conditions or interventions that allow them to see enough patients per year to acquire and maintain the necessary skills directly (6).

The financing, organization, and delivery of PHC appear to have significant impact on health outcomes at the national level, as all cause specific- and several categories of cause specific premature- mortality proved to be sensitive to PHC (e.g., asthma, pneumonia and cardiovascular disease). A time series analysis was performed in 2003, of the association between national PHC systems and health outcomes, from 1970 to 1998, in 18 countries [Australia, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Italy, Japan, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, the UK, and the USA] (8). Those countries were chosen based on the availability of data and economic similarities among them. The study demonstrated that strong PCH oriented health systems were associated with improved population health. But not all European countries have strong PHC orientation. Ordered by practice score (maximum, the best, 20) they rank, in 1995 (the latest date):

- the UK (19),
- Denmark (18),
- Spain (16.5),
- the Netherlands (15),
- Italy (14),
- Finland (14),
- Norway (13)
- Sweden (11).
- Portugal (7),
- Belgium (4),
- Greece (4),
- Germany (3),
- Switzerland (2.5)
- France (2).

In fact, the two latter are under the USA practice score of primary care, 3⁵. It is noteworthy that countries with the weakest PHC, and therefore those with the most potential to benefit from improvements have, in general, not made much progress in improving PHC structure and practice. However, it must be noted that the French health system was ranked number 1 by the WHO in 2000 (9). This obviously shows either that the WHO's WHR2000 criteria did not value PHC, or that chronic deficit incurred to obtain its performance had been not noticed until 2004, when pressures to change French health system gave emphasis to PHC and a new *quasi* gate-keeping role to general practitioners.

In short, PHC in Europe should not be taken for granted. In Europe a few countries have strong PHC (Denmark, the Netherlands, Spain and the UK). Strong PHC is associated with similar quality of care than specialists, better population health outcome and lower cost in their health care systems (or at least, with slower growth rate of health care costs). In many wealthy European countries PHC is not an

⁵ Primary care practice score in 1995 was 13 for Australia, 11.5 for Canada and 7.5 for Japan.

euphemism for cheap and low quality care (second rate health services for poor people) but an organization for answering population needs. But it is clear that European studies evaluating how to most effectively organize PHC are far too few.

Summary

The health of a population is mainly determined by wealth and its distribution. Strong PHC in Europe has been shown to be associated with better health outcomes, and to some extent to reduce the adverse effects of lack of equity, which is consistent with the postulated benefits of primary care. General practitioners, in comparisons with other specialists, take care of many diseases without loss of quality, and often at lower cost. Emphasis on PHC has been partially successful in at least slowing the health care costs growth rate. Expectations about the beneficial role of PHC in improving health of the population may be plausible, as suggested by the association of strong PHC and better health outcomes, but there is a lack of firm bases in terms of evidence. If PHC is to make a more effective contribution to reducing health inequalities, it needs to be more aware of the nature and scale of social and economic disadvantage at both geographical and individual levels.

2. PROVIDERS OF SERVICES IN PHC DELIVERY IN DIFFERENT EU COUNTRIES.

2.1 European differences in PHC workforce

As seen above, despite the presence of universal health insurance in all European countries, there are marked differences in emphasis in PHC and its organization. Indeed, health care is still largely a national affair in the European Union. Then, differences in the tasks and activities of PHC professionals, as general practitioners, do not only exist between individual physicians, but also between countries. Sources of variation between countries lay in the features of the respective health system, such as their specific financing and regulation modes.

As it is the case in other sectors, when countries of central and eastern Europe look to the West for models of PHC organization, provision and financing they face no easy choices. But the fact is that whichever models these countries have chosen, all have decided to move towards a health care structure with a firm base of primary care, including general practitioners playing a more or less central role, and a simultaneous reduction of the hospital sector.

It is astonishing how little information is available for comparison of PHC in different European countries, even at descriptive level (10). Information from one of the best data banks, the *OECD Health Data 2003* (Organization for Economic Cooperation and Development) refers mainly to 2001 and focuses on expenditure, not outcomes (11). In fact, international studies on expenditure abound, but research on the effects and

mechanisms of health care provision to the population is scarce and handicapped by lack of data. According to OECD *Health Data 2003*,

- health professionals' density per 1.000 inhabitants varies from 46.9 in Finland to 13.3 in Portugal (32.1 in the U.K., 30.9 in France, 30.4 in Germany, 28 in the Netherlands, and 17.1 in Spain),
- general practitioners' density varies from 1.7 in Finland to 0.5 in Switzerland (1.6 in France, 1.4 in Austria, 1.1 in Germany, 0.6 in the UK, and 0.5 in the Netherlands and Portugal), and
- nurses' density varies from 14.9 in Finland to 3.8 in Portugal (14.8 in Ireland, 12.8 in the Netherlands, 9.7 in Germany and 9 in the UK).

In the European Union general practitioners are a minority amongst active physicians, ranging from 18% in Portugal to 53% in Finland, in 1999. Their total number has increased, but only in parallel to the increase of the population. Available data on physicians supply suggest that the composition of the workforce has not kept pace with specific technical aspects of the development in delivery of care. Concerning nurses, the ratio has tended to increase slightly.

What staff is involved in PHC delivery in Europe? We might regard as "core" European PHC workers the following: a) general practitioners, b) nurses, c) pharmacists, d) managers e) auxiliaries and d) other professionals. Such professions do show the classic traits required for cooperative coordination mechanism to work effectively, as common socialization process (training), high salience of reputation and shared value systems (deontology). Each will be briefly assessed next.

2.2 General practitioners in Europe

According to *WONCA Dictionary of general/family practice*, a general practitioner (family doctor, family physician) is a specialist physician trained in the principles of the discipline (12). Is "a personal doctor, primarily responsible for the provision of comprehensive care to every individual seeking medical care irrespective of age, sex and illness" (this emphasis on responding to medical care- seeking is linked to the so called Osler' paradigm). The general practitioner cares for individuals in the context of their family, their community and their culture, always respecting the autonomy of the patient. (S)He recognises the professional responsibility to the community. General practitioners exercise their professional role by promoting health, preventing disease and providing cure, care and palliation (12).

General practitioners accept the responsibility for making an initial decision on every problem with which a patient presents, and more than 90% of problems are dealt entirely with within general practice.

General practitioners and specialists have complementary ways of thinking. Using epidemiological concepts, general practitioners have very high negative predictive value (they know very well who is healthy) and specialists have very high positive predictive value (they know very well who is ill, when working with populations who have high prevalence of disease). So the natural way of organizing health services (in order to increase the efficiency and quality of medical care) is to use general practitioners as a

“barrier” to keep healthy patients away of the unnecessary contact with specialists, and to refer the “filtered” population which higher prevalence of disease to specialists. The diagnostic task of specialists consists of reducing uncertainty, exploring possibility and marginalizing error. The diagnostic task of general practitioners, as a way of contrast, is to accept uncertainty, to explore probability and to marginalize danger (13). First access should be only to general practitioners with enough knowledge and skills to answer directly almost 95% of the demands, thus referring around 6% of the patients to specialists, because probably they have infrequent diseases, or they need costly diagnostic and therapeutic procedures.

An analysis of the general practitioners’ tasks profiles in Europe, in 2003, shows a consistent contrast in task between post-communist and western countries (10). In western countries general practitioners have more comprehensive services profiles, particularly regarding the first contact with health problems and the provision of medico-technical procedures. In all countries, there is a contrast between rural and urban areas; in rural areas the profile of services is more comprehensive. General practitioners have longer working weeks in countries where they are self-employed (Austria, Denmark, France, Germany, Ireland, Italy, the Netherlands, the UK and others) (10).

Paediatricians have the role of general practitioners in countries like Italy and Spain, where they care for population under 14 years in the public health system.

2.3 Nurses in Europe

The primary responsibility of nurses is to assist individuals and groups (families and communities) to optimise function within varying states of health. This means that the discipline is involved in caring functions which relate to health as well as illness and which stretch from conception to death. Nursing is concerned with maintaining and promoting health, caring for the sick and providing rehabilitation. A nurse is thus a professional who has completed a programme of nursing education and is qualified and authorized to provide nursing care for patients (12). The term “nurse” includes both qualified and unqualified nurses, the latter describing a wide range of professionals who assist doctors and help patients. Moreover, even the definition of a “qualified” nurse differs between European countries, where the range of activities and responsibilities of PHC nurses is very wide. At one end of the spectrum (“nurse practitioners”) they have been trained to function as practitioners in their own right, taking over much of the work traditionally regarded as that of the physician (even prescription rights), as in Spain, in Sweden and the UK. Auxiliary nurses in Europe are devoted mainly to assist fully trained nurses in less technical work as bed bathing patients at home. But just as the nurse’ role has changed in relation to the doctor, so the auxiliary’ role has changed in relation to the nurse.

Nurses are members of health teams (public health centres) in countries like Finland, Portugal, Spain and Sweden. Nurses involved in prevention are common in Europe, as health visitors and public health nurses, as in Denmark, Italy and the UK. The midwife has a fairly clearly defined role related to the delivery of birth. However, it has become progressively more related to ante and postnatal care than with the actual supervision of deliveries (yet, for example, in the Netherlands still home deliveries are not uncommon

and most of them attended by a independent midwife⁶). Community nurses, or district nurses are common in Scandinavian countries and in France and Italy; they provide care for patients in neighbourhood clinics or in their own homes.

Although the number of nurses has tended to increase slightly in Europe, there is a serious problem of inter-country comparability due to different definitions of nursing. It is not exactly known what proportion of these nurses are directly involved in PHC.

The perception of nurses as low-status staff requiring minimal training is beginning to moderate, though the process of changing attitudes is very slow and widely uneven among European countries.

2.4 Pharmacists in Europe

A pharmacist is a professional licensed to practice pharmacy. PHC pharmacists practice in various settings including community pharmacies, and health centres (as in Sweden). PHC pharmacists are moving from being providers of drugs prescribed by doctors to pharmaceutical care providers, pharmaceutical care being a patient-centred, outcomes-oriented pharmacy practice. The four main areas considered critical for the future of pharmacy are: 1) the management of prescribed medicines, 2) the management of long-term conditions, 3) the management of ailments and 4) the promotion and support of healthy lifestyles (14). Pharmaceutical care is stronger in the Netherlands, Spain and the UK than in the rest of Europe.

2.5 PHC Managers in Europe

The PHC manager is a professional who has the duty to conduct or direct PHC organizations. Managers could be mostly physicians, as in Spain, or professionals in their own field (from business schools), as in the UK.

Managers may be specialists in finance, marketing or human resources, but many more PHC managers are generalist doctors. Managers think first about organisations and deal with leadership, strategy, systems, negotiation, team working, organizational development, economics and finance. Managers could also include in their management teams pharmacists devoted to promote rational use of drugs in PHC.

PHC Management development is in many ways in its infancy.

2.6 Other PHC professionals in Europe

Administrative staff, the receptionist and other professionals are important in PHC daily practice, as they care of critical components in the process of care (booking and repeat prescriptions, as examples).

⁶ According to the scientific evidence, the outcome of ante and postnatal care, and normal pregnancy is better under care by midwives and general practitioners than by obstetricians

Other professionals as dentists, social workers, physiotherapists and occupational therapists could be part of the PHC organization, as in Spain and Sweden.

Outside of the official health care system a variety of unorthodox healers flourish and during the last decades there has been considerable increase in public interest in acupuncture, homeopathy, osteopathy and other types of fringe medicine (alternative or complementary) in Europe. Borders are erased when, for example in France and Germany, homeopathic prescriptions are covered by public sickness funds.

2.7 Inter-professional interactions in daily practice

As already explained, currently the PHC team members are under steady pressure to take on new roles and functions in the delivery of care. New roles mean conflict and re-definition of responsibilities. There are three types of functions for that re-definition:

- 1) supplementary functions (extending the efficiency of other professional by assuming some of the tasks, usually under the direction of that professional),
- 2) substitute functions (providing services that are often provide by other professional), and
- 3) complementary functions (doing things that other professional do not do at all, do poorly or do reluctantly) (4).

Until today, nurses in PHC have received less training, accepted less responsibility, and dealt with less uncertainty (and as a result, they have received less remuneration) than doctors. Increasing availability of nurse practitioners, with high level of patient satisfaction and high quality care, is even challenging the relevance and balance of existing undergraduate education for the physicians (15,16).

Poor liaison exists between community nursing (district nurses, health visitors, etc.) and general practitioners, as it is recognized to be the case in Ireland, Italy and the UK.

The auxiliary is not so much assisting the nurse, but deciding to whom she needs to refer and what she can do by herself.

While community pharmacy is developing strategies to enhance its professional status, those strategies are not so much aimed at usurping the general practitioners' role as they are a bid for survival, especially on the part of the rank and file. General practitioners and pharmacists can cooperate in imaginative ways, even in the fields of continuing education and research, as is the case in the Spanish Primary Care Network (a scientific association of general practitioners and community pharmacists). But frequently, general practitioners may fear that in the privately financed, commercially focused environment of a community pharmacy, a pharmacist may not be able to resist the temptation to act, may be unconsciously, in their own interests. Privacy is also cited as a potential barrier. Research in Europe has shown that pharmacist are able to avoid such moral hazard, and that when deciding where to seek advise and from whom, patients make a series of trade offs (while holding very firm views about who does what and why with regards to their care) (14).

About general practitioners and managers, a constructive dialogue has to replace mutual suspicion. They are learning from each other in daily practice (use of electronic data bases in decision-making, for example, as in Denmark, the UK, and other countries) and specially from fora such as the European Association of Public Health and the European Association of Health Economics.

Also, the boundaries between health care and social services are becoming blurred, so that services such as homes for the elderly and family care are currently included in health care. This forces cooperation between PHC workers and social workers, as in the Netherlands, Spain, the UK, and other countries.

When coordination between levels of care and services (e.g., hospitals and PHC, health care and social services) occurs, it is usually as a result of network interactions operating within public hierarchies and across boundaries. Coordination requires enough stability and a common set of professional values. An example is the “trans-mural care” Dutch experience, where a bottom-up facilitating approach was chosen to stimulate development of coordination between traditionally separate sectors (17).

The traditional antipathy between the established medical profession and other healers seems to be declining.

2.8 Teamwork

A team is a group of people brought together to work towards a common purpose.

At the beginning of the 20th century PHC in Europe was characterized by solo practice. In the early years of the 21st century, solo practice is still common in Europe in countries where general practitioners are self employed, as Austria, Denmark, France, Greece (urban areas), Germany, Ireland, Italy, the Netherlands, and others. But general practitioners increasingly share their practices and facilities (group practice, as in the UK) or work as public employees in health centres owned by the health insurance funds or by the government (as in rural Greece, Finland, Portugal, Spain, Sweden and others).

The already mentioned Dawson Report set up the concept of health centre. One of the early examples was that of the relatively short-lived Peckham Pioneer Health Centre in London in 1935 (first established as a health club in 1926). Mention must be made among services based in similar ideas of the Pholela Health Centre in South Africa and the project carried out in the 1950s by the Montefiore Group in New York. WHO started to support both PHC and public health centres in the 1970s, with the Finnish reform as first national example in 1972.

In practice, teamwork could be an ideal rather than a feasible reality as most health centres, in Finland, Portugal and Spain for example, have more than 25 professionals (even some health centres have more than 100 staff!). Research has shown that teamwork is highly unlikely with more than 12 members. All teams are groups but not all groups are teams. Inter-professional collaboration is difficult to attain via hierarchical mechanisms only. Without collaboration, task profiles expanded by decree are not easy to implement either.

Teamwork is becoming increasingly important to patients because it enables them to call on a range of skills which is wider than those any one individual may have. Where there is shared decision-making and management of patients, results improve. The disadvantages of teamwork lay in problems of communications, confidentiality and either competition or duplication of services by different members of the team. Little is known about the scientific base of teamwork in PHC and about its cost effectiveness. Team members need to be more aware of management as a discipline in its own right and of the need for valid criteria of effectiveness to be developed and monitored.

Summary

Little information is available for comparison of PHC in different European countries even at a descriptive level. This lack of information is particularly remarkable in the light of the health care reforms that have occurred since the early 1990s, many of which have affected primary care. We know little about the impact of different modalities of practice organization and workforce distribution.

Core professionals in European PHC are general practitioners, nurses, pharmacists, managers and others. Roles are changing with implies conflict and reorganization of responsibilities. Although teamwork is seem as desirable, its scientific base and cost effectiveness is not well known.

3. DIFFERENT ACTORS FOR DIFFERENT INTERESTS IN PHC IN THE EU. MODELS OF BEST PRACTICE.

3.1 PHC policy in Europe: similar actors, different interactions (and solutions)

The categories of social actors in PHC policy in Europe are invariably:

- 1) the patients (o their families and associations), consumers of services and population (in a broader sense, society),
- 2) the providers of services and institutions as health centres and hospital (those directly contacted by patients, those available via first contact providers and others, as future providers) and their associations,
- 3) teaching and research institutions,
- 4) the health industry (consultancy, pharmaceutical and technological industries),
- 5) the financers or insurers of health care, and
- 6) governments authorities (international, national, regional and local).

Informal policy power is in hands of the main collective actors: government authorities, insurers and professionals. The main sources of informal policy power are:

- 1) ownership and financial resources,
- 2) knowledge and information resources, and
- 3) social and political support (5).

Formal policy power lays in turn in the hands of government authorities.

Differences between PHC in Europe do not lay in the types of actors, but in the way they relate to each other (18). Collective actors, endowed with informal policy power, can exert pressures upon the political process (e.g., lobbying for private entrepreneurship), and exercise formal influence (for example, joint decision-making among physicians and insurers). As a result, policy shifts may:

- 1) modify the rules of the interactions (external rules imposed by the government upon other actors), and-or
- 2) allocate and redistribute resources.

The dynamic interactions between the actors relate to:

- a) the provision of services to patients and populations,
- b) the movements and referrals between each level providers,
- c) patients' payment of insurance premiums, or taxes,
- d) providers' way of payment,
- e) scientific and policy knowledge (as reports and guidelines) and
- f) regulation by government.

Little is known about the way the PHC actors interact with each other (5,10,18). As a proxy, we can measure the success of the interactions at country and international levels as reflected in outcomes such as the cost of the health systems and the health outcomes produced (8). The impact on the adverse effects of lack of equity on health is also critical.

Accomplishing the European public health policy objective of ensuring that everyone has access to the necessary health care while keeping expenses affordable whatever the income has proved very difficult. (19).

Again, the problem for governments and societies, as demonstrated by experience in recent decades, is that demand for health care is rising inexorably. In fact, the supply of health care actually fuels further demand. Worse, demand is not equivalent to need. Also, it is worth noting that organizations do not start in real life from a clean slate from which ideal choices can be made. Health systems are not easy to change, since they only develop within a framework which they have inherited, building on what has gone before. Often, organizations are true memorials to old problems, institutional residues that reflect the historical processes through which problems have been tackled.

Historically, the dominant interest group included the professional monopolisers, the physicians, whose control of medical knowledge both explains and reinforces the dominance of the disease model of illness. Although numerically small, as compared for example to nurses, their definition of health and illness tend to dominate health policy and service provision. The fact is that actors with better social reputation (e.g., hospitals *versus* health centres, or specialists *versus* general practitioners), and organized interests (for example, specialists supported by pharmaceutical and technological industries) do enjoy more informal policy power, which might not always lead to efficient coordination solutions.

The dynamic policy process ends with a health services structure and function which reflects how rules are established and modified and how resources are allocated and redistributed (5). Policy making being a dynamic process, there is no real end to it, and changes in formal and informal policy power (due to changes in the distribution of resources and social and political support) lead to reforms. Reforms aimed to empower PHC may:

- 1) increase the power of general practitioners over other levels (pro-coordinating reforms, as introducing gate-keeping or purchasing rights),
- 2) broaden the profile (the service portfolio) of general practitioners and other primary care providers, and
- 3) induce concurrent changes in PHC organizational resources and control systems (necessary for promoting a major role for PHC) (5).

3.2 Models of best practice

General practice is a well-recognized medical specialty in Europe, with postgraduate training now obligatory in the EU, ranging in practice from 3 years (as in Spain) to 6 years (as in Finland). But it is clear that the position of PHC (and general practice) is stronger in some countries than in others (7,8,10,18,20). The strength of a country's PHC system depends of its actors and their interactions. In some countries, there is a negative circle of low social esteem, poor education, low self respect, poor earnings, scarce research and heavy competition with the more glamorous specialists- and hospital-based medicine (20). Countries that have broken this vicious circle, like Denmark, the Netherlands, and the UK (and to a lesser extent Spain) have strong professional organizations which elbowed its way into the universities and finally achieved postgraduate training courses, which became mandatory for the profession of general practitioner (before the EU issued the corresponding legislation).

The above mentioned 4 countries are very different. Perhaps the most interesting case is the Netherlands, because of its success compared to Belgium, France and Germany, also wealthy countries with a "Bismarck" health system model (a social security system, funded from proportional premiums earmarked for health care). Generally speaking, governments in countries with Bismarckian systems have played a more hands-off, reactive role, with the two other main actors (professionals and insurers) dominating the policy process (5). Governments share in fact their formal policy power with sick-funds (public insurers). In these countries, organizational networks follow neo-corporatist schemes, based in joint decision-making by state-insurers and professionals (with specialists as key actors), whereas (with the exception of the Netherlands) they have a weak general practice.

The status of general practice is better in countries with national health services ("Beveridge systems"), such as Denmark, Spain and the UK. In national health services funding is through taxation and services are largely provided in kind by the state, but general practitioners may be contracted and work in private practice, as in Denmark and the UK. In these countries State authorities have the monopoly of formal policy power and they are pro-active, establishing targeted interventions by external rules and allocating and distributing resources (5,10). Insurers play almost no role (financing is public, albeit private insurance is a profitable business) and professionals are powerful

lay actors The example of Spain is very interesting, being a country with a Beveridge system only from the 1980s which has achieved reasonable success compared with other Mediterranean countries, such as Greece and Portugal.

General practice forms the solid base of these 4 European countries' health care system. It is aided by protective measures, like:

- 1) limiting direct access to specialist care and providing the general practitioners with the role of gate-keeper (external rules imposed by the state), and
- 2) allocating enough financial and material resources (even ownership of health centres in Denmark, the Netherlands and the UK) (5,10,18).

Gate-keeping is perhaps the most important example of mechanisms through which hierarchical coordination power over other levels of care is delegated to general practitioners. The capitation way of payment, associated to patient list has proved important for general practitioners to have the role of gate-keepers to specialised care in the 4 countries considered (though Spanish general practitioners are salaried, with only around 10% of the total amount *per capita*) (13,18).

In Denmark and the Netherlands the application of the general principle of gate keeping differs in practice, according of the type of health insurance. For the publicly insured (97% and 60% of the population, respectively, with an income below a certain annual level) this requirement is absolute. The privately insured patients may access specialists directly (18,20).

Gate keeping gives *de facto* gives general practitioners a monopoly over patients flows into secondary level, with the exception of emergency care. In practice, gate keeping has improved neither communication nor cooperation between general practitioners and specialists, because administrative rules have dominated the referral process, at least until the pro-coordination reforms of the 1990s. Being mainly a formal process, gate keeping does not accomplish its full power, and cooperation and redistribution of functions and resources across the interface of levels of care remain in its infancy. Denmark, the Netherlands and the UK can be considered examples of best practice for the design and implementation of pro-cooperation reforms in an attempt to further transfer power and tasks to the general practitioners (5). Comprehensive, strong inter-organizational networks have emerged as a result. Having strong general practitioners' associations, empowered with informal policy power before the 1990s, has made PHC professionals the natural coalition partner of governmental authorities in pro-coordination reforms, thus facilitating policy change and granting implementation.

General practitioners associations in these 4 countries have strong informal policy power because of:

- 1) their professional autonomy, and status of independent contractors and ownership of premises (not in Spain),
- 2) their monopoly of first contact (gate keeping), which has allowed the creation of multidisciplinary groups and expanded task profile,
- 3) their knowledge production (research in PHC) and information control (development and implementation of classifications, dictionaries and electronic medical records),

- 4) their impact on national health outcomes and on the health care system cost control,
- 5) their contribution to reverse the impact of social inequity on health, and
- 6) the population satisfaction levels they have achieved.

By contrast, general practitioners associations are weak and enjoy almost no informal power in other countries with national health systems as Finland, Greece, Portugal (patient list, gate keeping, salary payment) and Sweden. The same happens in countries with Bismarckian systems, as Austria, Belgium, France, Germany, Ireland (patient list, capitation and gate keeping role for lower social class), in Luxembourg and Switzerland or in transitional countries (ex-communist), such as Bulgaria, Croatia, Hungary and Poland.

In countries with a Bismarckian system, general practitioners have the ownership of provision, are private entrepreneurs, but no gate keeping role, and they share the financing scheme with ambulatory specialists, in a context of heavy competition (specialists control more than 50% of the first contact market) (10). Consequently, it can be said that the balance of relative informal policy power of general practitioners *versus* specialist does not help in establishing pro-coordination policies or in broadening the PHC portfolio.

In countries with national health system and salaried general practitioners, doctors do not enjoy ownership of health centres and have low social esteem (they are frequently skipped by the median and upper classes which go directly to visit private specialists). In transitional countries, even the lower class prefer specialist care (5).

3.3 Actors and interactions in Dutch PHC. A case study⁷.

The position of general practice in the Netherlands at the beginning of the 20th century was very difficult. General practitioners were at the bottom of the medical hierarchy, entrepreneurs who offered little medicine beyond support, or even union employees who signed *absence from work* permits .

Two factors complicated the situation around World War II:

- In 1942 the government decided to introduce a *new* sickness fund system, which was already initiated before the war. The consequence was that about 70% of the population (wage earners with a limited income) became members of a *compulsory system* and each came to be on the *list* of a general practitioner, who had *gate-keeper role*. *Without financial barriers*, after a short time, overall *medical consumption* rose to the level of upper classes before the war.
- The second factor which influenced the position of general practice was the rapid development of specialist medicine. This was the result of *scientific and technical progress*, but in the Netherlands the sickness fund system stimulated hospital medicine in an indirect way as the costs of specialist care were not limited. The remuneration of specialists was a *fee-for-service* system, while general practitioners were paid by *capitation fees*.

⁷ *Italics are interactions.*

The tension created by the increase of general practitioners *workload* was relieved by the general practitioners *referring* patients to specialists, who accepted them with pleasure, cause they were paid *fees* for their service. Universities were not limited in their acceptance of new medical students. Many of the young physicians wanted to become specialists, and so there were almost no limitations on the education of future specialists.

In 1956 the Dutch College of General Practitioners was started and in 1965 a National Institute for General Practice was set up. The first chair in general practice was created in 1966 in the University of Utrecht. In the same year, the *remuneration* of general practitioners, after a deep conflict between trade unions (National Association of General Practitioners) and professional associations with the government, was increased by 50%. In that year, also, the government published a *White Paper* on the organization of health care, in which general practice was given an important role.

Nevertheless, further development of Dutch general practice was very slow and it took almost two decades to transform and fully develop it (21).

Crossing the border between PHC and hospital care proved even more difficult. *Integration* of PHC and hospital services has been the subject of *health policy* in the Netherlands from the 1990s -the already mentioned “*trans-mural care*”- (17), following the *Biesheuvel Report*. The proposed introduction of *additional fees* for general practitioners’ for *extra services* on top of their *capitation rates* was never implemented. In 2004 *trans-mural care* is a *research activity* and a *daily reality* which involves more hospital and home care providers than general practitioners.

3.4 Policy analysis of the Dutch PHC case study

This case study summarized the role and interactions of the main actors in the system and the use of informal and formal policy power.

In health policy terms, World War II, and its consequences on population, politicians, and professionals were powerful.

As showed, even with a targeted and well selected policy that induced desired changes, it took decades to transform the health system and fully develop PHC (re-accreditation, performance monitoring, quality assessment, guidelines, peer audit, research, etc).

It must be noted how it was necessary to increase, at least initially, the amount of resources (financial, material, human and knowledge). To be successful, the transfer of power and tasks should be tightly coupled with parallel shifts in accountability and resources.

As seen in the Netherlands case, policies can be aimed at

- 1) modifying the rules of the game, as in the 1940s (e.g., setting up a new sickness fund system, with patient list, gate keeping and capitation method of payment to general practitioners), and

2) allocating and redistributing resources among actors (e.g. increased financial resources in PHC, in 1966 and the trans-mural care initiative in the late 1990s).

The centre of gravity of policy shifted because the post-war climate, which allowed the exercise of formal influence (setting up a compulsory insurance system and giving a gate keeping role to general practitioners). This later on had in turn two main feedback effects:

- 1) more institutional changes in regulation and legislation, in terms of empowering general practice and promoting pro-coordination reforms (trans-mural care) and
- 2) a modification of the socio-political structures via resource shifts induced by public authorities (forced by the strike in 1965, or by policy knowledge, as was the case with the above-mentioned White Paper and Biesheuvel Report).

The “trans-mural care” reform had a bottom-up facilitating approach (again, participation has been entirely voluntary), which was successful. However, it needed to be followed by top-down measures to insure adequate evaluation and encourage widespread implementation, since it was not easy to cross boundaries between professionals who work independently as general practitioners, community nurses, specialists and others, in hospital, nursing homes, health centres and community settings. Improved continuity and integration of care were the most prominent goals for participation, but the lack of financial incentives and support might explain the different participation figures in 2001 (98% of all hospitals, 75% of home care organizations, 22% of nursing homes, 21% of general practice settings, 18% of health insurers and 12% of patient organizations).

Attention should be paid in the Dutch case to the main actors:

- 1) patient and population (individual, unions),
- 2) providers (general practitioners, specialists, medical students, hospitals, home care providers, College of General Practitioners, National Association of General Practitioners),
- 3) teaching and research institutions (University of Utrecht and others, National Institute for General Practice),
- 4) the health industry (new technology for specialists and hospital),
- 5) insurers (sickness fund), and
- 6) government (national, in this case).

There were many interactions which explain the policy dynamics:

- a) provision of services to patients and populations (medical consumption, patient list),
- b) the movements and referrals between levels (gate keeping, trans-mural care)
- c) patients’ payment (free access),
- d) providers’ way of payment (capitation, fee-for-service)
- e) scientific and policy knowledge (White Paper, Biesheuvel Report), and
- f) regulation by government (compulsory insurance, monopoly of first-contact)

3.5 Governments

The ultimate responsibility for health care (the formal policy power) lies with the government. The driving force in publicly-operated health systems in particular is normative in character, seeking to extend coverage and services on grounds of social justice and moral obligation.

However, the direct involvement of governments in the health system may be diverse. Two extreme strategies are at one end comprehensive funding and provision by the State (the case in former URRS and others) and a policy of minimum State intervention (the case in the USA, and others) at the other. Intermediate strategies are a) national health systems, or Beveridge system in which funding is through taxation and the State is substantially involved, and b) State harmonization of arrangements developed among interest group in society, as trade unions, as in the Bismarck system (the case of France, Germany, Ireland, the Netherlands, Switzerland, and others) (10).

In general, as already mentioned, a Bismarck system can be considered as rather reactive in terms of State authorities' involvement, whereas the Beveridge system requires more pro-active government interventions (5).

There are many variants within the above scheme. Some countries with a national health system, such as Portugal and Spain, have salaried general practitioners and a patient list, while other countries like Denmark, Italy and the UK have, private self-employed general practitioners with contractual link with the system and paid by capitation and allowances (18).

Moreover, the main orientation of the entire health system may change with times, as shown by the French case, evolving from a medium State intervention in the 20th century to a strong government involvement, as the system bankruptcy approached in 2004. Spain is also an example of evolution, from a heavy central government intervention in the 1980s to a regional, almost federal responsibility, in 2003.

In all cases, governments face many critical decisions. The obvious initial one is whether to answer a health problem only with measures that entail the provision of services by the health system, or to look for an answer outside the health system proper.

If the answer is the former, policies can be aimed at:

- 1) modifying the rules and agreements inside the system, and-or
- 2) allocating and redistributing resources among actors.

Setting and crossing the boundaries between hospital and PHC, and between health care and social services [home care is a good example] is particularly important (but again, too little is known about the relative cost effectiveness of providing care in different settings and by professionals with different types of training) (19,22).

Governments may promote a strong PHC in different ways, such as expanded pro-coordination experiments (for example, fund-holding in the UK, trans-mural care in the Netherlands), or expanded task profiles (minor surgery in Spain) but their success always lays on receiving professional support from strong general practitioners associations. Gate keeping as a pro-coordination measure in France and Germany, for

example, was blocked in the turn of the 20th century by the powerful professional opposition of specialists' associations (and insurers associations with support of the health industry), faced only by relatively weak associations of general practitioners. A similar approach had been successfully introduced in Belgium in 2004 on voluntary bases. The scheme allows patients to select a "preferred" general practitioner, who has the patient' electronic medical record and who may order referrals to specialists with less cost-sharing for the patient (and a better payment for the specialist).

Countries with weak general practice will have problems to adopt international best practice, as redistribution of informal and formal policy power will raise opposition from socio-political actors, and thus reduce the likelihood or scope of institutional change. This is the case in France, Germany and Greece, for example (5).

Politicians thus can be a force for change but also an obstacle to change, because they may choose different options according to:

- 1) different political visions (right and left),
- 2) different points of view in the central and regional and local governments, and
- 3) different sensibilities to lobbying activities (insurers, professionals, industry, patients associations, international agencies, and others).

There is not a common European health care policy (23). Even the proposed new European Constitution, 2004, says nothing about a common approach to the topic. In western Europe there are 4 dominant schemes of governance of PHC, reflecting different balances of power between central and regional/local governments:

- 1) decentralized governance within a Beveridge system (Denmark, Finland, Italy, Norway, Spain and Sweden),
- 2) centralized governance within a Beveridge system (Greece, Iceland, Portugal and the UK),
- 3) decentralized governance between a Bismarck system (Austria, Belgium, Germany, the Netherlands and Switzerland), and
- 4) centralized governance within a Bismarck system (France and Luxembourg) (5).

Institutions matter because they translate socio-political actors' informal policy power into formal political power. That is, institutions embody:

- 1) modifications of the institutional framework (regulation, legislation, rules), and
- 2) changes in allocating and redistributing of resources (financial, manpower, equipment and knowledge).

When target decisions by governments of countries with cooperative networks (e.g. Denmark, the Netherlands and the UK) meet relatively autonomous group practice of general practitioners, a "positive circle" is fulfilled. The public power can play an important role in removing obstacles for networks to achieve efficient system coordination, by means of financial mechanisms, decision-making rules and production and dissemination of knowledge. It is important to note here that competition can be an obstacle, because it inhibits cooperation.

Decision-making responsibility may be formally vested in elected politicians at national level (France, Portugal, the UK), national and regional level (Denmark, Norway, Spain, Sweden) or national and municipal level (Finland), while day-to-day operating authority is delegated by these politicians to a corps of career administrators and planners (24,25). Until 1998 national governments and insurance funds had believed that they had the right to decide whether they would pay for non-urgent treatment carried out abroad. That year, two rulings by the European Court of Justice had wider implications as relevant precedents. So in fact, a European healthcare policy is emerging... developed by the European Court! (23).

3.6 Insurers

Insurers or financiers have a narrower point of view, as they do not consider actions outside the health system. Insurers are intermediary representatives of payers and potential patients. They have a strong interest in keeping up to date in scientific and policy development (introduction of new technologies, Evidence Based Medicine, guidelines, new organization arrangements, effectiveness of incentives, and so on).

As explained, public insurers (sickness funds) have a particularly important policy role in countries with Bismarck systems, with strong informal and formal policy power (10,25).

Private insurers do not enjoy such strong informal and formal policy power but are becoming more and more powerful in Europe, as the example of the UK demonstrates. Only in Switzerland private insurance premiums and out-of-pocket payment combined exceed 50 per cent of total health expenses. The role of private insurance also varies across countries in Europe. In some countries (e.g., Ireland and the Netherlands), private insurance is geared to providing cover for persons (the better-off) without comprehensive public coverage. In others (e.g., Italy, Portugal, Spain and the UK), private insurance provides supplementary cover (double coverage, looking for more comfort and avoiding waiting lists) to persons who are already entitled to comprehensive public cover. In other countries still (e.g., Denmark and France), private insurance covers against public sector co-payments levied on prescription medicines, dental care, etc. Public and private health insurance and service delivery organizations in Europe, both for-profit and non-profit are rather traditional. Mixed forms of private insurance and service delivery, such as the USA-developed Health Maintenance Organizations (HMO) have not encountered their niche in Europe (26).

All insurers' interaction with professionals is concerned with

- 1) defining which patients or services should receive priority, and
- 2) to what extent it pays off to invest a given amount of resources on one patient rather than on another one.

Insurers contract insurees (usually employees) and define their practice profile through more or less explicit contractual clauses. The critical question is, as always, the interface between them and the service providers. The clustering of unrelated diagnosis (i.e., comorbidity) in patients, its impact on costs and outcomes, and the need of coordination suggests the usefulness of exploring new interfaces between PHC and secondary care.

There is therefore a continuous interest in redefining the boundaries between primary and secondary care, with the aim of shifting selected services traditionally provided in the acute and chronic hospital to less resource-intensive primary and community based alternatives.

An example of the above is the successful primary-secondary substitution in the field of emergency care. The Swedish Adel reform, in the 1990s, involved a decentralization of coordination power over hospitals to the municipal community sector (from hospital care to nursing home) which decreased acute beds in hospitals and increased chronic beds in nursing homes.

The payment mechanisms could control general practitioners behaviour, but the scientific base on which to recommend any specific remuneration or incentive scheme is rather weak. Insurers and financiers usually have a biological orientation to the health and disease phenomena, which fits more with specialists than with general practitioners. Thus when sickness funds play an important policy role (as in the Bismarckian systems):

- 1) spending in high technologies is easier than in small or low technology (in part this bias probably explains why health services research is underdeveloped worldwide), and
- 2) the usual way of payment is fee-for-service.

With patients, insurers' interaction is aimed at defining:

- 1) which services will be covered (the known "basic packages" of services), and
- 2) to what extent cost-sharing will be established.

As rationing is usually necessary, an explicit choice should be made about rules on waiting list, for example. In Europe service coverage is more comprehensive in Germany and Switzerland. Self-help groups, and other groups, could exercise strong lobby action.

Population coverage by the Spanish NHS for example is almost universal (99.5%) and assures a quite comprehensive benefits package to all the citizens, regardless of their personal wealth; the other 0.5% consists of high-income non-salaried workers who are not obliged to join the social security system as per the 1088/89 Royal Decree. Some 95% of those covered by the statutory system are covered by the common social security system and the health services of the NHS whereas a 5.1% (civil servants and their dependants) are covered by their own (publicly financed) health insurances. All Regions ("autonomous communities") without exception include within their regulations the principle of universality of personal and collective health care extending it to all citizens. Most reproduce the basic central normative (Spanish citizens living in the region, plus temporary residents and non-residents in the terms provided in the Spanish State normative are included, while EU and non-EU citizens are covered depending on the international agreements and treaties signed by the Spanish Government).

A number of services have been explicitly excluded from financing: Psychoanalysis and hypnosis; Sex-change surgery (with the exception of some regions, notably Andalusia,

which have included in lately); Spa treatments and Plastic surgery not related to accidents, disease or congenital malformation. Other benefits not covered by the public system, exclusion criteria include: lack of evidence on safety or clinical effectiveness, or evidence that the intervention has been made redundant by other available procedures (for example, a negative list of pharmaceuticals was introduced for the first time in 1993 and updated in 1998 excluding all products of unproven clinical effectiveness from public funding; classification of the intervention as a leisure activity, relating primarily to rest and comfort, e.g. sports, aesthetic or cosmetic improvement, water therapy, residential centres or spas.

All European countries have used cost-sharing to reduce demand to some extent, but the role played by cost-sharing compared with total health expenditures has been modest, except in France and Portugal. In summary, insurers may have an important influence on priorities through their decision on levels of reimbursement and coverage of services.

3.7 The health industry

The health industry is among the most important influences on the organization and delivery of health care in any country. The health industry is part of the economic world (and so is the health system, although few physicians notice it). The influence of the health industry goes from bottom-up to top-down, that is, from government to population and from patients and professionals to politics. One example of top-down interaction is the widespread interest in proposing HMO⁸-like solutions to Europe, as in Switzerland and the UK (26) [by the way, a rather strange interest, it must be said, since HMOs have not yet solved the problems in their country of origin, the USA, and their superiority as insurance and service delivery structures lack definitive scientific base].

By contrast, governments are confronted by medical professionals groups in relation to the application by the latter of new technologies, e.g. aggressive treatment of infertility, before those technologies had been evaluated as to their necessity, effectiveness and efficiency. The demand from patients may also hasten the introduction of a technology which has not yet been evaluated.

Of course, the value of the health industry as innovator is enormous. Innovation is relevant not only for diagnosis and treatment, but also for organization of care, for finding out the precise location at which the care should be delivered (hospital, health centres, home), as well as in other fields, such as comfort and privacy (single rooms in nursing homes) and information for policy making or research (a good example is the promotion of electronic medical records in general practice in Belgium).

In general, the absence of an explicitly defined research strategy and limited government funding for research means that the industry (consultancy, pharmaceutical and medical equipment) will become the major force in directing research and in developing and disseminating initiatives, as for example, Evidence Based Medicine.

Also, doctors, and to a lesser extend pharmacists and nurses, may establish strong relationship with the health industry because promotional and continuing medical education activities. More recently, the industry has shown a broader approach , seeking

⁸ HMOs as any alternative introduce new problems. For example, adverse selection, undertreatment of poor and chronically ill patients, uneasiness in taking financial responsibility for the elderly, etc.

to influence political decisions on the structure of health care systems in ways that will benefit its own interest (24).

3.8 Teaching and research institutions

In 1963, the first chair in general practice in the world was established in Edinburgh, Scotland (the UK). The second one was established in Utrecht, the Netherlands, in 1966. In general, universities have been very important in PHC development, but there is a sharp contrast in Mediterranean countries (Portugal has chairs of general practices from the 1980s whereas Spain has had its first chair in 2002 in Barcelona, a “Novartis” chair of general practice). However, Portugal has a very weak PHC and Spain has a strong one. Professors are usually general practitioners who do not leave their clinical duties.

Numerus clausus (restricting entrance to Medical School by means of quotas) is considered by most to be essential, as it allows the control of vocational training in coordination with workforce planning by central government. As already explained, more physicians and more hospitals do not necessarily mean more health in developed countries (not un-frequently the opposite is true!). It is not the quantity but the quality (general practitioners *versus* specialists and their geographical distribution) what matters. In any case, a lack of *numerus clausus* is linked to medical unemployment, as was the case in Spain, with a peak of 22% in 1999 (this high rate of medical unemployment was in part relieved by “exporting” general practitioners to Portugal, the UK, and Sweden in the 2000s).

Again, we lack scientific knowledge about the optimal proportion of general practitioners and specialists⁹ but empirical data show a consistent positive relation between the availability of general practitioners and population health levels (4,6). How many general practitioners per inhabitants then? We do not know the right answer. Evidence suggest that perhaps the right figures lay in between 500 (very isolated rural areas) and 3.000 inhabitants per general practitioner.

Some universities in Denmark, Finland, the Netherlands, Portugal, the UK and others have advanced PHC oriented teaching policy in their schools of medicine. The general world movement is expressed by the slogan “from ward to office, from acute to chronic, from disease to problem solving orientation”. That means: early and permanent contact and integration of the students in PHC, a focus in management of chronic patients with co-morbidity, and teaching from a clinical, not disease description point of view. Nursing schools are in general more PHC oriented than Medical schools. Even schools of pharmacy are introducing PHC, as it is the case in Spain.

Organization of vocational training varies. In the Netherlands, for example, the responsibility for vocational training is with university departments of general practice. In Spain vocational training is under the control of the Health Ministry and hospitals still play an important role in how doctors are trained.

⁹ When the data become available, it will possible to calculate the appropriate proportion of general practitioners and specialists, instead of relying on demand-oriented projections, that reflect the current state of practice, rather than rational planning.

In practice, (too) many aspects of continuing medical education depend on the pharmaceutical industry in some countries (the idea of a “free lunch” is very common). The role of universities, public institutes, insurers and professional associations varies. In general (rhetoric aside), continuing medical education usually has a rather weak value and low scientific base.

Mandatory re-accreditation in general practice will be soon in place in Europe. It does already exist in some countries, as the Netherlands (every five years) or Spain (on voluntary bases).

Research institutes, either independent or part of the universities, have proven its value in developing PHC in Europe, and mention must be made of Portugal, the Scandinavian countries, the UK and the Netherlands. For example, the Dutch Institute of General Practice (NIVEL) has been giving support since the 1960s to research programmes promoted by the College of General Practitioners, and has continues its activities from then on. A similar role is played in the UK by the Nuffield Provincial Hospital Trust, which supported, for example, Collings to prepare his seminal report in 1949. In Spain, the “*Fondo de Investigaciones Sanitarias*”, [Health Research Fund], has funded hundreds of studies and researchers in PHC, from 1982 onwards. In Italy, mention needs to be made of the Mario Negro Institute of Milan.

Research is a source of informal policy power (i.e., it increases the knowledge and information resources, as well as social and political support) and it has added strong support to self respect and social esteem of general practitioners. Research has proved a valuable way of understanding the role of general practice in the health system and in society at large. In fact, to improve the relationship between general practitioners and specialists (and to facilitate pro-coordination reforms), general practice needs a much stronger scientific development of its specific knowledge and experience. This specificity can only be discovered when general practitioners are confident in their own value and identity (which in turn helps to break the negative cycle of poor general practice). PHC research is well developed in Belgium, Denmark, Finland, the Netherlands, Norway, Spain, Sweden and the UK.

In 1958, members of the (now Royal) College of General Practitioners in the UK demonstrated that almost half the problems brought to general practitioners could not be assigned a “diagnosis”, at least during the initial encounter with the patient, with the available rubrics of the International Classification of Diseases, Injuries and Causes of Death, then in force. The WONCA International Classification Committee (WICC) has followed such pioneering work. Last products of the WICC, to help in understanding PHC and research, are the International Classification of Primary Care (2nd version), in 1998, and the WONCA Dictionary of General/Family Practice, in 2003 (12).

There are European Associations of general practitioners with interest in research (e.g. European General Practice Research Network, funded in 1970) and in promoting better teaching activities (European Academy of Teachers in General Practice, funded in 1992). Some EU programs, as COMAC-HSR, AIM, DELTA, BIOMED, and other, have had crucial importance in promoting research and interchange of PHC professionals in Europe.

Schools of public health might have a critical influence on PHC development. This was, and is, the case in Portugal (School of Public Health of Lisbon) and Spain (School of Public Health of Granada and Madrid).

Finally in this account, leadership indeed matters. A few “reports” have captured an essential vision of health, health services, or general practice. Examples in the UK are the Collings (general practice) and Black (health inequalities) Reports. In Canada, the Lalonde Report. In the world, the Alma Ata Declaration. In Sweden, the Crossroad Project. In Spain, the “Sociología de los ambulatorios” [Report on the sociology of ambulatory care] and the Abril Report. In the Netherlands, the Biesheuvel, Dekker and Dunning Reports.

As a matter of contrast, Evidence Based Medicine has a strong biological bias, and low proven external validity. Its impact in PHC is not known, as it is focused on the model of “one disease” (and thus nothing is said about co-morbidity) and pharmaceutical products.

Guidelines may indeed help in very specific problems, and there is a important European development of the area.

3.9 *The service providers*

As already indicated, general practitioners have a central role in PHC in Europe. This professional group is one of the main collective actors in health care, enjoying informal policy power attached to their source of knowledge resources, and valuable social support. The above described Dutch case study demonstrates the important role of their organizations. There are strong associations of general practitioners that support pro-coordination reforms, or reforms that broader the PHC portfolio. The first professional association of general practitioners in Europe was founded in 1952, the (English) College of General Practitioners (from 1967 designated “Royal”). Some Associations concentrate their activities around mostly scientific and ethical areas while others are engaged in defending their members in the more mundane issues of working conditions and the like.

Associations with *quasi*-trade union activities might have crucial informal policy power, as shown by the role of the *Union Européenne des Médecine Omnipraticien* (UEMO, European Union of General Practitioners). As early as 1970 the UEMO set forth guidelines for a vocational training programme for general practice of at least two years, including a minimum training period of six months in a general practice setting. In 1984 the Commission of the European Community adopted these guidelines in a draft proposal published the same year to the Council, as to a specific programme of vocational training in general practice. In 1986 the European Community accepted the draft. This single decision, mandatory vocational training in general practice in Europe, may be the key step to conserve and improve the role of general practitioners in PHC.

As explained above, governments and insurers may aid general practice with protective measures, like limiting direct access to specialist care and providing the general practitioner with the role of gate-keeper or co-ordinator. Again, gate keeping saves money and can become popular as it is the case in Denmark, Iceland, Ireland, Italy, the

Netherlands, Norway, Portugal, Spain, and the UK (18). Gate keeping as an arrangement has sound scientific bases such as:

- 1) it acts as a filter of morbidity and for the selection of patients who might probably need specialist care (thus increasing the probability of a proper balance regarding the aggressive test used by specialists), and
- 2) it is an effective way of controlling cost.

Even countries like Austria and Germany, with no gate keeping, try to reduce patients' shopping around from one doctor to another by means of a health insurance voucher system (each insured is entitled to one voucher per period of three months which enables the patient to visit only one general practitioner). However, the evidence on whether gate keeping is better than other arrangements in terms of efficiency and coordination is limited (6,18).

Gate keeping establishes a monopoly over patient entry flows into secondary care and is very frequently associated to patient list, as in Denmark, Ireland (lower income), Italy, the Netherlands, Portugal, Spain and the UK. Specialists often see only the cost-control role of the filter, and sometimes gain support to this thinking, as in France and Germany.

Gate keeping and patient list favour in theory the population orientation of PHC as general practitioners may contact at the end of a defined period those persons who have not shown up around the surgery when they were expected to do so according to their health status or risks. This should in principle make it easier to reverse the "inverse care law" ("people who need more health care receive less of it"), first formulated in the 1970s in the UK by Julian Tudor Hart, and more evident in more market oriented health systems (27).

There seems to be some relationship between gate keeping and better health care outcomes, such as costs, population satisfaction and health status of the population (18).

Task profiles in general practice in Europe are not homogeneous. Those differences in general practitioners task profiles can be statistically explained by individual characteristics of general practitioners (gender, age, training), the organization of practice (teamwork, available equipment), the setting (urban, rural, practice population, availability of hospital facilities) and features of the health care system (remuneration, gate keeping role, patient list) (10). In Europe there is common interest in expanded task profiles covering poorly evaluated experiences as outreach clinic, integration of community nurses, provision/coordination of hospital emergency care, and others. For example, in the late 1990s, almost 10% of Danish general practitioners spent a few hours per month as advisors and coordinators of the interface between hospital care and PHC services. Experimentation with expanded task profiles has led to some degree of duplication.

Although the development of doctor/nurse skill mix has historically occurred ahead of evidence of effectiveness, there is a developing literature to suggest that, in some areas, substituting nurses for general practitioners gives equal or better health outcomes, with high level of patient satisfaction and high quality care (15,16). Teamwork might help in mutual understanding and new compromises.

Several research groups and institutes for nursing research in Europe have been operating since the 1970s, but new understanding and knowledge of the nursing process has not resulted in any policy shift as the concerned professional group lack resources of informal policy power (mainly ownership and social and political support). Once more, the fact that nurses and other non-physician professionals have weak informal policy power reveals the importance of social trust and reputation.

Pharmaceutical care has scientific plausibility to improve health outcomes, but until now such has not been proved yet.

Questions around health centres, its workforce, the size and composition of health teams, target population definition and many others lack scientific base and are answered by governments and insurers in a knowledge vacuum (6,9,10,18,19,22).

There are serious signals that doctors in PHC may be in a process of declining morale. A key factor seems to be a change in the psychological compact between the profession, employers, patients and society so that the job is now different from what doctors expected. A danger has been identified that consumer demands for increased access to specialists, coupled with an industrial transformation of the health sector (HMO-like) plus commercial incentives for hospitals to induce demand for their services, might well undermine the current trend towards PHC.

3.10 Patients and their families and associations. Consumers. Population

Patients are increasingly active consumers and they demand and are encouraged to expect enhanced services, including extended hours and rapid access (24). Gain in life expectancy and quality of life seem to have raised expectations of a life without illness and disease (or even promises of no-death, in view of the advances in genetics!).

Very interestingly, research proves that better health services do not necessarily mean better perception of health (this has been formulated as “the paradox of health” by which healthier populations of wealthier nations declare more perceived morbidity than poor populations with bad health outcomes in underdeveloped countries).

The truth is that patients do not seem to care about the precise organization of health services, but rather about having their problems solved as soon as possible (and note that resolution of a health problem in many cases means assessment, not diagnosis and treatment). Thus if a general practitioner efficiently solves the tasks of consultation for most common health problems, general practice will be accepted as a permanent component of the health system, even with a gate-keeping role. By the same token, when general practice is weak, with low social esteem, poor education, lack of research, low self respect and poor earnings, general practitioners lose the competition with specialists, and patients prefer direct and frequent access to specialist care (as found in Austria, Belgium, France, Germany and Switzerland).

Upper classes seem to prefer specialists to general practitioners. Seeing a specialist is not a random affair, nor it is associated with differences in the frequency of illness in different population. On the contrary, research shows that specialists' visiting rates are

directly associated with social class: the higher the social class, the greater the rates of seeing specialists (even in most European countries where rates of seeing general practitioners are inversely related to social class) and even though rates of illness are inversely related to social class (28).

In 2002, a study about equity in the use of physician visits in OECD countries demonstrated that after standardization for need across the income distribution, significant horizontal inequity in total physicians visits emerges only in Austria, Greece and Portugal (and the USA). However, disaggregating by general practitioner and specialist visits reveals a net effect from quite diverging patterns in the type of doctor consulted by income level: in all countries (except Luxembourg) the rich see a medical specialist more often than expected on the basis of their health needs, while the use of general practitioner visit is fairly closely related to need. In several countries, the visits to general practitioners is even distributed in a somewhat pro-poor way (as in Belgium and Spain). The degree of pro-rich distribution of use of specialists is much larger in Ireland and Portugal (28).

There is no solid research about the reasons why upper class people uses more specialist service, but the following ideas have been forwarded as a hypothesis:

- 1) a more biological orientation on the side of the patient, which would fit with specialists' orientation,
- 2) wrong understanding of the use of technology in health care,
- 3) path dependence of the historical development of general practice in association to workers unions,
- 4) gate keeping as a threat to individual autonomy, and
- 5) strong development of Osler' paradigm in specialists' professional behaviour

As repeatedly suggested in this paper, understanding this policy question is crucial not to lose one important source of informal policy power: social and political support.

Patients' autonomy to select a general practitioner is nowadays the rule in most countries, including those with gate keeping arrangements as Denmark, Ireland, Italy, the Netherlands, and the UK. This right has been extended in Spain and Sweden.

How to involve the public in the development of health policies? Experience shows that achieving so is not easy in practice. Three main approaches have been tried:

- 1) the representative democratic process (European, national, regional and local elections),
- 2) organized interest group, and
- 3) direct involvement of individual citizens in the health care spheres. Denmark could be an example of management of health services by local governments.

The Netherlands is an example of consumer groups' involvement. And the UK, in turn, can be considered a model of public direct consultation (24).

There are a multiplicity of self-groups and organizations which provide mutual education and support for people suffering from specific conditions. Such conditions usually are, for obvious reasons, chronic and linked to a substantial degree of disability

and suffering, such as diabetes, alcoholism, epilepsy or psoriasis. These groups can raise considerable attention and amounts of money, and lobby for quicker development of specific services. On the other hand, and from a population point of view, the success of such self-groups and organizations could rise concerns about inequalities in health and health care.

Greece, Italy, Portugal, Spain and the UK show the lowest levels of expressed public satisfaction with their health care system while Denmark shows the highest level of satisfaction (29,30).

How to match public health activities and PHC? Public health addresses specific problems, such as food and environmental questions, and PHC can help in targeting the population who use those services. In hypertension, for example, a case finding activity may be more productive than a population approach. But there is no scientific base to prescribe a specific type of cooperation between public health and PHC.

Summary

PHC Actors in European health systems are the same everywhere, but its interactions are very different. Patients, providers, teaching institutions, the health industry, financiers or insurers, and government cooperate to promote health and to avoid morbidity and mortality (in other words, to avoid suffering and to prolong the life span). Europe provides many examples of successfully health actors' interactions, mainly gate keeping and patient list. Experimentation as a way of improvement is common around expanded task profile for general practitioners and other workers, and pro-coordination activities with specialist care. But many key questions in health services research have no scientific answers yet, so decision are taken in a vacuum knowledge. Changes in the expected role of physicians' and in the expectations of the population about medical possibilities seem to be eroding the morale of general practitioners.

3.11 The role of international models and organizations

Socio-political structures, as governments, endowed with formal policy power, can introduce policy changes in their health care systems. Evidence suggests that exogenous factors (ideology, political considerations) have played an important role in health systems reforms development. The Bismarck system of Germany, for example, has been very attractive for Eastern European countries, with support from the World Bank and other international agencies¹⁰. The Beveridge system of the Nordic countries, in turn, influenced the creation of the national health systems in the Mediterranean countries in the 1970s and 1980s. In this context, WHO and WONCA have promoted PHC and general practice only with a limited knowledge base.

Exogenous factors have thus played an important role in health system reform and development all over the world. One key influence is the transfer of models and ideas across national boundaries. In some cases, the legitimacy of reform policies has been eroded when those reforms have been perceived as imposed from the outside. As a result, those reforms have encountered greater difficulty in implementation.

¹⁰ We will no consider the role of World Bank and the General Agreement on Trade in Services (World Trade Organization) because their negligible impact on Western Europe' health policy, until now.

Yet many national governments obtain credibility and social support through international agencies and organizations, which support them with new ideas.

In 1974 the Lalonde Report on the health of the Canadian was the first government report to acknowledge that a biomedical health care system is not the only option for improving health. Also, PHC as defined in 1978 by the Alma Ata Declaration of the World Health Organization was a wider concept than general practice/ family medicine, requiring that doctors in this field look again at their traditional role (2) following the Lalonde approach (yet it does not challenge the need for doctors, nurses and other staff whose remit is providing a broad range of services, who are readily accessible and who provide continuity of care. A specific problem with the WHO approach is that in many countries PHC is a part of the health system where needs, utilisation and effectiveness are poorly defined but boldly asserted, and uncritically advocated by international organisations) (19).

In 1996, the Ljubljana Charter on Reforming Health Care addressed health care reforms in the specific context of Europe (3). The (then) 49 Member States of WHO's European Region approved a Charter which underlines the fundamental principle that health care reforms' objective should be to improve people' health, not to contain costs. Within the European context, according to the Ljubljana Charter, "reforms, with primary health care as a philosophy, should ensure that health services protect and promote health, improve the quality of life, prevent and treat diseases, rehabilitate patients and care for the suffering and terminally ill. They should reinforce joint decision-making by the patient and care provider and promote the comprehensiveness and continuity of care within their specific cultural environments". In other words, health systems need to be:

- 1) driven by values,
- 2) targeted on health,
- 3) centred on people,
- 4) focused on quality,
- 5) based on sound financing and
- 6) oriented towards PHC (3).

However, WHO still promotes PHC with an arguable scientific base, promoting Finland as the reference national model ("best practice"). But the Finish PHC system is a very rigid and hierarchical one, with a network of public health centres staffed with salaried public employees, and no personal doctor.

WHO promotes PHC, and the popularity of PHC seems to be spreading. However, like it is the case with other elements of health care delivery, its scientific base, in terms of cost effectiveness of competing interventions, is poor. Its efficiency, in particular, should not be accepted uncritically. PHC is seen as a philosophy and that its role covers almost everything. The truth is that many of the interventions promoted have little or no knowledge base. But population, policy makers and providers groups accept PHC reform where much is promised but little can be demonstrated to be cost-effective.

WONCA is in turn the World Organisation of Family Doctors/ General Practitioners (former World Organisation of National Colleges and Academies of General Practitioners/ Family Physicians). The objectives of WONCA are:

- a) to promote and monitor high standards of general practice through education and research,
- b) to foster communication and understanding among general practitioners,
- c) to represent the academic and research activities of general practitioners to other world organizations, and
- d) to stimulate the development of the educational and research organizations of general practitioners.

There is no problem of compatibility with the WHO in WONCA's special concern with research and education. But WONCA has promoted, and still promotes, a kind of doctor whose main task is to respond to the complaints of individual patients (the so-called Osler' paradigm). This model better fits with general practitioners as independent entrepreneurs working in a fee-for-service system than as public employees working in publicly owned health centres.

WONCA promotes general practice, but general practitioners should understand that to be consistent with science, PHC must serve the whole population according to their needs rather than be merely available to individual demanders or purchasers of care (irrespective of whether these are state subsidized demanders or buyers of a freely marketed commodity).

Summary

The European population thinks that some kind of national insurance should distribute the financial risks of disease, handicap and other health problems, and contribute to keeping expenses affordable irrespective of the income. European health services also have a long history of general practice as primary care, so WHO's and WONCA's emphasis on PHC fits with the perceptions and interests of population, insurers, providers groups and policy makers. However, a) as it is the case with other health care arrangements, the science base of PHC in terms of the cost-effectiveness of competing interventions is poor, b) many of the interventions in the general practitioner daily practice have no knowledge base, c) PHC is seen more as a philosophy than as an answer to health needs, and d) general practitioners are still educated, and work, following the Osler' paradigm, their main task being to respond to the complaints of individual patients.

4. HOW DOCTORS AND NON-PHYSICIAN PROFESSIONALS ARE PAID IN THE EU. IMPLICATIONS OF DIFFERENT METHODS (AND USE OF INCENTIVES TO CORRECT IT).

4.1 On paying the health professional of PHC

It is well known that the method of paying health professionals must be distinguished from the method by which funds for meeting the cost of health services are raised. Both are part of the financing function, but the payment methods belong to the so-called "resource allocation" whereas the latter belongs to the "revenue raising" sub-function. It is well known that there are three main reasons for providing basic primary care

services on universal bases: (i) Help individuals protect themselves against the consequences of more severe illness; (ii) Help protect individuals from the ill health of others; and (iii) Reinforce primary care as a cost-effective system of care. A system of primary care based on well resourced and quality general practice has been suggested as an important dimension of a strengthened health care system. For such a system to function correctly, the population must use it. Conversely, if the system remains selective, then it is likely those not qualifying, likely to compromise richer and more influential individuals will continue to rely on direct and ad hoc access to specialist services. Family practice itself may continue to be perceived as a service for the poor and so a poor service.

Both elements share a common background, as the way of payment is associated to a whole series of values involving autonomy, quality, attitudes to solidarity and efficiency, as well as other important attributes of professional services. Methods of paying doctors also have an enormous importance in the way PHC institutions relate with each other.

Few questions in the organization of medical care have provoked such heated controversy over the years as the method of paying health professionals for their services. Capitation, salary and fee-for-service are the main methods of remunerating general practitioners¹¹.

In European PHC, countries with “Beveridge systems” are associated to salary and capitation payments, while in countries with “Bismarck systems” fee-for-service prevails (with the notable exception of Ireland and the Netherlands, where general practitioners are paid by capitation). Most countries have mixed systems of physicians payment, but countries with a predominant fee-for-service system almost never mix payment methods.

Changes in the way of paying general practitioners in the last decades have occurred against a background of surprisingly little empirical evidence about the effects of different forms of remuneration on general practitioners’ behaviour, on the costs of care, and on the welfare of patients (31-36). Needless to say, without such evidence, those changes are unlikely to be compatible with the desired efficiency and equity goals of European health systems.

In a few countries (e.g. Spain and the UK) general practitioners are better paid than specialists. In Norway, systematic efforts have been recently made to narrow the income gap between general practitioners and specialists. Medium total earnings per year for senior doctors are quite different in European countries, from 120,000 euros in the UK to 36,000 in Spain, in 2001.

The above-mentioned three main methods of remunerating general practitioners are hypothesised to provide very different incentives (31,32). Under capitation, the general practitioner receives income in the form of a payment for each registered patient; capitation is supposed to encourage income-maximising physicians to keep costs below the per capita fee. A salaried general practitioner, as a way of contrast, receives a salary, usually in a monthly basis, for a specific number of hours per year; under salary

¹¹ Little is known of the effects of remunerating health professionals other than general practitioners on the costs and outcomes of care. In the remainder of this section the focus will be on general practitioners.

payment the incentive is supposed to operate in the sense of minimising personal costs (such as effort). Fee for services, finally, means that general practitioners are given a fee for each item or unit of care they provide, such as consultations, immunizations and prescription; as a payment linking remuneration to health care output, the incentive is supposed to be to maximise output (quantity of items of care). When physicians fully respond to these incentives, salaries and capitation payment may result in under-treatment, and fee-for-service in over-treatment.

Under capitation and salary payment, general practitioners know in advance the amount of payment they will anyway receive before any care is provided (prospective payment). Under fee-for-service, the amount of payment is known after care has been provided (retrospective payment).

Payment systems therefore do influence job choice decisions and the recruitment and retention of general practitioners. For example, the variability of income under salary is lower than under capitation and fee-for-service. So in areas where income is expected to vary greatly (or to be too low), general practitioners may be more likely to accept employment in salaried post in under-served areas (inner city, rural).

The available evidence suggests that general practitioners paid by fee-for-service provide a higher quality of primary care services compared with capitation and salary general practitioners. Capitation seems in turn to be associated with better population health, and with better control of the total health care budget. But the studies about whether the remuneration system resulted in changes in health outcomes are not conclusive.

There are no studies about differences in access to care between the three payment methods by population subgroups according to level of need either. Evidence suggests that the overall satisfaction of patients with salaried general practitioners do not differ from those with doctors paid by fee-for-service.

Overall, the evidence of the impact of payment systems is not robust enough to be used and applied in every policy context. This general lack of empirical research means:

- 1) that policy makers have very little guidance with respect to the design of payment systems, and
- 2) that the frequently found strong opinions about the relative merits of the different payment systems are to a great extent ideology-led nonsense (32,33).

Politics, and even economics, assume that the ways of payment have an impact on the general practitioners' behaviour. There is empirical evidence, however, that a strong system of ethics may dilute, or completely remove, the economic incentives inbuilt in some payment systems for physicians to provide costly diagnostic and therapeutic services merely to increase their income (32,34).

4.2 Capitation

Medieval guilds and later fraternal orders and health clubs of workers paid physicians by a capitation system (i.e., so much per year for each member, who would then be

attended if someone would become ill). The capitation system thus stipulates the person served, rather than the medical act (*per capita*) as the unit of remuneration.

In the 1910s in the UK, under the British National Health Insurance, local communities were asked to decide their own choice of method of payment; many soon changed from fee-for-service to capitation as the latter was found to be much less troublesome.

Theory has it that under the capitation system:

- 1) doctors may make excessive referrals,
- 2) the method induces a preventive point of view in the general practitioners, since he earns no more if illness occurs and (s)he has to treat it,
- 3) administrative procedures are simpler,
- 4) the volume of services rendered is immaterial, and the general practitioner's income is dependent on the proportion of patients who choose to be on his list (thus, it is the population rather than the physician that ultimately determines professional incomes),
- 5) among physicians, capitation serves as a kind of buffer against sharp competition,
- 6) a list establishes some kind of implicit relationships not only with users but also with non-users (which gives an opportunity to reverse the inverse care law, by proactive contacts with non-users), and
- 8) because capitation is linked to a patient list with a cap, it is associated to a more even geographical distribution of general practitioners.

The general practitioner has the economic inducement of wanting to keep a maximum number of persons in his list, and patients' dissatisfaction can reduce this number if they leave to register with another general practitioner.

European countries regulate the maximum number of persons in GP's list in different ways. In the Netherlands, general practitioners receive from the sick funds the full tariff for 1,600 publicly insured patients on their list, and a lower tariff for those exceeding this number, up to a maximum. General practitioners may select low-risk patient, or actively discourage high-risk patients, but in many countries, e.g. Spain, the fee is adjusted upwards by social deprivation, age (0-1, and > 65 years), and geographical isolation.

General practitioners capitation payments are not to be confused with capitation payments made to health care organizations as HMO in the USA and Switzerland, and former fund-holders in the UK. The fact that there is some sort of capitation contract between an insurer and an HMO does not mean that the physicians are remunerated in the same way.

Capitation is the way of payment (always in the context of a mixed system, as it was explained) in Denmark, Ireland (low class), Italy, the Netherlands, Spain (around 10% of total earnings), and the UK. In the Nordic countries Finland, Norway and Sweden there is an experimental Personal Doctor Program going on, which pays on per capita bases. Also in Belgium a capitation system to pay general practitioners of the *Maison Médicales* has been developed on an experimental basis. General practitioners are self-employed (independent contractors) in all capitation countries, except in Spain (18).

Capitation means patient list and gate keeping. The aim of gate keeping, as repeatedly explained, is more concerned with efficiency by avoiding un-necessary and expensive specialist treatment, whereas the aim of patient registration is more concerned with enhancing continuity of care and general practitioners' responsibility for their patients' files.

Capitation might be used to pay nurses also, as demonstrated by the case of Spain, where nurses have an specific variable financial incentive according to the total number of patients in the lists of the health centre.

Capitation is associated with strong primary care score and with improved population health. In the above mentioned comparison of 18 wealthy OECD countries, UK, Denmark, Spain and the Netherlands are rated as the best (8).

4.3 Salary

The Greek city-states, as well as the Medieval cities, paid salaries to designated general practitioners for taking care of the poor. Physicians attached to feudal manors and to armies (public or privates) also received salaries.

The salary method is essentially a payment to the doctor for his/her time, regardless of the number of units of service provided or of the number of persons whose health is supervised.

A salary method is invariably associated with some form of organized framework of medical practice, as health centres in PHC. An organization of this kind means some group-discipline and control of autonomy. Most salaried general practitioners have a community responsibility, or at least they have a defined geographical area.

Theory has it that under salary payment the inducement to optimal performance is lodged in the organised framework surrounding the physician, rather than in the financial mechanism *per se*. It is the judgment of the pairs, more than of patients, that counts. At the same time, however, physicians might minimise personal cost (as effort) by:

- 1) selecting low risk patients,
- 2) writing prescriptions,
- 3) making referrals, and
- 4) shortening consultation time.

Some patients might receive superficial attention and inadequate care just because a financial incentive toward maximum service is lacking. The salary system, when the salary is relatively low, might incentive informal payment ("black money", "under the table payment") to secure quicker and improved access to some desired services.

But it is important to note also that a salaried PHC permits the professionals to undertake post-graduate studies periodically. At the same time, the young professional can be supervised by more experienced colleagues and can be adjusted to the level of his/her capacity. These factors contribute to advancing the quality of care.

As for its administrative implications, the salary system is manifestly simpler than any other. Geographical distribution of professionals is usually a matter of more or less central planning.

General practitioners are paid by salary in European countries where the State have dominant and comprehensive roles in the health system, both in funding and providing services. The main examples are Finland, Greece (rural general practitioners in health centres), Iceland, Norway (as city employees), Portugal, Spain and Sweden. The salary payment method is compatible with patient list and gate keeping as in Iceland, Portugal and Spain.

Salary is more beset with controversy than any other way of payment. Many professionals see it as “socialized medicine”, as part of the “Semashko system” in place in communist countries for decades, tainted with low quality care and poor working conditions. But physicians are salaried in medical schools, hospitals, and teaching medical centres which offer excellent quality of medical care in Western Europe and elsewhere. This clearly shows that it is not the salary form *per se*, but the organized framework of regulation and incentives surrounding the physician what matters.

4.4 Fee-for-service

After the industrial revolution and while the rise of the bourgeoisie and the cities was taking place, physicians broke their attachment with feudal manors and occupational guilds and set up shops as private entrepreneurs. They thus offered their professional services to anyone who could buy them, and for each service they charged a fee. In doing so, the fee-for-service system became firmly rooted in the capitalist society, at least for the treatment of patients at home or in the physician’s office.

Theory has it that under fee-for-service payment, there is an incentive to deliver more care in order to inflate the output. This can lead to supplier induced demand (excessive and unnecessary diagnosis and treatment), where the patient receives more care than they would have chosen if they had the required knowledge. Physicians might induce demand when

- 1) there is scientific uncertainty,
- 2) physicians have low workload,
- 3) competition is increasing, and
- 4) fees decrease its monetary value.

Induced demand could lead to excessive referral and “trafficking in patients” when kickbacks exit, but the common problem is a too low referral rate, when physicians do not want to “lose” patients.

The fee-for-service method of paying for medical care is associated with greater freedom and autonomy for the doctor. But autonomy might disappear (for good or bad) with any way of payment, even fee-for-service, as the USA industrial model of general practice demonstrates. In HMOs doctors act within a clear management framework and management control is exercised over a whole range of care. Procedures are codified;

standards are set in relation to criteria for hospital admission and the use of ambulance services; and protocols and guidelines are devised for the management of common disorders such as hypertension. Styles of communication, with patients and colleagues may be monitored.

Fee-for-service fits with Osler' paradigm of seeing the physicians' main task to respond to the complaint of individual patients. There is no implicit relationship with non-users, or with population. General practitioners tend to provide more services themselves and consequently have more patient contacts and longer working days. The practice will be organised, staffed and equipped in such a way as to cope with the range and complexity of services, which implies more use of technology.

Fee-for-service is associated with weak informal policy power of general practitioners, low primary care score (see ranking above) and not improved population health in correspondence; in a comparison of 18 wealthy OECD countries, Germany, Switzerland and France were the worse (8).

The fee often depends on the type of service, and is stipulated in a published fee-schedule. Given its inflationary character, fees may have a relative value:

- 1) pro-rating general practitioners' bills (more items of the same service, less value), and
- 2) capping the global budget and giving in the fee-schedule a number of "units" to each fee (at the end of the period considered, the unit means a monetary value according to total number of units), as in Germany.

But this relative value system makes fee-for-service administratively even more cumbersome (and expensive).

No doubt, fee-for-service is popular among physicians under the claim that it fosters a good personal relationship between the doctor and the patient [one may be surprised that physicians should so often claim these interpersonal advantages for the fee-for-system, as it to imply that attitudes toward patients would be less considerate if they were not enforced by an earmarked fee!].

General practitioners are paid fee-for-service in European countries with a "Bismarck system", as Austria, Belgium, France, Germany, Ireland (middle and upper classes), Luxembourg, and Switzerland. As already explained, general practitioners do not have gate keeping role in those countries, and patients can go directly to visit specialists (sometimes with costly cost-sharing when patients by-pass general practice, as for example in Belgium, from 2004).

Fee-for-service does incentive uneven distribution of general practitioners, as physicians are reluctant to establish themselves in areas of low population density.

In a public reimbursement model (fee-for-service system where patients pay directly doctors according to the services rendered) the fees are later on reimbursed by the health system, often with cost-sharing. Countries with a public reimbursement model are Andorra, Belgium, France, and Luxembourg. Under fee-for-service payment in a public reimbursement model physicians are paid in cash and "doctors follow [rich] patients".

For example, in France approximately one third of all doctors practise in the Paris region, another third in the Côte d'Ázur-Provence, while the rest of the country contains the remaining third (18).

4.5 Incentives

“Most policy changes in the area of payment systems are inadequately informed by research. Future changes in general practitioners’ payment systems need to be rigorously evaluated” is the systematic conclusion of all revisions of this topic, from 1963 to 2004 (31-36).

The studies reviewed, experimental and observational, did not evaluate the effects of remuneration on:

- 1) patients health outcomes (errors and adverse effects included),
- 2) population health (avoidable morbidity and mortality),
- 3) access to care by population sub-groups differentiated by their level of need (inverse care law),
- 4) geographical distribution of general practitioners,
- 5) administrative cost,
- 6) doctor satisfaction,
- 7) informal payments (“black money”, “under the table”),
- 8) “trafficking in patients” (kickbacks), and
- 9) over and under diagnosis and treatment.

From a policy perspective, therefore, the main point to note regarding the literature is that it is not possible to make conclusive recommendations about the optimal remuneration system for general practitioners. As indicated above, fee-for-service seems to result in a higher quantity of services of PHC, compared with capitation, but the evidence of the impact on the quantity of secondary care services is mixed. Fee-for-service results in more patients visits, greater continuity of care, higher compliance with recommended number of visits, but lower satisfaction with access to a physician compared with salary payment.

The evidence of the impact of target payment is also inconclusive. Target payment is a form of fee-for-service for which the general practitioner is remunerated if (s)he reaches a certain target level of service in a defined population. The objective is to control cost and to promote certain important services, as immunization, cervical smear and so on, in specific population sub-groups (35,36).

This is also the problem with the performance-related payments in health care which have been widely extended within the British public sector (in the last 15-20 years), the Irish, Spanish and others health systems in the last decades. Performance-related payment has been introduced for a variety of reasons as:

- 1) to provide incentives to general practitioners (use of protocols and guidelines, to promote interventions of proven efficacy, prescription of generics, control of pharmaceutical cost, to increase home visiting, etc.),
- 2) to improve access,

- 3) to motivate staff,
- 4) to enhance staff recruitment and retention,
- 5) to signal a change in organizational culture,
- 6) to control staff costs,
- 7) to reduce the power of trade unions, and
- 8) to reinforce staff development policies.

But most of the evidence on performance related pay points to it having, at most, only a very modest beneficial impact (35,36). Efforts resulting in some success include making agreements on yearly objectives with the whole team (Spanish health centres) and rewarding them in relation to goal achievement. The way is paved to introduce “outcome” incentives in the future, that is, to promote clinical activities which avoid “avoidable health outcomes” such as:

- 1) ambulatory care sensitive conditions (potentially avoidable hospitalisations), and-or
- 2) avoidable deaths (as, for example, death by tetanus or pneumonia).

Some incentives may have mixed effects. For example, in 1993, a scheme to provide incentives to general practitioners to contain the cost of their prescription to publicly funded patients (low class, capitation) was introduced in Ireland (37). General practitioners were allowed to keep half of any under spending for projects benefiting their patients while the remainder of the saving went to the health authority for PHC development. There were no penalties for overspending the indicative budget. A survey in late 1990s demonstrated that general practitioners supported the scheme, pharmacists opposed it, and patients were unaware of the scheme but seemed to have suffered no harm as a result. This aspect has never been fully addressed in any study about impact of incentives for doctors around prescribing. In fact, evidence suggests that the results of purely financially focused incentives may be perverse to good patient care.

There is anecdotal evidence of some success with the use of incentives. In 1964, in the UK, specific payment for group practice, for improvement of premises, and for ancillary staff led to dramatic changes in British general practice which produced the structure of primary care that exists today (27). In Norway, general practitioners who were remunerated under a system that gave them 30 euros for home visits were more likely to do routine home visits than other doctors who were paid 6 euros for such a visit. However, in this example it was not clear whether patients gained much from increased home visiting.

Part of the differences found in observational studies on the impact of payment mechanisms and incentives could be due to a selection effect, as salaried physicians prefer shorter working hours and prefer to work less intensively. Physician payment systems affect the trade-off between leisure-time and work. Female and younger general practitioners value family life and leisure-time more highly than the rest. This was the case, for example, in Norway, in 1990, where there were two main types of general practitioners: local government employees remunerated by salary and independent contractors mostly paid by fee-for-service. In this case, the change from salary to fee-for-service would increase service production by 20-40%. At the same time, working part-time, or salaried, could be an incentive to some general practitioners.

Only where there are health centres or group practices it is possible to use group incentives. In Spain there are group incentives in health centres for the whole team (global and per professional groups), to spread over more than just a general practitioner the risks associated with costs control (including prescription costs), and to encourage mutual monitoring among physicians and nurses. In such a setting, this monitoring is effective because professionals have better information about each other's practice patterns than health managers do.

Privatisation of PHC in Croatia (general practitioners changed from salary payment and public employees status to capitation payment and independent contractors status) was associated to accessibility improvements (appointments at precise times, scheduled visits by telephone, telephone advice outside working hours) (38). However, we know nothing about the access by population sub-group, or the impact on patients' health of those changes.

Incentives can also have a professional character. For example, in Portugal where there are many "obstacles" to be overcome from the bottom to the top of the ladder, and few rewards, a scheme exists which provides professional incentives as a career. In Portugal and Spain, the most popular incentive used by managers has been the opportunity for professionals to take part in important management decisions and health service planning.

Finally, there is also some experience with punitive approaches to incentives ("negative incentives"). In Germany, a scheme that penalised doctors for overspending a national drug budget resulted in a decrease in drug costs by 25% but it may have resulted in an increase in hospital admissions and referrals. In France, punitive incentives have been designed against prescribing outside recommended guidelines. While most of the examination of the guidelines has looked at compliance and there is provision to examining their clinical effects, the results of the study have not yet been reported.

Incentives may be also used to promote self-care because self-care (personal and familiar) is the basic level of care. For example, financial support for families caring for a chronically ill patient at home (home care) is provided in Germany.

Summary

Little is known of the effects on the costs and outcomes of care of different modes of remunerating general practitioners. The studies reviewed did not evaluate the effects of remuneration on patients' health status and were characterised by the omission of major confounding variables. This makes it inadequate to generalise results to other settings. Sadly enough, however, most ongoing policy changes in the area of payment systems are inadequately informed by research.

The three main methods of remunerating (capitation, salary and fee-for-service) general practitioners are hypothesised to provide very different incentives.

5. CONCLUSIONS

There are no best models ready to be copied in the field of PHC. The (limited) European best models of PHC analysed in this text might help in understanding basic questions,

such as the difficulties in breaking the negative circle of weak general practice, and the importance of gate keeping. But there is not enough information “to sell” any package of health policy rules which ends in a “perfect” PHC system. Each country should follow its way, according to its history, culture, wealth and socio-political circumstances.

The review of the European experience allows us to suggest that:

1. In the EU, PHC is the base of the health care services. But the science base of PHC is poor, in terms of the cost-effectiveness evidence of competing alternatives.
2. General practitioners are key professionals in PHC, with better reputation and strong policy power compared with others professionals. Nurses, managers, pharmacists and other non-physician professionals have weak informal policy power, which shows the importance of trust and reputation.
3. Little is known about the impact of different ways of practice organization, different ways of payment, and different workforce arrangements. General practitioners need a minimum workload to maintain knowledge and skills. In some areas, substituting nurses for general practitioners has shown to produce equal or better health outcomes.
4. General practitioners, in comparison with other specialists, take care of many diseases without loss of quality, and often at lower cost. The very high negative predictive value of general practitioners gives scientific justification to gate keeping (as it allows “to filter” the population who contact with the specialists). Specialists in turn have very high positive predictive value when working in conditions of high prevalence of disease.
5. Informal policy power is in the hands of six main collective actors or stakeholders: government authorities, insurers, professionals, patients, teaching and research institutions, and the health industry. The main sources of informal policy power are: ownership and financial resources, knowledge and information resources, and social and political support. Actors’ interactions might change health policy in two ways: by modifying the rules of interactions and by allocating and redistributing resources.
6. There are four EU countries where general practice is strong and have a positive circle of high social esteem, enough earnings, high self-respect, good education and research, and cooperation with specialists: in alphabetical order, Denmark, the Netherlands, Spain and the UK. In spite of many other considerations (see below, point 11), we have considered these countries as best practice models.
7. Governments in the above four countries have been pro-active during decades, supporting PHC with rules and resources. They promote general practice in eight main ways: a) limiting access to specialists care and providing the general practitioners with the role of gate-keepers, b) promoting pro-coordination reforms to emphasize basic characteristics of PHC, such as coordination, continuity and comprehensiveness, c) allocating enough financial and material resources, which gives PHC professionals the opportunity of answering more common problems as

chronic diseases and co-morbidity (and solving more than 90% of total patients health problems entirely within PHC), d) establishing capitation as the way of payment (plus allowances and target incentives) and patient list as an opportunity to work with the community, e) promoting reforms aimed at broadening the PHC portfolio, f) shifting the balance to promote decentralization decisions and professional networking, g) establishing *numerus clausus* and mandatory vocational training, and h) promoting the production and dissemination of knowledge.

8. Associations of general practitioners in Europe are well established and have supported governments initiatives (in some cases have forced it) thinking not only in professionals and earnings improvement, but in the health of the population. Gate keeping is a monopoly with cannot survive without efficient services of high scientific, technical and human quality in general practice. General practitioners must therefore accept the responsibility for making the initial decision on every problem with which a patient presents him or herself. Having the same or better earnings than specialists demands scientific development of the knowledge and experience which are specific for general practice.

9. General practitioners associations in the above mentioned four countries have strong informal policy power and high salience of reputation mainly because of twelve reasons: a) professional autonomy, b) scientific answer in daily practice to the challenge of having the monopoly of first contact, c) multidisciplinary groups, d) expanded task policy, e) knowledge production (research), f) information control (with the use of low and high technology), g) impact in controlling national health costs, h) contribution to reverse the inverse care law, i) satisfaction of the population, j) lobbying not only for earnings issues (deontology), k) promoting local self-coordination steered by general practitioners through network-like arrangements and l) developing a system of continuing medical education and promoting re-accreditation.

10. Research is a source of informal policy power, as it increases the knowledge and information resources. In countries with best practice models, general practice research is well developed, with support of universities and research institutes. National and international organizations, public and private, have helped in research activities through funding and production of basic tools, as classifications.

11. The four countries with strong PHC and which can be considered best practice models have important problems. In general, there is poor coordination with hospitals and the social sector, and underdeveloped answers to the co-morbidity challenge. There are also specific problems, as very weak relationships between community care and general practice in the Netherlands and the UK or the fact that paediatricians work as general practitioners for those under 14 years in Spain, among others. The UK is in fact involved again with major reform proposals which intend to foster efficiency in PHC by means of “constructive discomfort” (39).

12. General practice is pro-poor health care in many European countries. European upper classes seem to prefer specialists care (rich people see a specialist more often than expected on the basis of health need). Specialists care is pro-rich specially in Ireland and Portugal. Not much is known about the reasons behind this social

behaviour but understanding the question is critical not to lose one important source of informal policy power: social and political support.

Again, there are no best models ready to be copied in the field of PHC. Having said that, common sense indicates that it is better to consider the example of countries which have solved most of their basic problems and have a socially strong PHC, than considering countries which have a weak PHC (except for learning the consequences of wrong decisions).

The above 12 conclusions draw a map in which general practitioners are central to PHC, and PHC is central to developing a balanced health system. Governments and professional associations might contribute to a strong PHC system in different ways, with support from universities and research institutes, insurers, patients and the health industry. However, it must be stressed again that not enough is known about many critical questions in developing PHC.

This leads us to conclude that final decisions in any country should not follow a simple recipe from anywhere. It is up to the main actors and stakeholders to make their decisions with extreme care.

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