The Role of General Practice in Primary Health Care

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Foreword

Almost 20 years have passed since the Alma-Ata Declaration placed primary health care at the top of the health policy agenda. Since then, the significance of primary health care has been reaffirmed in practice, in various ways: some countries have taken major steps to strengthen it, and some have based their health policies entirely on its principles. In another group of countries, probably the most numerous, continuous small-scale changes in the health systems have gradually increased the role of primary health care.

In Europe, the will to strengthen primary health care was reaffirmed in 1984, when the WHO Regional Committee for Europe adopted 38 targets for Health For All as the basis for the health policy of the Region – both for the WHO Regional Office and, most importantly, for the Member States themselves. The targets clearly state how primary health care should be used as a key reference for health and health systems development and Target 28 focuses on primary health care itself. In formulating this policy, WHO provided a framework that could be adapted to suit the needs of each country.

Indeed, one of the strengths of primary health care is that the concept can be adapted to different circumstances. Thus, in Europe, it has been more or less identified with the provision of diagnostic and curative services, often combined with disease prevention and sometimes complemented by health promotion and rehabilitation. Within this context, general practice – or family medicine, as it is referred to in several countries – has been the core professional discipline involved in the delivery of primary health care, often providing the backbone of services around which primary health care has developed. Of course, to recognize the key role of general practitioners in the provision of primary health care does not mean to underestimate the role and functions of nurses, social workers and other health professionals who make a valuable contribution to primary health care.

This book presents a very clear picture of the role and functions of general practice in 30 Member States of the WHO European Region. It shows the common features that underscore general practice in countries where differences in history, culture and political developments might have led to divergences in the development of the specialty. It shows that, albeit at different paces, in almost all the countries studied, general practice (or family medicine) is emerging from being a field of medicine practised by professionals with little specific training, to become a discipline with its own distinctive features, area of professional practice and corpus of knowledge. General practice is taking its rightful place as one of the major medical specialties. Of course, the specific characteristics of general practice vary from one country to another. Nevertheless, one of the major conclusions of the survey on which this book is based is that these variations concern the organization, working methods and functions of general practice, rather than the core content and key concepts of the specialty. Further, although certain patterns can be discerned that relate to the historical development of general practice in the countries surveyed, the variations observed often cut across the historical, political and cultural differences that characterize these countries.

The shared view of general practice that is illustrated in this book has led the WHO Regional Office for Europe to draft a framework for general practice/family medicine in Europe. This document develops the principles and characteristics of general practice, providing a framework within which individual countries can formulate their own policies. It also outlines the structural conditions, the organizational improvements and the professional development that are required for general practice to advance. It is designed to apply equally to those countries where general practice is at an early stage of development as a separate discipline and to those with long-established systems that need to be strengthened. The present book illustrates how many of these principles find their application in practice.

When reviewing the present state of general practice, one inevitably looks ahead, especially in the wake of the major health care reforms witnessed throughout the European Region in the

1990s. These were extensively discussed at the WHO Conference on European Health Care Reforms, held in Ljubljana on 17–19 June 1996. One of the conclusions of the discussions was that primary health care remains high on the agenda of health policy. It may even have received a new impetus, because one of the basic principles of the Ljubljana Charter on Reforming Health Care, adopted at the end of the conference, was that reforms should be oriented towards primary health care.

Of course, the reasons for the renewed interest in primary health care and in general practice are varied. In some instances, they are seen as a means of cost-containment, or as the field where privatization is easiest to apply. Other factors, such as the advances in both medical and information technology, reinforce the trend. Whatever the reasons, general practice must respond to these new circumstances in ways that are consistent with its best traditions of respecting human dignity, of being sensitive to the need for equity and of ensuring services of high quality.

We in the WHO Regional Office for Europe believe that this book will provide the evidence and the analysis that health professionals and policy-makers who are involved in health care reform, and in particular in the development of general practice, require in order to make informed decisions.

J.E. Asvall

WHO Regional Director for Europe

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Introduction

The development of a framework for general practice in Europe is part of a comprehensive process aimed at increasing awareness of the role of general practice in promoting population health. There have been several contributions towards this aim. Meetings have taken place under the auspices of the World Health Organization (WHO) Regional Office for Europe and have involved contributions from five WHO collaborating centres for primary health care, the International Society of General Practitioners (SIMG), the World Organization of National Colleges, Academies and Academic Associations of General Practitioners/Family Physicians (WONCA) and the Netherlands Institute of Primary Health Care (NIVEL). The most recent framework proposals are published here (Annex 1), but the main purpose of the book is to highlight those elements which we consider essential for any charter for general practice, a term which tends to be used almost synonymously with primary health care.

The book is directed as much towards health administrators and social scientists as towards the medical profession. It aims to encourage health reformers by describing the role of the general practitioner in a variety of health care settings. Whilst no one imagines all the best (or all the worst) features can be found in any one country or national health care system, it is important for reformers to appreciate the good and bad features in each of them. The notion of a framework is very much concerned with building on success and is a natural development of the Health For All policy of the WHO Regional Office for Europe.

Scientific and technological advances in medicine, particularly over the past 50 years, have transformed health care from a situation in which one doctor might have cared for almost all the health needs of their patients to one in which a team approach is essential. New specialties continue to emerge and there is constant pressure to specialize in ever-narrowing areas of care. There is no denying the advantages this brings. The prognosis for leukaemia sufferers and for cancer patients generally has been shown to be better when they are treated at the super-specialist level of tertiary care.[1, 2] Super-specialization, however, threatens the cohesion of health care. Unless health care is coordinated, the efforts of experts in narrower areas of care are in danger of fragmentation and disintegration; moreover, duplication of effort reduces cost-effectiveness.

The coordinating function belongs to the general practitioner, who is also known as the family physician. Many efforts have been made to provide a suitable job description but we here quote one of the earliest, which was published by the Royal College of General Practitioners in 1972.[3]

> The general practitioner is a doctor who provides personal, primary and continuing medical care to individuals and families. He may attend his patients in their homes, in his consulting-room or sometimes in hospital. He accepts the responsibility for making an initial decision on every problem his patient may present to him, consulting with specialists when he thinks it appropriate to do so. He will usually work in a group with other general practitioners, from premises that are built or modified for the purpose, with the help of paramedical colleagues, adequate secretarial staff and all the equipment which is necessary. Even if he is in single-handed practice, he will work in a team and delegate when necessary. His diagnoses will be composed in physical, psychological and social terms. He will intervene educationally, preventively and therapeutically to promote his patient's health.

Though not necessarily applicable in all countries, the elements of this job description appear and reappear throughout the European Union of General Practitioners (UEMO) consensus document on specific training for general practice.[4] The central position of the general practitioner has been reinforced by the Framework for Professional and Administrative Development of General Practice/Family Medicine in Europe formulated under the auspices of the WHO Regional Office for Europe. It has been further strengthened in the report of the WHO–WONCA conference in Ontario (November 1994)[5] which contains the following as an executive summary:

> To meet people's needs, fundamental changes must occur in the health care system, in the medical profes-

> sion, and in medical schools and other educational institutions. The family doctor (general practitioner/family physician) should have a central role in the achievement of quality, cost effectiveness, and equity in health care systems. To fulfil this responsibility, the family doctor must be highly competent in patient care and must integrate individual and community health care. The cooperation between the World Health Organization (WHO) and the World Organization of Family Doctors (WONCA) towards this vision is historic.

The object of this book is to elaborate on the characteristics of general practice and to consider the current situation in European countries. In some, the biomedical model of medical care enunciated in 1910 by Flexner[6] still prevails and the broader model of a biopsychosocial concept of illness has not progressed: in these countries, the growth of general practice is stunted. Emphasis on the biomedical model and the high-technology specialist approach in medical schools is one of the reasons that has prompted Stimmel[7] to describe primary care in the United States as being in crisis, with a dearth of physicians. Training, career opportunities, academic recognition and financial reward go together in the development of an acceptable professional environment. Not all these issues are covered in the book though at the outset we stress the importance of them all. Whilst the book aims to be comprehensive in the broad sense of describing general practice, it does not aim to be comprehensive in detail: there is of course an ample literature on all the topics discussed.

The first part of the book deals with the nature of general practice and conditions appropriate for its functioning, which include the administrative framework, training, quality assurance, professional status and finance. The second part presents the results of a survey comparing the tasks and activities of general practitioners in European countries. The third reports on some recent developments and focuses particularly on the methods used to implement change.

Part I

General Practice: Nature and Conditions

Chapter 1 Attributes of General Practice

General practice functions within primary care. Primary care was described at the World Health Organization (WHO) meeting in Alma-Ata (1978)[8] as follows:

> Primary health care is essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination. It forms an integral part both of the country's health system, of which it is the central function and main focus, and of the overall social and economic development of the community. It is the first level of contact of individuals, the family and community with the national health system bringing health care as close as possible to where people live and work, and constitutes the first element of a continuing health care process.

The World Organization of National Colleges, Academies and Academic Associations of General Practitioners/Family Physicians (WONCA) defines a general practitioner as providing comprehensive care to every individual seeking medical care and arranging for other health service personnel to provide services where necessary. The notion of comprehensive care distinguishes the general practitioner from all other health care workers, whether functioning in primary or secondary health care sectors. In the document, published by WONCA in 1991,[9] several requirements for general practitioners are listed and these include:

- ***Comprehensive care*** Not only curative care but includes rehabilitation, prevention and health promotion. It is not limited by gender, by diagnostic category or to one episode of illness and implies continuity over a period of time.
- ***Coordination*** A responsibility to make available to individuals and families the differing resources of health care and a requirement to ensure the integration of general practitioner services within an overall health care system.
- ***Information base*** The clinical and personal details which should be known to the general practitioner.
- ***Accessibility*** General practitioner services are to be accessible and available to patients and other health care workers at all times.
- ***Resource management*** The strategic position of the general practitioner implies a management role in the allocation of health resources.

Starfield's characterization of primary care[10] accords with these principles and she considered these were the elements envisaged in the Alma-Ata Declaration. Pereira Gray[11] drew particular attention to home care. He listed six fundamental features, calling them primary care, domiciliary care, family focus, preventive care, continuity of care and a holistic focus. McWhinney[12] expanded this list and in particular included the concept that the entire practice population, not simply those who consult, should be seen as a population at risk . The view that general practitioners have an even wider community role as well as their primary commitment to the individual patient is prevalent in Sweden. For example, in cases where environmental conditions are a significant factor, the employment situation and the dangers of pollution are drawn into the orbit of the general practitioner's activity. Although in most countries these are generally seen to be the province of district community-based physicians (as opposed to personal physicians), this important function is not necessarily separate from general practice. The Dutch National Association of General Practitioners listed features along similar lines to those already mentioned but there was an increased emphasis on the specific responsibility of the general practitioner to secure appropriate help: "As a generalist, the general practitioner first has to clarify the demand for help and subsequently see that appropriate help is offered by himself or other providers."[13]

The role of the general practitioner is given particular attention in the WHO Health For All Targets.[14] The general practitioner, whilst not to be seen as the

only provider of primary care, nevertheless has a particularly important function within it. Two further points were made concerning the implementation of preventive and health care policies by outreach to the community. Target 28 states: "By the year 2000, primary health care in all Member States should meet the basic health needs of the population by providing a wide range of health-promotive, curative, rehabilitative and supportive services and by actively supporting self-help activities of individuals, families and groups." It goes on to argue that this can be achieved by ensuring adequate numbers of appropriately qualified family physicians and nurses for primary health care services. Particular stress is placed on the general practitioner as a focal point in primary care.

In summary, the role of the general practitioner should be to provide health care which is: universally available to all persons; comprehensive; continuous; person centred; holistic in its approach; family focused; coordinated in relation to other health care provision; and established within an appropriate administrative framework.

Chapter 2 The Tasks of General Practitioners

By describing the attributes of practice, it might be said that we have defined the tasks. The theoretical description, however, takes minimal cognizance of the real world and the problems of variation. Variation is a feature of professional independence. Whilst very few would favour loss of independence with medical care dictated exclusively by management protocols, there are also few who view with ease the present variation in medical performance which is evident in almost all branches of medicine. Examples of variation are rates of delivery by Caesarean section,[15] prostatic operations,[16] and rates of referral from primary to secondary care.[17] One aspect of care in general practice which is conducive to variation is that "broad zone of uncertainty in which optimal treatment and the limits of efficacy have not been scientifically established".[18] Within this zone of professional uncertainty, the general practitioner's competence and confidence play important roles. In addition to these factors, collective influences such as the mode of payment of general practitioners may determine professional behaviour. So, in addition to differences between individuals, national differences in health care systems introduce another source of variation. We will return to the issue of variation after first considering the main tasks of general practitioners.

Curative care

The most obvious tasks in general practice are curative. General practitioners are confronted every day with a large variety of complaints and conditions. As a proportion of all consultations reported in the fourth practice-based morbidity survey in England and Wales,[19] acute respiratory infections accounted for 12% and ear disease, neurotic disorders, hypertension, chronic obstructive airways disease, back problems and skin conditions each accounted for between 3% and 4%. Using a different classification of disease, McWhinney[12] listed symptoms presented to family physicians by frequency of presentation. Upper respiratory infections, pains in various sites, and fever and skin rashes were prominent. The ten most frequent conditions in the Dutch survey of morbidity and interventions in general practice were: upper respiratory tract infections, myalgia/fibrositis, cystitis and other urinary infections, acute bronchitis, cough, sinusitis, ear wax, eczema, acute otitis media and gastrointestinal infections.[20]

There is a similarity in all these lists: many of the conditions are self-limiting and require no therapeutic intervention. However, bridging the gap between the patient presenting with a headache, convinced that they have meningitis or a brain haemorrhage, and delivering the appropriate medical advice in the individual circumstances is the art of the general practitioner. It is not always a simple task to bridge this gap and it is here that the skills of inquiry, examination and the deployment of the appropriate investigation techniques are necessary.

Groenewegen et al.[21] described the response to undifferentiated symptoms presented by patients in terms of the number of diagnoses made in the practice (58% of contacts), diagnoses outside the practice (5%), treatment in the practice (59%), drug prescriptions (65%), referral to secondary care (6%) and referrals to other primary care providers (3%). These statistics demonstrate the range of tasks undertaken within general practice, but are given as a rough guide, since individual variations in the structure and process of care give rise to considerable differences. A study of the consultation pattern in Germany[22] disclosed that patients made an average of 13 consultations per year with general practitioners, which compares with approximately 3 in the United Kingdom[19] and 3.3 in the Netherlands.[20] National expenditure on prescribed medicines displays equally wide variations.[23] The interface between primary and secondary care is viewed differently in the various countries of Europe and hence referral rates differ but, surprisingly, the range of variability is similar in all countries.[17] When considering international differences, it is essential to consider differences in the "universality of care" offered by general practice. In some countries, specialists such as gynaecologists, paedi-

atricians, dermatologists and diabetic physicians function within the setting of primary care and therefore comparisons with the activities of truly comprehensive general practitioners are limited.

The financial arrangements for general practice influence the extent to which general practitioners are involved in the provision of care. Highly equipped offices with suitably qualified ancillary workers and general practitioners with sufficient time and appropriate financial reimbursement have the capacity to investigate patients more fully. It is not simply a matter of the competence of individual doctors but also of establishing appropriate incentives to encourage optimal working. The increased effectiveness of highly specialized doctors in certain areas of care has already been referred to in the Introduction. Whilst it is important to encourage the establishment of a good working environment for primary care, this is not to underrate the importance of securing the services of appropriate specialists for the management of relevant diseases. The task for policy-makers lies in establishing the right balance. There is no sound economic argument for taking patients into secondary care who could be looked after equally effectively but more economically in primary care. The working relationships between general practitioners and others in primary care, as also those between general practitioners and their specialist colleagues in secondary care, are important to the successful delivery of care in the community.

Preventive care

The opportunities for preventive care in general practice are enormous. In the period covered by the fourth morbidity survey in England and Wales,[19] 78% of the population consulted with an illness problem or for preventive care. The proportion in the Netherlands is similar.[20] Whilst the proportions vary with age and sex, there is no denying that there are frequent opportunities for the delivery of preventive care. Consultation patterns in many European countries involve greater patient/doctor contact than in those two countries so, at least in Europe, preventive opportunities abound. McWhinney[12] summarized four types of preventive care which could be delivered in general practice:

- routine childhood immunization programmes;
- health education (particularly counselling and lifestyle advice but also, in effect, teaching patients how to manage health problems);
- developmental surveillance (particularly routine paediatric surveillance and antenatal care);
- screening and case-finding (for example, hypertension, mammography and cervical screening); he distinguished between screening as a community-based exercise involving the total population, and case-finding in which general practitioners were responsible for identifying those at risk amongst their own patients.

Opportunities for preventive care are optimized by the existence of a good personal relationship between doctor and patient. In these circumstances, compliance with and respect for the advice of the doctor are enhanced. Preventive services are dependent, however, on good records and established systems of patient registration for medical services with a particular doctor or practice. The act of registration defines the doctor who is responsible for delivery of preventive care: without it, such responsibility does not exist. In many countries, however, the act of registration is seen as a limitation of the freedom of the patient. It is important at any rate that the patient (and also the doctor) is free at any time to change the registration to a different doctor. The patient may request a preventive service from a doctor regardless of registration, but if doctors are to promote health by outreach as envisaged by many authors quoted in the previous chapter, they must know for whom they are responsible. Equally there must be adequate financial arrangements to support a programme of preventive care. If general practitioners are to be effective in organizing the delivery of preventive care, either directly through their own attached staff or indirectly through related health care workers, there must be an appropriate administrative framework. Financial inducements to achieve specified levels of preventive care (referred to as target payments) have been an effective way of achieving high levels of childhood immunization and of cervical cytology uptake in the United Kingdom.[24] Target payments coupled with care for defined populations have encouraged doctors to identify defaulters[25] and to provide suitable education about the value of preventive services.[26]

"Preventive care" and "health promotion" have become popular concepts in the medical world in the 1990s. Appropriate health care and advice to

individuals in the consulting situation might be considered as one end of the spectrum of preventive care; screening is the other. It is worth recalling the ten criteria for screening listed by Wilson:[27]

- the condition screened for should be an important one;
- there should be an acceptable treatment for patients with the disease;
- the facilities for diagnosis and treatment should be available;
- there should be a recognized latent or early symptomatic stage;
- there should be a suitable test or examination;
- the test or examination should be acceptable to the population;
- the natural history of the condition including the development from a latent to a declared disease should be adequately understood;
- there should be an agreed policy on whom to treat as patients;
- the cost of case-finding (including diagnosis and subsequent treatment of patients) should be economically balanced in relation to civil expenditure on medical care as a whole;
- case-finding should be a continual process and not a once-for-all project;

Programmes of health promotion should be based on evidence and doctors must retain a scientific approach when considering the appropriateness of their actions. The Cochrane Centre has been established specifically to foster practice using evidence-based medicine.[28] Prevention can be primary, as in immunization procedures, or secondary, involving proactive intervention to diagnose aberration from the norm at an early stage and preferably before major disease has established itself (cervical cytology is an ideal example). However, the term secondary prevention has been extended to include the development of programmes for early diagnosis, as with mammography. There is also a tertiary level: for example, protection against the risk of a second myocardial infarction by rigorous attention to all relevant risk factors after the first episode of infarction.

Apart from primary or secondary prevention, perhaps the most valuable work at this end of the preventive care spectrum can be described as health education or health promotion. The potential opportunities for doctors to limit tobacco smoking are considerable: by personal example; by active counselling at critical times (such as when providing contraceptive or antenatal care); by the routine recording of smoking habit; by the establishment in their practices of smoking cessation support clinics; and by political lobby. Doctors cannot ignore scientific evidence and the case against tobacco smoking is overwhelming.

The boundaries of health promotion/education are difficult to define. Few doctors would see themselves as responsible for sex education but perhaps it is something which should be considered, as part of their integrated function for primary care services. On balance, it would seem preferable for general practitioners to have an input into programmes of sexual education rather than to be responsible for it.

In some circumstances routine surveillance of the population is a general practitioner responsibility. Examples of this are child health surveillance, antenatal care and routine surveillance of people aged 75 years and over to identify problems of deteriorating function. Laudable as these actions are, it is inappropriate to advocate them unless they are supported with the necessary facilities to deal with the problems identified: for example, hearing aids, home care services and facilities for attending to social needs. The WHO Health For All policy is particularly concerned with the needs of the disabled, the mentally handicapped and the disadvantaged members of society. The primary care team is the appropriate group to deal with them.

Palliative care

"Palliative care is the active total care of patients whose disease is not responsive to curative treatment. Control of pain, of other symptoms, and of psychological, social and spiritual problems is paramount. The goal of palliative care is achievement of the best possible quality of life for patients and their families."[29] The care of patients for whom treatment is essentially palliative is very much the province of the general practitioner. Wherever possible, these patients will be looked after in their own homes with the support of specialist nursing services, such as those widely known in the United Kingdom as Macmillan nurses. General practitioners will usually find themselves heavily involved in management of these patients, especially with

regard to pain relief, though they will often have the support of a specialist colleague. Effective palliative care is enhanced by coordinated family support and it is here that the family doctor has a particular advantage.

Coordination

The general practitioner has a central position in primary care and therefore should make use of appropriate resources of health care and social services for the benefit of patients. This requires coordination and communication. It requires the skill and authority to say "no" as well as to say "yes" to requests received. Lack of coordination may damage the continuity and effectiveness of care, rendering it inefficient and even wasteful. Though the general practitioner will in most cases be the logical choice as coordinator, other members of the health care team may be appropriate in particular circumstances. The community nurse or midwife may be particularly well placed to undertake this role. Individual case management is related to individual patients. The case manager, whether a general practitioner or someone else, must take a comprehensive view and be responsible for setting and reviewing treatment objectives. Coordination implies adequate collaboration between professionals in health care delivery, often including joint consultation. Multidisciplinary team work in primary care can incorporate the activities of community nurses, social workers, physiotherapists, community psychiatric workers and midwives. Ancillary practice staff will also be involved in appropriate areas of practice activity. A fragmented structure of health care, in which the disciplines are separate, hampers coordination. Collaboration is also hindered by professional rivalries and differences in status. Adequate information about the services available both within the normal health care arrangements and from voluntary organizations such as self-care groups is necessary for an effective coordinating function.

Coordination is often assumed to be important because of its role in maximizing concern for the efficient use of health care resources. However, it is equally essential for optimizing the treatment of individual patients. When health care is provided by doctors working in different specialties, there is the danger that the drug regime appropriate to one set of problems will interact unfavourably with that appropriate to another. From time to time it will be necessary for the doctor in a coordinating position to make an arbitrary decision as to which is the more important problem to be treated. If there are to be formal coordinators of care, then they must be given sufficient authority to exercise this function.

Practice management

Tasks directly related to patient care have the highest priority in a practice. Management tasks nevertheless are indispensable in organizing the primary process of care. General practice can be seen as an organization or enterprise with a coherent set of activities directed towards certain goals. Various management tasks have to be carried out in order to keep the organization running smoothly. The following have been identified:[12, 13, 30, 31]

- ***Goal setting*** Goals relate to expectations about the quality of care. For example, patients with acute problems will be seen on the same day; wherever possible patients will be seen by the doctor of their choice; the blood pressure of an adult will be recorded at least every five years; patients with hypertension or diabetes will be seen at specific intervals; etc.
- ***Practice population*** This should be defined. If there is no registration procedure, all the patients who have had contact with the practice during some preceding period can be regarded as comprising the practice population.[32]
- ***Assessment of unmet needs*** There are two types of unmet needs: first, patients may be unaware of certain health needs and second, the general practitioner may not have perceived the need. Needs can be assessed by periodic surveys or by routine surveillance, as for example in the routine surveillance of elderly people.
- ***Evaluation of performance*** Process assessments analysing practice activities[33] and patient satisfaction measures have their place. Equally, proper attention should be given to the patients who complain about services received. The maintenance of the optimal level of skills, competence and performance is the basic purpose of continuing medical education for established practitioners.

- ***Adequate availability and access*** Availability needs to be considered in the context of a twenty-four-hour day and seven-day week. Access to medical services means the ability of a patient to make contact with the doctor and to consult. The difficulties of access for disabled and handicapped patients must be accommodated.
- ***Efficient management of personnel, equipment, premises and administrative infrastructure*** General practitioners often focus on patient care to the detriment of management tasks. Furthermore, many of them have received no training in management. Neglect, however, leads to suboptimal practice organization and, in consequence, suboptimal care.

Community responsibilities

Though most of the general practitioner's tasks are patient-focused, there are some which can be considered as responsibilities to the community generally. A general practitioner is of course required by statute to notify certain infectious diseases, to provide death certificates where appropriate, and generally to act as a certifier of health-related matters. Beyond these statutory requirements, general practitioners should reasonably be expected to be vigilant and conform to national procedures for the detection of adverse drug reactions and to be alert to problems of occupational health risks: for example, occupational asthma.[34] These responsibilities have to be interpreted on the basis of scientific evidence; it is not for the general practitioner to induce alarm without justification.

There are other issues which concern the protection of the community from risks linked to specific situations. Examples are the mentally disturbed who are violent, epileptics who continue to drive and people who have been treated by a general practitioner for injuries that could relate to serious criminal offences. In all these situations, the responsibility of the general practitioner towards the individual, including that of confidentiality, must be weighed against an overlying responsibility to the community.

A wider dimension of community care is addressed within the framework of sentinel practices.[35] Sentinel practice networks, in which general practitioners provide regular information about the incidence of disease, have been established in many European countries. They exist primarily to inform the health authorities in particular, and the public generally, of the spread of epidemic illnesses. A typical use of these networks is in the monitoring of influenza, which involves collaboration between general practitioners and virologists and between countries, for example European countries.[36]

Factors influencing practice performance

Variations in physician performance in general and in the performance of general practitioners in particular have been well documented,[15,16,17,33] but it is important to consider these in the light of the many factors which influence general practitioner activity.

There are variations in the distribution of disease which relate obviously to age, gender, racial group, cultural characteristics and endemicity by region. Less obvious differences relate to social class, tobacco consumption and lifestyle. Individual practice populations comprise different mixes of patients by these characteristics and thus variation in performance is inevitable.

In addition there are variables which relate to the threshold for consultation. This can differ widely between countries: as was mentioned previously, 13 consultations per patient per annum in Germany compared with approximately 3 in the United Kingdom and the Netherlands. Even within a country, large differences exist.

Variations in the health care structure are important. Perhaps the most important concerns physician density and the relative balance between doctors working in primary and secondary care. In a health care system where the general practitioner has the role of gatekeeper to secondary care, the influences on performance differ from those in a system in which patients have direct access to specialists. The proximity and availability of emergency and other health care services in hospitals will also influence general practitioner performance for some types of problem.

Financial considerations exert their effect. On the one hand there is the situation in which patients are not required to pay anything at the time of consultation even if it includes a home visit: the general practitioners are paid by a capitation system (for example in the Netherlands, general practitioners

are paid by capitation for two-thirds of the population) and there are only limited opportunities for item-of-service payments. On the other, as illustrated by the situation in France, patients pay the doctor for the various services received and are reimbursed for the major part by insurance, though the Ministry of Health sets the fees. In Germany, a system of reimbursement exists but the government is not involved in defining the levels of reimbursement and it is the doctor and not the patient who makes the claim on the insurance organization for the items of service rendered. In capitation-based systems, there is an inevitable pressure from the general practitioners to limit services, whereas in systems based on direct reimbursement, there is a financial interest to increase the number of services provided.

Finally there are those differences which seem to relate to the doctor or the practice and not to any of the above features. In a study in which the age, sex and social class of patients were standardized, the referring patterns of general practitioners (organized in practices) were examined in each of the major chapters of the International Classification of Diseases. The study showed that practice referral rates were ranked similarly, regardless of the nature of the illness treated.[37] The conclusion was drawn that the doctor, rather than the patient and their illness, was the major determinant in the decision to refer. Also, when studying referrals, Grol et al.[38] found that the general practitioner's attitude to risk taking was a relevant factor in the decision to refer. Wijkel[39] has shown that general practitioners working in multidisciplinary teams have lower referral rates than those not working in this way.

If variability of performance is to be accepted as an inevitable consequence of professional freedom – and in that context even to be regarded as a virtue – is there any need to try and contain it? The problem is not the fact of variation but the extent of it. In the critical areas of prescribing and of referral, there are some practices which generate more than twice the costs of others.[40] Partly to reduce variability, but also to define an improved quality of care, there is a gradual movement towards management by protocols and the development of professional guidelines for certain aspects of general practice. In the Netherlands, there are now more than 30 of these; examples are the management of sore throat, asthma in childhood, raised blood cholesterol, dementia and diabetes mellitus.[41]

Chapter 3 The Place of General Practice in Health Care Systems

Health care and illness

In 1963 Last[42] described the "iceberg" of health care and drew attention to the large number of people experiencing health problems that did not prompt them to consult a doctor. Most of these were minor self-limiting problems but they serve to emphasize the importance of self-care as part of a health care system. Self-care implies a degree of competence of parents managing the illnesses of their children and of individuals making appropriate health decisions for themselves. Such confidence comes partly from health education passed on from parent to child, partly from a common sense approach to health care in schools and partly from sensible advice delivered by nurses, health visitors and general practitioners when patients do have occasion to consult. The decision to make contact with a general practitioner is not necessarily a consequence of the gravity of the health problem. There are many cultural factors which influence the decision-making process. Demands for health care are dependent partly on the extent of support from the family and from friends etc. They are also influenced by the availability and cost of remedies through the pharmaceutical service, and these differ between countries. There is no common European legislation with regard to the availability of drugs. In some countries, antibiotics may be purchased "over the counter" without a medical prescription.

Once the decision has been taken to consult a professional person about a health problem, it will usually be the general practitioner who is contacted first. Because of the nature of general practice, the problems presented vary widely in their medical and social content. As examples, consecutive consultations could concern a child with acute respiratory infection, an elderly man recovering from a stroke, a young mother with a depressive crisis, a middle-aged man requiring routine management of his diabetes and a young woman with a gynaecological problem. For many of these, the area of care for which help is required is obvious, but there are many situations in which the immediately presenting symptoms mask the critical features of the medical problem. To continue with reference to the examples above, meningitis in a child can masquerade as a simple upper respiratory infection; the presentation of a stroke may be secondary to an underlying lung cancer; the young person with a serious depressive crisis may disclose underlying drug addiction; a simple request for routine diabetic care can be the way a man may approach his doctor with a view to discussing his impotence; a gynaecological problem can be a way of bringing a problem of marital stress to the doctor.

It is the general practitioner's job first of all to clarify not just the presenting problem but all the underlying features relevant to that consultation at that particular time. The importance of clarification should not be underestimated. It is only after this basic exercise that any rational management can be devised; in some cases this would clearly involve other workers in primary care and in others, referral to a specialist. Even after specialist advice has been obtained, the continuing management will rest with the general practitioner, who in the interim may have to be concerned with explaining to the patient the nature of the diagnostic issues, the type of procedures necessary to investigate the problem and the therapeutic alternatives available. Some patients referred to specialists will be involved in further referral. There are now many areas of medicine where a tertiary level of specialism exists, with doctors working in a very narrow band of disease management. Each of these functional levels of care has a corresponding level of administration and for each, there is an optimal population for the purpose. Fry's suggestion[43] is displayed in Figure 3.1.

Health care as a system

In this section we will consider the features of a system which have particular relevance to primary health care:

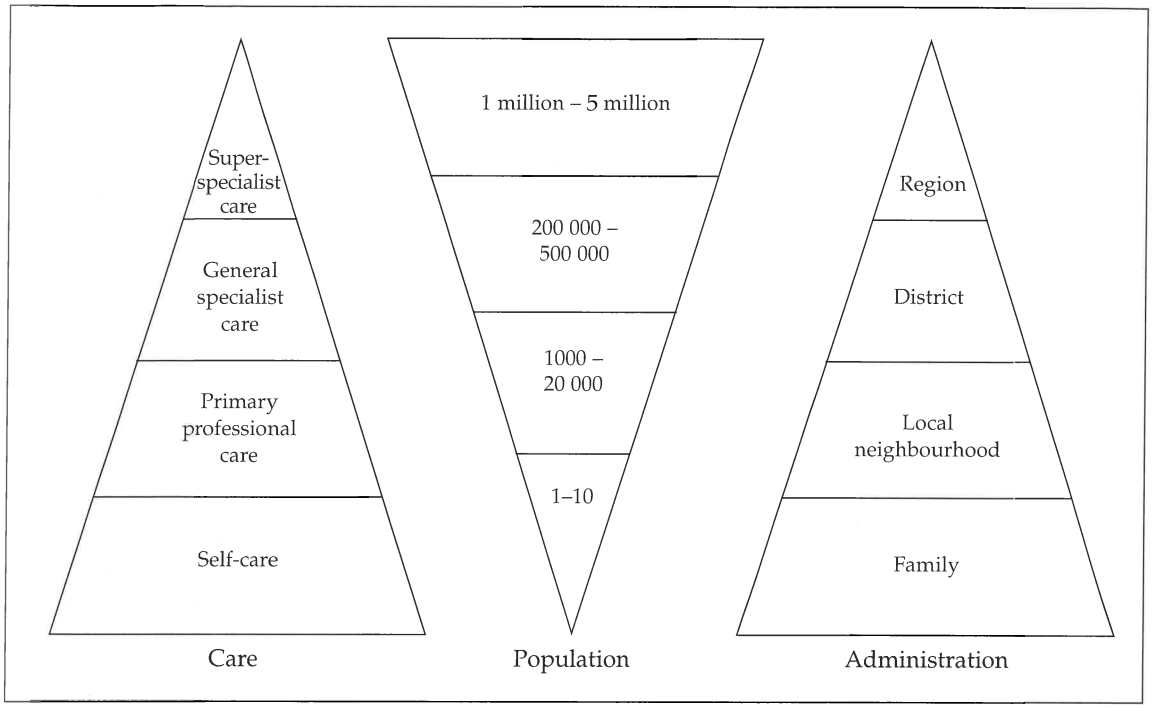

Figure 3.1 Levels of care, population and administration.[43]

1. ***Autonomy***

Although doctors would like the freedom to determine health care policies, they function in a society in which expenditure is determined by governments. Expenditure on health care has grown faster than the average growth of the economy in Europe. This is an unsatisfactory situation and the trend cannot continue indefinitely. Political and economic pressures to reduce expenditure on health care have been resisted in several countries of western Europe by the medical profession, who have enjoyed a degree of professional autonomy not shared by other professional groups such as teachers. In the countries of eastern Europe, the medical profession has not had such a privileged position.

2. ***Division of labour***

A complex system such as that of a health service requires the appropriate deployment of labour resources. Over the last 30 years there has been a very considerable growth in specialists and specialties, at the expense of general practice. As a result, recruitment to general practice represents a serious problem for many countries.[7] An effective system requires the appropriate deployment of human resources and this area has been neglected in several countries. If health care is to be delivered in a cost-effective way, it is necessary to decide:

- how many medical students should be trained each year;
- the level of service required from working doctors (in the general practice context, how many patients we want a general practitioner to care for, which relates to the frequency of consultations;
- the pressures to be imposed on doctors in order for them to practise in less attractive parts of the country;
- the procedures to be introduced in order to effect a rational distribution between doctors working in primary and in secondary care, between those in medicine and in surgery and between those in laboratories and those in administrative roles.

3. ***Shared operational goals***

In an ideal world the goals of an operational system would be defined. However, medical care has become too complex for outcome goals to have gen-

eral applicability. As a result, goals for health care systems tend to be expressed in terms of process rather than outcome. At the minimum, operational goals should be for the benefit of the entire community. People should not be disadvantaged for reasons of poverty, race or adverse circumstances relative to their peers in matters relating to health.

4. *Coherence and coordination*
These are features of an integrated system. There are few countries which can be said to have an integrated system of health care. In some countries, lack of coordination is a challenge to the concept of a system. In France, for example, it is not uncommon for people either to consult secondary care physicians by direct access or to consult them on the basis of advice received from a general practitioner without any communication taking place.[17] This means that there is neither a referral introduction nor a dialogue about the continuing management of the patient which might involve both parties. Professional autonomy when it is in the form of autonomy of individual subgroups is a major obstacle to the rational development of an integrated health service.

Lack of shared operational goals and coordination leads to inefficient use of resources in health care. Patients tend not always to be treated by the most appropriate physician and specialist resources can be used wastefully. Diagnostic procedures and treatments may be duplicated and this in itself is a cause of patient dissatisfaction. The introduction of a coordinating primary care structure focused on general practice is currently regarded as the answer to many national problems for health care systems. If this solution is to be adopted, it is necessary to introduce procedures for patient registration and to establish the authority of the general practitioner as a gatekeeper to secondary care.

The position of general practice

Professional autonomy

Probably the most important prerequisite for general practice is recognition of the discipline by other specialist colleagues. In many countries, the position of the general practitioner alongside other specialists is weak and has been undermined by low esteem, poor education, poor earnings and competition from specialist care.[44] However, general practitioners do not have the automatic right to acceptance, this must be justified on the basis of their activity. Pereira Gray[45] distinguishes four phases in the evolution of general practice as a discipline:

- the recognition that general practitioners possess a separate field of knowledge and that they need an academic body in order to develop it;
- the formation of that body;
- the emergence of a literature describing that knowledge written by those practising the discipline;
- the recognition by others outside the discipline, notably those in other medical disciplines, academic departments and society as a whole (represented by the state).

These four stages can be traced in the experience of general practitioners in the United Kingdom and in the Netherlands. The Royal College of General Practitioners was founded in 1952 but was initially opposed by some of the specialist professional organizations. Critical to the development of the Dutch college was the 'Woudschoten Conference' at which the basic job description of the Dutch general practitioner was drawn up, subsequently becoming one of the foundation statements of the 'Leeuwenhorst Group'.[46] Both colleges created their own scientific journals. The first chair in general practice was established in 1963 in Edinburgh and the second in Utrecht in 1965. Here was the academic recognition of general practice. The publication of scientific articles and books and increased academic activity, with more general practitioners obtaining higher degrees, have enhanced the status of the general practitioner in these two countries.[45–47] In both countries, there are established periods of postgraduate vocational training in general practice, arrangements for proper programmes of continuing education, and associations for defending the interests of general practitioners.

Protected position

If general practice is to flourish, it is essential that the relationship between general practitioners and specialists is understood and respected by both parties. It is unrealistic for the health care system to expect general practitioners to act as coordinators, if at the same time, it permits specialists to compete with them by providing opportunities for direct access. The gatekeeper role therefore is not only

important for economic reasons but is also critical to the success of general practice as a major form of health care delivery.

A gatekeeper role can be established in many ways. The first is by observance of the convention of referral from primary to secondary care; this arrangement exists very effectively in both the United Kingdom and the Netherlands where it is totally observed within their respective national health services and largely observed in the sphere of private practice. In Denmark and Spain this convention is also observed though a limited number of specialties can be approached by direct access. At the opposite extreme, in Belgium and France, patients may consult any specialist directly.

Referral from primary care to secondary care has a reverse face, that of referral from secondary back to primary care. If no referral occurred in the first place, there is no option to refer back for continuing care. In some health care systems (Canada for example), insurance reimbursement of health care costs are higher for the specialist if the patient has first been referred by a general practitioner.

A further aspect of successful general practice is the need to minimize "shopping around". Where patients can present demands linked to an implicit threat that they will take their custom elsewhere if these are not met, there is an unacceptable pressure on the general practitioner to conform. As an example, good medical advice may involve denial of a patient's request for hypnotics (sleeping tablets); however, if the doctor's income depends on "pleasing the patient", an unacceptable conflict is readily created. Systems of patient registration are necessary to restrict the conflict, though opportunities for patients to change their general practitioner must be in place. Frequent change, however, counteracts the principle of continuity of care. General practice exists at a crossroads as described by van Es[31] and presented in Figure 3.2. If general practitioners are to control the traffic along these roads, their control of the crossroads and the elimination of the bypass routes is essential.

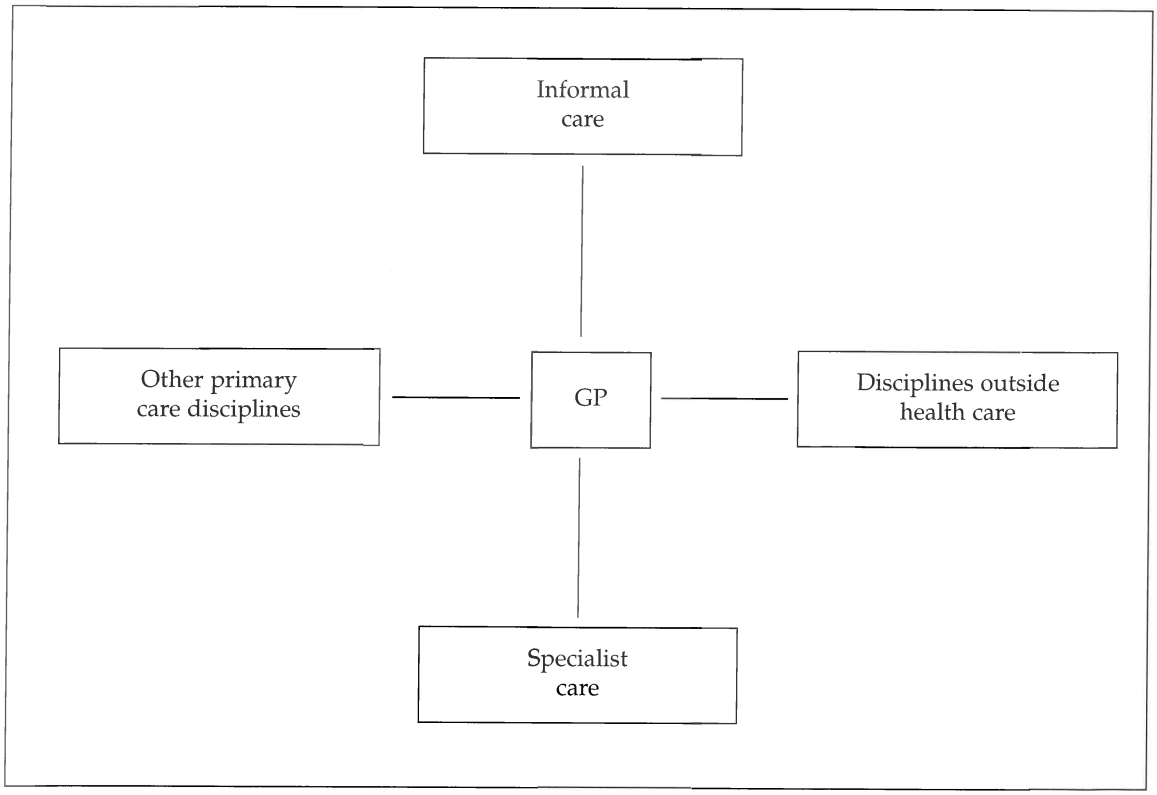

Figure 3.2 General practice at the crossroads.[31]

Chapter 4 The Working Environment of the General Practitioner

In this chapter we shall consider first the working relationships with professional colleagues, then the working conditions and organization of practices.

Teamwork in primary care

The importance of teamwork has already been discussed. The conditions which promote effective teamwork depend primarily on good working relationships between team members. These relationships start with respect for each other's professional position. General practitioners have a set of skills in which they are the specialist par excellence but they are involved in the delivery of care to people who in many cases require the expertise of others. It is essential that the general practitioner appreciates their expertise. It is also necessary for all members of the team to appreciate those circumstances in which individual professional freedom has to be subjugated to corporate wisdom. There needs to be respect not only for authority, but also for the position of decision-maker.

Teamwork has become increasingly important with the increase in specialization. Advances in medical technology will increase the need for super-specialization but will also increase the importance of team care and coordination of health care efforts. The composition and working conditions of the team are important. The size of the team and distribution of skills must reflect the needs of the population served. A young population with a high birth rate will require relatively more midwives and health care workers, whereas an elderly population may call for more physiotherapists and home carers.

The importance of communication skills between general practitioner and patient have been mentioned and will be discussed further but here it is necessary to emphasize the importance of communication between members of the primary care team. Boerma[48] and Marsh[49] identify a range of opportunities for meetings between team members. These include routine morning meetings for the immediate problem of time management for the day in question; monthly meetings where consensus policies can be developed; clinical meetings; reception staff meetings, perhaps over lunch; and meetings covering the business and organization of the practice.

If teamwork is to be effective, there need to be boundaries of responsibility. A formula which includes a fixed registered list of patients for the general practitioner, a local area base for the district nurses who may be answerable to a district community physician, and a hospital catchment area for a community psychiatric worker answerable to a specialist psychiatrist, represents disaster for teamwork. There needs to be a clear commitment to structuring primary care.[50] This will be an impossible task if the chain of command and responsibility goes back to a miscellaneous group of individuals who are independent of each other. The coordinator (or team leader) needs sufficient authority to function effectively. There is a particular problem in a situation where some members of the team operate as independent contractors and others are salaried.

The optimal size of the health care team has not been determined. In the United Kingdom there has been a considerable increase in partnership size since the establishment of the National Health Service in 1948. In 1990 three-quarters of the population were registered in practices with three or more general practitioners working in partnership. By 1990 the number of solo practices had fallen to 40% of the 1952 total and the number of two-doctor partnerships to 75%. In contrast, there were twenty times as many large practices of five or six general practitioners. Group practice has been financially encouraged in the United Kingdom and many feel that the position of general practice has been much strengthened by the establishment of group practice. One drawback of large practices is the necessarily large size of the associated primary care team. Teams have to contain a sufficient range of skills but they can become too big.[51] A tendency to work in groups is also evident in the Netherlands though here there are still many

general practitioners working in solo practice. In France and Belgium, solo practice is usual.

Links with specialists

It is first necessary to distinguish between primary and secondary care and between ambulatory and hospital care. The clearest distinction of primary from secondary care relates to access. Direct access by the patient is applicable only to primary care; secondary care involves referral from primary care. Ambulatory care can apply to both primary and secondary care. Specialists in some countries (for example, Germany) sometimes work in both primary and ambulatory care but not in secondary care. In many countries, specialists in secondary care are hospital-based. Having set the boundaries between primary and secondary care, there also needs to be an institutional procedure whereby formal relations can be established between the two. This of course is not a substitute for the less formal local relationships.

Models of access and the gatekeeping role

The professional relationship between the general practitioner and specialist is dependent on the access arrangements to specialists. There are four ways in which access from primary to secondary care can be described in relation to the gatekeeper or controller over access to secondary care. There is firstly the situation in which there is exclusive general practitioner control and this applies in both the national health systems and in private medicine. This model is generally applicable in Denmark, Italy, the Netherlands and United Kingdom. There is secondly the situation in which access to secondary care is controlled from primary care but the authority to refer is vested in several primary care workers; not only the general practitioner but, for example, also community paediatricians, community gynaecologists, midwives etc. This model exists in Spain. In the third model, control is exercised by hospital admission officers. Such an arrangement exists in Germany. In this situation the admitting officer is concerned to establish patient flow to an appropriate specialist within the hospital. There is no sense of coordination of primary care and indeed, patients may have independent access to ambulatory care specialists. In the fourth model there is no control at all.

For practical purposes a gatekeeper role is operational in the first and second of these models and it is only in these that the general practitioner can give any form of health care coordination or continuity of care. Methods of access have implications for the workload and for the case-mix of patients treated, whether by general practitioners or specialists, and these impinge on health care costs; on administrative arrangements in the health service; and on the type of communication that exists between the doctors supplying health care to individual patients.

Case-mix of patients

In situations of direct access, specialists working in well defined specialties such as paediatrics, gynaecology or ophthalmology will see an assorted group of patients whose problems are obviously related to the specialties concerned. Access by referral from primary care will have followed some preliminary assessment, resulting in only some patients being referred. This group will include those who are more seriously ill and those who perhaps pressurized their doctors in primary care to such an extent that the latter initiated referral in order to gain reassurance either for themselves or for the patient. Competence is therefore important in the determination of referral. In some circumstances, remuneration will influence the referral process. A general practitioner who obtains a fee for a specific service is less likely to refer the patient for someone else to provide that service. Under a capitation payment system or salary, it can be in the general practitioner's interest to refer patients on to specialists, since this action can be regarded as a security in the event of patient dissatisfaction or litigation. In those circumstances where referrals are costed against a practice (as in the United Kingdom's practice fundholding arrangements), there is pressure to refer only when there is good reason.

Health care costs

In general, health care costs less in the primary than in the secondary care sector. This is mainly due to the increased overheads in hospitals relative to those in health centres or practices. It is sensible therefore to control access to secondary care by means of a referral system. Financial considerations should not be seen as the major or the only issue. The deployment of resources, especially those of medical personnel in the different specialties, the basic competence of the general practitioner and the health care expectations of the public who pay for the services, must all be considered.

Administration

Administrative machinery exists to control patient flow, to manage record systems and to deploy resources. Another part of the administrative function is to monitor current practice. In circumstances where the health care system requires there to be a logical flow from primary to secondary care, the administrative procedure must ensure there is no bypassing of the accepted method.

Communication with specialists

Controlled access from primary care enhances communication: It entails firstly communicating in order to establish the referral and secondly communicating the result of the referral. There is always the potential on the one hand for making an unnecessary referral, perhaps over-medicalizing a situation[52] and on the other hand for failing to refer, resulting in delay in treatment. Since we should all be willing to learn by our experience, it is desirable that a referral letter contains the following elements:[31] analysis of the problems and presenting complaints; previous medical history; relevant social and occupational conditions; purpose of referral.

Links with hospitals

Hospital admission rights for general practitioners are uncommon in Europe. If general practitioners are to use hospital facilities effectively, they will need appropriate and specific training. In the United States for example, general practitioners commonly manage patients on coronary care units and undertake surgical procedures such as appendicectomy. In the United Kingdom, a few general practitioners have hospital admission facilities, mainly to what used to be called "cottage hospitals". These were small general hospitals primarily in rural locations and commonly providing geriatric and non-intensive medical care. In Finland and Croatia, some of the larger health centres have facilities for admitting patients to small wards.

Tarrant[53] and Schattner and Dunt[54] considered the advantages of general practitioner access to hospitals to be increased job satisfaction, increased quality of care for the patient and enhancement of the general practitioner role as coordinator. Disadvantages were predominantly logistic and administrative, though in some situations the competence of the general practitioner could be challenged.

Chapter 5 Practice Conditions

This chapter deals with the organization of general practice. Organization relates to the contractual requirements and functions of the general practitioner and these differ in the various countries.

Premises and staff

Premises

The provision of practice premises at the one extreme can be the responsibility of the state, with facilities offered to the general practitioners wishing to use them; or, at the other, premises can be acquired and developed by the general practitioner operating in a free market. An appropriate national policy is needed to ensure the adequacy of premises. In the United Kingdom, there have been problems in the provision of suitable premises in areas where property values are particularly high. In central London, for example, property prices are so high that it has been very difficult to recruit general practitioners into practice situations where they have to buy a share of the premises, even though there are schemes for reimbursing the doctor on a market-value basis.

A national policy on practice accommodation must be related realistically to the money available to acquire or build premises and to the requirements placed upon primary care facilities. It should be recognized that sick people may be unable to walk upstairs, may be disabled and in wheelchairs (thus wide doors are necessary), may be suffering diarrhoea and vomiting (with relevant requirements for toilet facilities), or may have an infectious illness (and should be directed to a private examination room).

Premises need to be considered along commercial lines. Practice premises for a population of 10 000 must be capable of dealing with a throughput of patients to see the general practitioner of between 600 and 700 persons per week (based on current consulting rates in the United Kingdom; capacity for many more would be necessary in Germany). Reception facilities, telephone services, toilets, waiting room facilities, record storage facilities and the space for equipment must relate to these demands. Additional accommodation must be added for other professional staff such as practice nurses, health visitors, chiropodists etc. Waiting room space and related facilities will depend on the nature of the appointment system. More accommodation is needed if there is no appointment system. It is also necessary to take note of the need for privacy even at the reception desk, which calls for more space than would be required in commercial situations.

There are then the issues relating to the immediate working environment of all staff members. In the Netherlands, the minimum size for a consultation room has been specified as 14 square metres and for an examination room, 7 square metres.

This is not the place to consider individual national conditions but we need to emphasize the importance of adequate premises if primary care is to have an adequate base. In those countries where the major developments in health care have been largely in the sphere of secondary care, the state in one guise or another has financed hospital development. The same thinking appropriate to hospital establishments has to be applied in primary care.

Ancillary staff

Ancillary staff include the people who facilitate administrative operations within the practice and these should not be confused with the other professional staff. Their immediate responsibilities include answering telephones, arranging appointments, helping patients with difficulties, acting as a chaperone, filing records and distributing information/leaflets relevant to practice arrangements or to the management of specific health problems. Other professional staff include, for example, nurses who are particularly involved in the application of medical techniques, procedures for more detailed examination of patients, sterilization of instruments, health education etc; for most of these activities, separate accommodation is necessary.

There are also the staff managerial and secretarial functions. If general practice is to evolve along the lines of encouraging group practice and integrated primary care teamwork, there is a need for management within practices. This is not the management of clinical situations but rather the commercial management of a business enterprise. An appropriate hierarchical structure of staff management suitably integrated at different levels of responsibility is needed.

The function of the practice secretary is obvious, but the involvement in practice organization is potentially very diffuse. The operation of the practice must be monitored continually and thus a number of audit tasks fall on the secretary or receptionist.[55] In particular, where there are significant items of service payments, the claim and reimbursement procedures must be properly monitored. Although this description does not aim to cover the functions of all ancillary staff members, it is, however, concerned with the accommodation requirements of personnel. This accommodation must be provided according to the relevant legislation for working people appropriate in the individual country.

Increasingly there is also the need to consider conference and teaching facilities on practice premises. It is of course not necessary for each person or each function to have monopoly of one room, but consideration must be given to the provision of at least one particularly large room for dealing with the business and teaching side of medical care. Accommodation for health education is another important requirement. This accommodation will be quite different from that of a conference or student teaching facility, in that it will be directed more towards patient groups including, for example, mothers and children, antenatal health education classes, and people attending group therapy sessions as part of a programme of smoking cessation or stress management.

If the construction of new premises for the delivery of primary care is under consideration, we would strongly encourage contact with architects who have particular expertise in this area. Ergonomic considerations of patient flow, the special problems of dealing with sick people, the need for several well located toilets, the size requirements for accommodating records etc. are all aspects of health centre design which call for specialist experience.

Equipment

The premises and equipment are part of an integrated package. In a study of seven selected items of equipment, Boerma[44] has demonstrated a north/south division in Europe, with those in the north using more items of equipment. Attempts have been made to describe a standard package.[56] It is not however just a matter of the equipment to be provided but of the availability of that equipment. Marsh, a general practitioner in the north of England, has focused on an ergonomic approach to the ready accessibility of equipment.

> Available at the chair/desk site, I have several pockets on the wall at my right hand containing blood pressure machine, tendon hammer complete with brush and pricker in the handle, pen/torch, tape measure, magnifying glass, blunt edge scissors, auriscope with several speculums, and mini swabs for cleaning them, ophthalmoscope, tongue depressors, middle C tuning fork, height–weight calculator, FEV gadgets for adults and children, cotton wool, thermometers and a stethoscope. In addition there are supplies of prescription pads, certificates of various types, and a tick-off form for patients to use for other appointments – vascular clinic, well man clinic, minor operations and so on. The overriding principle is that the items are immediately available, always in good working order and accessible without leaving the chair.[49]

Computer facilities

Though part of surgery equipment, the computer facilities are particularly important and are here considered separately. It is surely only a matter of time before the computer replaces the paper record.[57] In the United Kingdom there remains some legal anxiety, particularly concerning the concept of an "audit trail". This anxiety concerns the possibility that the record could be altered even perhaps maliciously, and important historical information thereby lost. Mechanisms for storage of data on optical disks have reduced the anxieties but there are still many other issues to be resolved. In principle, however, information stored on such a disk cannot be erased or altered and therefore it is only by destruction of the disk that the necessary information will be lost. Where an "audit trail" is established, any revised entry would include the time of revision, the person making the revision and the content of the revision. There are issues of computer size and decisions need to be made about the nature and quantity of

information to be stored. However, if the computer is to replace the conventional paper clerical record, practice computer facilities will be measured in gigabytes of capacity rather than kilobytes. We do not propose to enter into discussion as to what exactly should be stored, but stress the need to consider that the computerized information system in a practice should service the needs of:

- a faithful record of doctor/patient interaction;
- a comprehensive record including the results of all examinations and investigations (both negative and positive findings), of prescriptions and of referrals;
- an integrated information system for primary care such that appropriate parts of the record can be seen and added to by other authorized providers of primary care;
- an integrated information system with secondary care such that appropriate parts of the record can be seen and added to by specialists in secondary care to whom the patient has been referred;
- a national health care information system such that the records can be scanned in a way which provides information about the incidence of disease and particularly of change in incidence associated with epidemics;
- an information system which permits the identification of adverse effects attributable to drugs.

In order to meet these objectives, some parts of the record will need to be retained in free text form (for example, the precise detail of a patient's history with the minutiae of timing and individuality of symptom description) and others in classified form (for example, diagnoses and drugs). Where classification systems are used, they must be comprehensive and sufficiently detailed to cover the most specific diagnostic term, even if that level of detail is inappropriate for the generation of statistics about health care utilization or the prevalence of disease.

It is further necessary to define the data fields carefully. Information about the presenting symptoms of patients are not interchangeable with the assessment diagnosis or plan of action of the doctor.

It is not the place here to consider all the arguments relative to the best use of computers in practice. However, it is most necessary that the place of computerized information systems is given high priority within integrated systems for the delivery of primary care. Efforts have been made in the United Kingdom to define a minimum standard of computer record.[58]

This consideration of computer facilities cannot be left without reference to the issues of patient confidentiality and data protection. All doctors are required to observe the principle that medically related information is confidential. In most European countries, patients with few exceptions are entitled to see what personal information is stored on a computer record; however, they are able to alter it only if it is factually incorrect. There is a secondary question concerning the use of anonymized patient-specific data and this has recently been clarified in the Council of the European Union.[59] However, we are here discussing the computerized medical record for patient management. Issues of use of the data for epidemiological purposes are not part of our primary consideration.

Access for patients

Health care focused on general practice in primary care must be organized in a way that facilitates access. Access must be available on a continuous basis and for those circumstances in which access is not immediately available, there must be provision for informing people how they might obtain necessary health care.

Practice location

Practice premises have to be located within reasonable distance of the patients' homes. Clearly there is a minimum viable population for which comprehensive health care services can be provided and thus it is inappropriate to define a standard applicable throughout an entire country. However, the health service administration must recognize the need for locally available resources. It is inevitable that patients in remote areas will have a restricted choice of practice (or doctor). The agreement of the patient and the doctor respectively to seek and provide health care services has to involve a commitment by the doctor to visit a patient at home. "Distant care" is contrary to ready access. It is also contrary to the concept of integrated family care. A person may work ten kilometres away from the home: it is desirable that the whole family should receive care from the same practice; it is preferable that facilities should be near the home rather than near the workplace.

The location of practice is of course related mainly to the distribution of a population. General practitioners are influenced by many factors[60,61] including income prospects, attractiveness of a neighbourhood, local housing costs and adequacy of professional contacts, especially proximity to medical schools. Where free-market conditions operate, there is a tendency for young doctors to enter the most favourable areas, to the detriment of difficult unattractive inner-city areas. Financial inducements may be needed to maintain the balance of recruitment across the country.

Practice locums

Access considerations include provision for holidays. In partnership practice this is generally dealt with by shared and reciprocal arrangements among the partners. In single-handed practices the situation is more difficult and locum practitioners are employed. The establishment of a list of available locum practitioners and some monitoring of their acceptability and quality are desirable. However, most practices identify such persons by personal contact and by local word of mouth. Any commitment to a continuous service will need to resort to locum facilities in an emergency. There is an argument for monitoring the quality of potential locums and their rewards for acting in this capacity. Neglect of such a monitoring procedure leaves the door open for inexperienced or inadequately trained general practitioners to operate as locums. Whilst an over-interfering administrative machinery to control this aspect of practice activity would be unacceptable, an appropriate registration procedure may still be desirable.

In ideal circumstances the locum should work from the usual practice premises and should both have access to and contribute to the medical records of the patients. In some situations, the locum is used not primarily to fill the gaps created by general practitioners' holidays or sickness but rather to contribute to emergency work at night and at the weekend. The points made above still apply: there is a need to ensure that emergency work is not done by second-class doctors. Some of the medical emergency work demands the highest levels of competence.

Home visits

There will always be some patients who need to be visited at home. Patients receiving regular medication will need to be reviewed from time to time even if only twice a year. A disabled patient may not be able to reach the practice premises, however well organized the buildings are to receive disabled patients.

Home visiting therefore is an essential part of the general practitioner's function. It creates extra opportunities to assess patients' needs in relation to their living situation and as such provides valuable additional information for patient management. Effective home visiting requires ready access to patient notes for medical history and for input of information about the salient features of the home circumstances.

It may not always be for the general practitioner to make the home visit and record the domestic circumstances. Many other professionals in the primary health care team could fulfil this role. Much of the home visiting for health care screening of the elderly in the United Kingdom is currently undertaken by practice nurses. It is desirable, however, that the records held by the general practitioner are furnished with appropriate information. It is particularly necessary for this sort of information to be readily available when caring for patients with disability. The ageing effect in the population throughout Europe is clearly going to increase the need for good information about patients' home conditions.

There is an implicit requirement here for a general practitioner to be able to drive. It seems hardly worth mentioning but it is clearly obvious that the ability to drive is almost a condition of employment for a general practitioner.

Some arguments against home visits need to be considered.[62,63] There is first the issue of the extra time involved. Fleming,[64] in a review of doctors' working arrangements, reported that doctors considered a home visit equivalent in terms of time to three surgery consultations. This is not an argument for saying that home visits should be abandoned on economic grounds, but it does indicate that a home visit should not be made as a substitute for a surgery consultation unless there are good reasons at the time for considering the particular home visit necessary. In some areas of towns and cities there are serious car parking problems for the doctor. These add to the time taken to undertake home visits and occasionally it is impossible for the doctor to park close to the patient's home. In some circumstances, the opportunities to examine a patient thoroughly are not readily available in the home, lighting is often poor, there is no equivalent of the examination couch at an appropriate height, equipment is restricted to what is carried in the doctor's case, a chaperone is some-

times desirable but not available, and facilities to wash hands before or after a consultation are sometimes not very satisfactory. There are also anxieties about the behaviour of some patients. In recent years society has become more aggressive and doctors have been attacked both for drugs in their possession and for items such as prescription pads.[65–68] Female doctors in particular have felt anxious about visiting patients at night. Houses are often poorly numbered and difficult to find.[63]

In summary, therefore, whilst home visiting will always be necessary for a few cases, the economic argument is strongly against doctors making home visits. Most people now own cars, and there are growing anxiety levels associated with visiting patients' homes at night; all these factors discourage doctors from making home visits. On the other hand, there are increased numbers of elderly people and a greater emphasis of care in the community, which in several countries has resulted in reduced bed occupancy in hospitals. The matter of home visiting therefore remains very topical and national health care policies are needed to define the requirement and to finance it appropriately.

Organization of surgery hours

Critical to the successful organization of surgery hours is knowledge of consultation frequency and duration of consultation. In a health care situation in which a population of 5000 patients make an average of four consultations per annum, there will be 20 000 consultations per annum, equivalent to approximately 400 consultations a week or 80 on each working day. Obviously, there will be some seasonal variation but the basic consultation facilities must relate to that figure of 400. If ten minutes per consultation is considered appropriate, the consultation facility is equivalent to 67 hours per week. The administrative tasks appropriate to organizing the practice have been estimated as equivalent to a third of consultation time.[64] Thus, general practitioner availability on surgery premises caring for 5000 patients in these circumstances amounts to approximately 90 hours a week. These illustrative numerical examples are not applicable universally, but the basic principle of defining an appropriate availability is. It matters little whether the practice is to function on the basis of a universal appointment system, an unrestricted walk-in system, or some combination of both; this time commitment will be required.

All practice consultation arrangements must retain flexibility for dealing with emergencies. By distributing the appointments for patients consulting for long-term problems throughout an appointment schedule, opportunities are left for people booking immediately prior to the consultation sessions. Such arrangements are necessary to provide for acutely ill patients. These arrangements can be made quite easily because follow-up appointments for the next consultation are usually made immediately after a consultation.

There is finally the position of the consultation by telephone. In rural areas of Australia particularly, advice by telephone is commonplace. In North America and Scandinavia,[69] telephone consultations are considered particularly useful. This form of consultation has not been developed to the same extent elsewhere in Europe. Where it is used, it is essential that proper provision is made for it. Telephone consultations which interrupt face-to-face consultations are unsatisfactory. It is difficult to retain patient confidentiality and sometimes to ask important personal questions which may be critical to management. Telephone consultations therefore must be organized privately and involve either the doctor being available for the purpose of receiving calls at some specified time each day, or the practice telephonist/receptionist taking the telephone number of patients requesting telephone advice and giving the patient an approximate time when to expect a return call from the doctor. This latter arrangement allows the medical record file to be extracted before the doctor contacts the patient. The doctor is thus better informed about the patient's problems prior to contact but also at the time of contact is able to enter an appropriate record of the conversation. The obligation of a doctor to maintain a record is no less in circumstances where advice is given without face-to-face consultation.

There must be a proper appreciation of the limits of telephone consultations which, though obvious to a doctor, may not be so to a patient. A telephone conversation is not often a substitute for a face-to-face encounter. Telephone consultations should be requested by patients only in those circumstances in which all the information requirements for appropriate advice can be obtained without examination. Telephone advice can often be more appropriate for delivering follow-up information – for example, to discuss the results of investigation.

Continuity of care

Few would disagree that continuity of care is desirable but there is more than one opinion about what constitutes 'continuity'. It may be considered in the context of an individual episode of illness; as relating to management by an individual doctor or individual practice; or in some ways applied to continuity of the medical record. The virtues of continuity seem obvious, though evidence in favour of continuity is lacking. Marsh[49] thought that continuity minimized the chance of patients receiving contradictory opinions and gave greater opportunity for doctors to 'educate' their patients. An established relationship enhances the usefulness of telephone consultations and is likely to lead to more efficient and prompter management of recurring problems.

Many of the features of a personalized service can be maintained in partnership practice by establishing working arrangements that encourage continuity. Opportunities for audit and epidemiological research are greatest in situations of personalized care because the population denominator is most clearly defined and observer bias is minimized. Theoretically, a major disadvantage of totally personalized care is the limitation of a patient's choice and this is particularly relevant if the doctor acts as a gatekeeper to secondary care. Though personalized care assists continuity and for that reason should be encouraged, nevertheless the patient should have ready access to an alternative doctor within a group working arrangement and have the opportunity to change doctor in a practice where patient registration is used.

Medical records

Computerized records have been discussed and many relevant points made already but the availability at the time of consultation of a high-quality medical record is essential to continuity of care. The records need to be appropriately updated by all authorized persons and relevant correspondence and laboratory test results systematically stored. A good record[70] contains information which:

- is necessary for immediate disease management;
- serves as a reminder for the general practitioner or on occasions as a prompt to other practice staff;
- defines risk status in relation to a variety of diseases;
- can be used for practice monitoring (e.g. referral patterns);
- can be used for audit or research and for teaching purposes.

The detailed content of the records should be consistent. A problem-oriented approach based on the acronym "soap" (subjective complaints, objective findings, assessment and plan of action) has much to commend it.[71] Some items of information may be stored in a classified form for analysis purposes. In some circumstances, especially where the computerization of records is intended, it is desirable for all doctors to agree a common classification and here the agreement will need to extend to specialists in secondary care, if an integrated health record is to be realized. The record structure must distinguish factual information from impressions.[72] Information relevant to lifestyle, diet, exercise, alcohol and tobacco consumption has become important for health promotion and most would consider collection of this information an important part of the general practitioner's function.

The medical record has an increasingly important role to play in the legal context. Accurate records of positive and negative findings are essential for doctors to defend themselves against law suits alleging negligence.

Competence

Competence is a blend of knowledge, confidence and skills: a blend of training, personal characteristics and experience. It is now widely recognized that entry into general practice should be based on training directed at acquiring skills of administration, organization and communication as well as of medicine. Training leads to accreditation. Arguments continue as to the necessity for periodic reaccreditation but there is no longer any argument concerning preliminary training. Approved periods of postgraduate training for general practice are now mandatory in all countries of the European Union.

Motivation is also important. Highly competent doctors can become demoralized if they feel dissatisfied. Dissatisfaction can arise out of greed or idleness but also from lack of appropriate financial reward, academic status or professional respect. Doctors who lack authority to exercise professional

judgement, or who lack facilities to work at a level that corresponds to their qualifications, tend to work at suboptimal levels. It is necessary that salary structure should be commensurate with training and responsibility, and be appropriate in relation to that of other doctors and professional people: to find yourself near the bottom of a pile is demotivating.

Though general practitioners may be required to work long hours, this is commonly not resented when it relates to clinical care. However, commitments extending the working day that are largely part of the bureaucratic machinery are damaging to the morale of the doctor.

A career structure is a motivating force. One of the problems for general practice in some countries is that doctors may appear to reach their zenith at too early an age.[73] In the large group practices established in the United Kingdom, after a preliminary introductory period partners usually have an equality of status and of income. This is contrary to the custom in other professional partnerships where a hierarchy amongst the partners generally exists. It is also contrary to what was usual in the United Kingdom before the introduction of the National Health Service. The arguments against a hierarchical structure in medical partnerships concern the potential exploitation of junior partners. There is firstly the potential for exploitation with regard to the distribution of work. (The junior doctor's hours were determined by the senior doctor.) There is also the potential for a concealed exploitation where a new doctor is required to purchase a share of the practice. Regrettably, in the past there were many examples of exploitation and, as a result, in the United Kingdom there is now virtually no career structure beyond the point of first appointment as a principal in general practice. This point is introduced here because in countries where a general practice system is still emerging, it is desirable to retain some elements of career structure.

Chapter 6 *Professional Infrastructure for General Practice*

General practice cannot be developed in an organizational vacuum. It has a logical place in an integrated service of health and social care, with the relationships between it and other organizations appropriately defined. Those relationships are defined by the professional representatives of the relevant organizations. A framework is thus necessary for general practitioners to organize themselves and to select their representatives.

A variety of functions have to be embraced by organizations acting on behalf of general practitioners. Four main types of organization can be identified. There is first the need for a professional organization to promote the material interest of general practice in an individual and collective sense. There is also the need for an organization to represent general practice, particularly as a specialty in relation to the other specialties in medicine. Medical education in its broadest sense, from undergraduate medical education to continuing medical education for general practitioners, is another area which calls for specific organizational arrangements. Finally, organizations are necessary to deal with matters of registration, accreditation and professional discipline.

In countries such as the Netherlands and the United Kingdom, general practice has matured into an independent medical discipline integrated with medical and surgical specialties. The infrastructure of general practice in these countries is therefore particularly relevant to the enhancement of general practice elsewhere, so we shall first consider experience in the Netherlands and the United Kingdom before making some general comments about the individual components of infrastructure.

Experience in countries with a developed infrastructure

The infrastructure in the Netherlands is provided by two organizations. There is first an association of general practitioners within the broader medical association of all doctors. This body negotiates with the government and insurance organizations to establish appropriate remuneration. The second, the College of General Practitioners, was founded in 1956 and is concerned with training for general practice and the promotion of general practice as a specialty. This involves issues of standards in medicine and the establishment of quality assurance.

The situation in the United Kingdom is somewhat similar, though here there is a third organization, the General Medical Council, which is particularly concerned with professional accreditation and with professional discipline; it is the body which is legally empowered to remove a doctor from the medical register. The British Medical Association is the doctors' negotiating body and it fulfils this function regardless of a doctor's specialty, though it is structured in a way which permits considerable autonomy for the general practitioner members, who are represented by a subgroup known as the General Medical Services Committee. The College of General Practitioners was founded in 1952, largely by doctors who were strongly motivated towards undertaking research in practice. (In particular, the early research was concerned with monitoring infectious diseases in sentinel practice networks.) The College received a Royal Charter in 1967.

It is interesting in retrospect to note that the establishment of a college of general practitioners in the United Kingdom was opposed by doctors organized in the well established colleges of physicians and of surgeons. This opposition was particularly directed at the objective that general practitioners should organize appropriate educational programmes for their own training. There was an attitude prevalent at one time that doctors in general practice were those who could not make the grade as specialists. The establishment of an independent college with responsibilities for training has been critical to the overthrow of that opinion. Other highly relevant factors include the introduction of scientific journals in general practice, the establishment of academic chairs in general practice with their associated departments and, most important of all, a period of vocational training.

Protection of material interest

An organization is needed with which a large proportion (75% or more) of general practitioners associate themselves. That association can work in collaboration with all other medical disciplines but it must be sufficiently strong to represent the general practitioners on a pro rata basis. If half the doctors in the health care system work in general practice, then their representation in a combined representative body must accordingly make up half the total.

Membership must be open to all and membership of this group should be encouraged. The rules of membership in this context should be considered along the same lines as those of a trade union. Unless there are some quite specific philosophical reservations about belonging to such associations, general practitioners should feel under obligation to associate themselves with this negotiating body. Provided the body can recruit a sufficient proportion of general practitioners, its credentials to negotiate on their behalf are established. If there are several such associations, however, the negotiating strength is weakened.

The establishment of an appropriate association representing general practitioners' interest is only half the story. There must be in place a system for proper formulation of policy based on the majority opinion of the working general practitioners. Communication from bottom up and from top down are both necessary.

A negotiating body must agree an appropriate job description, outlining the nature of the task, its scope, the training requirement and its limits. Only when this has been agreed, can contractual obligations and financial reimbursement be defined. An organization of general practitioners is necessary to agree such a job definition

Scientific and academic development

Matters relating to the academic side of general practice are quite distinct from those associated with financial bargaining. There are two responsibilities here: first, to define the content of general practice in a way that can be used to design the curriculum for educating general practitioners and second, to promote research whereby the quality of general practice, the health of the community and the delivery of health care are continuously improved. These are the primary purposes for which a collegiate organization exists. There are several strategies adopted to achieve these aims.

A membership structure

This may include differing levels of membership and recognition of what the members see as meritorious practice. Commonly there is a level of association open to all interested general practitioners who have passed an appropriate qualifying examination. The formation of a college cannot start, however, with a restrictive examination: it is preferable to establish such an association among doctors who have a declared interest in research work or educational activities or even an interest in the association itself.

A representative structure

Once established, the association identifies individuals with particular skills of leadership or negotiation to represent them. These people need to be identified within specific contexts. Education, research and public relations are important functions of a college's activity and call for a variety of skills. The public relations function is particularly important because the college needs to receive recognition for those activities it wishes to influence and control.

Academic links

The links between general practice and the wider body of medicine can be firmly established only if general practice becomes part of recognized medical education. A key function of the college therefore is to promote the establishment of academic departments in medical schools, which still do not exist in several countries in Europe. The academic departments of general practice need to have equal status with other medical departments: a subsidiary branch of another department may be a way of establishing a presence in a medical school but it is not the final goal.

In the early days of academic departments in the United Kingdom it was important that there was an organization giving support to those appointed to academic departments of general practice. That support becomes less necessary once the academic departments are established in their own right. However, a continuing liaison between academia and a collegiate organization is desirable. These

links extend beyond the universities. There needs to be a framework which allows specialist sections of medical care to liaise. For example, general practitioners need to liaise with paediatricians over standards of child health and with obstetricians over standards of competence to undertake obstetric care. There therefore has to be a body which acts on behalf of general practitioners in such matters.

Role in quality assurance and professional standards

We have discussed the role of a college in the training and initial accreditation of doctors. There is a secondary role in defining standards of care, both in the general sense and with specific health care problems. These will be considered in the later chapter on quality assurance but we need to stress here the importance of a collegiate body to oversee their development and to promote those standards considered acceptable. The colleges in the United Kingdom and in the Netherlands have both been very active in this field.[74–76]

Continuing medical education

A college of general practitioners is an appropriate organization to establish and monitor standards of continuing education. In the absence of a formal structure, continuing education is in danger of becoming a sponsored offshoot of the pharmaceutical industry with an agenda of its own.

Scientific research

Health problems managed in primary care need to be researched within the framework of primary care. It is a part of the college's function to identify research needs, to support general practice researchers and to promote the research ethos in general practice. There is an equal imperative to ensure that research findings are translated into regular practice.[77]

Publication

A publishing medium is desirable and it is important that the quality of publications is commensurate with that of other well established scientific medical journals.

International collaboration

The issues of primary care development are not localized in any one country. A framework for establishing links between countries is desirable. There are now several organizations concerned with international collaboration in primary care. These include WONCA, WHO and, in Europe, the European Union of Colleges of General Practice and the European General Practice Research Workshop (EGPRW). There is also a considerable scientific literature on international collaborative research in primary care. As examples we refer to The Interface Study, a study of the interface between primary and secondary care,[78] The European Study of Referrals from Primary to Secondary Care,[17] The International Classification of Primary Care,[79] and Immunization Procedures in Europe.[80]

Chapter 7 *Teaching and Learning in General Practice*

". . . one with a well made rather than a well filled head . . ." This quotation from Montaigne,[81] though describing the desirable attributes of a personal tutor, succinctly summarizes the goal of all education. In medicine, however, we are so concerned with adding to the curriculum to fill the mind that we can easily underestimate the importance of training it.

Perhaps if a hundred years ago medicine had been recognized as a science such as mathematics or chemistry, we would have evolved separate educational arrangements for the pure and applied branches. That was not to be and, as a result, medical education until recently has been dominated by the need to acquire scientifically based knowledge rather than to acquire skills in dealing with sick people. The distinction has been known for many years. Thomson,[82] describing the 200-year history of general practice and the Edinburgh Medical School referred to Boerhaave of the University of Leyden who had pioneered medical training based upon demonstration and observation of patients and not, as previously, upon traditional discourse and dissertation. Notwithstanding this long history, the first academic chair in general practice was established only in 1963, although some of the principles concerning patient observation had been applied in other specialties. The recognition of increased importance for primary care relative to secondary care emphasizes the need for appropriate training for general practice.[7,11] Some training in family practice and issues which particularly concern family medicine should be taught in every medical school, which therefore needs a department of family medicine.[5]

In 1974 an international group of distinguished general practitioners, the Leeuwenhorst group,[83] formulated a statement which has underpinned the advancement of general practice in Europe. The educational aims of a training in general practice were formulated under three headings:

1. *Knowledge*

(a) That he has sufficient knowledge of disease processes, particularly of common diseases, chronic diseases and those which endanger life or have serious complications or consequences.

(b) That he understands the opportunities, methods and limitations of prevention, early diagnosis and management in the setting of general practice.

(c) His understanding of the way in which interpersonal relationships within the family can cause health problems or alter their presentation, course and management, just as illness can influence family relationships.

(d) An understanding of the social and environmental circumstances of his patients and how they may affect a relationship between health and illness.

(e) His knowledge and appropriate use of the wide range of interventions available to him.

(f) That he understands the ethics of his profession and their importance for the patient.

(g) That he understands the basic methods of research as applied to general practice.

(h) An understanding of medicosocial legislation and of the impact of this on his patient.

2. *Skills*

(a) How to form diagnoses which take account of physical, psychological and social factors.

(b) That he understands the use of epidemiology and probability in his everyday work.

(c) Understanding and use of the factor (time) as a diagnostic, therapeutic and organizational tool.

(d) That he can identify persons at risk and take appropriate action.

(e) That he can make relevant initial decisions about every problem presented to him as a doctor.

(f) The capacity to cooperate with medical and non-medical professionals.

(g) Knowledge and appropriate use of the skills of practice management.

3. *Attitudes*

(a) A capacity for empathy and for forming a specific and effective relationship with patients and for developing a degree of self-understanding.

(b) How his recognition of the patient as a unique individual modifies the ways in which he elicits information and makes hypotheses about the nature of his problems and their management.

(c) That he understands that helping patients to solve their own problems is a fundamental therapeutic activity.

(d) That he recognizes that he can make a professional contribution to the wider community.

(e) That he is willing and able critically to evaluate his own work.

(f) That he recognizes his own need for continuing education and critical reading of medical information.

The proceedings of a conference on the biopsychosocial concept of illness and disease provides a further introductory point. A summary of this conference made by White[84] stressed the importance of the "bottom-up" approach which he attributed to a British governmental report by Dawson in 1920. The "bottom-up" approach is a basis of planning focused on the needs and demands of its customers (patients) rather than the "top-down" approach based on the needs and demands of doctors. In the particular American context, the "top-down" approach had been delivered by specialists in tertiary care[85] and the upper echelons of academia and was considered by White as one of the impediments to change.

The literature of medical education is enormous. For the synopsis presented here, only medical education particularly relevant to general practice will be considered. The issues will be discussed but the debate about where in the curriculum each should be covered (during the periods of secondary education, undergraduate training or postgraduate education) will not be addressed.

The objectives of a training programme

As a framework we shall use the "Attributes of the Independent Practitioner" as set out by the Education Committee of the General Medical Council (United Kingdom), initially published in 1983[86] and revised in 1993. These attributes were considered appropriate to all doctors functioning independently regardless of their specialty and it is because of their wide applicability across all areas of medicine that they have been chosen here. They are considered specifically in relation to general practice and are generally similar to those outlined in other documents. Relevant educational training points will be addressed under the most appropriate of the listed attributes.

The ability to solve clinical and other problems in medical practice

Not all people who are ill present their problems to physicians.[42] Though general practitioners have an educational role to fulfil in this regard – and this will be considered later – the general practitioner's primary responsibility is towards the patients who present themselves. Training must therefore be predominantly based on a proper appreciation and understanding of the problems encountered frequently. In the United Kingdom the average general practitioner cares for approximately 1950 patients, which is a larger number than in most European countries. The recent morbidity survey in England and Wales[19] showed that during the course of a year the average doctor saw 78% of their registered population and, when considered by major illness categories, was consulted by 24% reporting acute respiratory infections, 15% with disorders of the skin and subcutaneous tissue and 11% with minor injuries (Table 7.1). For specific illnesses, approximately 5.4% of the population consulted with obstructive airways disease, 4.2% with hypertension, 1.2% with diabetes and 0.9% with malignant neoplasms. The proportion of consultations (also shown in Table 7.1) as opposed to the person consulting rates provides a clearer picture of the content of general practice for doctors working without a defined list of patients.

The problems presented to general practitioners often include social and behavioural components. The general practitioner, though not a social worker nor a counsellor for behavioural

Table 7.1 Person consulting rates per 100 and percentage of total consultations by selected broad diagnostic groups.[19]

Disease group	Persons consulting/100	Consultations (% of total)
Acute respiratory infections	24.2	11.7
Disorders of skin and subcutaneous tissue	14.6	6.6
Minor injuries	10.7	4.1
Disease of the ear and mastoid	10.1	4.4
Neurotic disorders	6.5	4.2
Arthropathies and related disorders	6.1	3.2
Dorsopathies	5.9	3.0
Chronic obstructive airways disease	5.4	3.5
Mycoses	4.7	1.8
Hypertensive disease	4.2	3.0
Intestinal infections	4.0	1.5
Ischaemic heart disease	1.7	1.2
Major psychoses	1.1	0.8
Diabetes	1.2	0.8
Malignant neoplasms	0.9	0.8

problems, requires sufficient knowledge to recognize these problems and to understand at least the therapeutic programmes appropriate to their management. There is also the question of change over time. In the course of a professional lifetime, tuberculosis has almost disappeared (not that the medical profession can afford to be complacent about the residual pockets of infection); AIDS has appeared; and the surgical termination of pregnancy from being illegal has become a common activity in most European countries. The problems that confront doctors change and doctors have to change with them, though this is not to say that doctors should simply accept politically motivated change.

Possession of adequate knowledge and understanding of the general structure and function of the human body and workings of the mind, in health and disease, of their interaction and of the interaction between man and his physical and social environment

Taken at face value, this statement is too nebulous. There could be an indefinite argument about what constitutes adequate knowledge. Though not presented as an attribute exclusive to medical undergraduate training, the ideas underlying this statement are an appropriate objective for this purpose. For most doctors, whether in family practice or in medical or surgical specialties, it is a prerequisite that they understand the epidemiology and natural history of the diseases they treat. They also need to appreciate the wider dimension of the impact of disease on the patient's life and family. Perhaps the most interesting part of this statement is the last phrase: "the interaction between man and his . . . environment". Knowledge can be imparted and basic skills learned, but experience is vital to the understanding of this component.

Possession of consultation skills

Consultation skills start with the art of communication. Bass et al.[87] demonstrated that the strongest predictor of the outcome of patient care was the extent to which the patient could discuss the problem fully with the general practitioner and arrive at a mutual understanding of its nature. If we are to accept this statement, profound implications follow for the training of all doctors, but particularly for general practitioners. The doctor must first listen and not ask questions.[88]

The progress of computer technology is driving medicine into algorithms for everything. If the patient's history does not fit, a different question is posed. There are dangers in systematizing the consultation inquiry. A patient's history cannot be reduced to a coded nomenclature, even if the doctor's assessment can. Patients must be allowed to present their own story and physicians must listen.

As a corollary, patients must be allowed to conduct the consultation in their own language.[89]

Consultation skills equally involve the communication of doctor with patient and patient with doctor. For this purpose, personal qualities of empathy and the ability to convey a message are important. In a wider sense, consultation skills might be extended to matters such as the quality of medical record-keeping. The days have long since passed when medical records were considered a minor aspect of the doctor's task. We have already made reference to the dynamic nature of medicine. The quality of medical records appropriate to the year 2000 is vastly different from that of 30 years ago. The art of précis, with accurate summary of important events, is part of communication.

Acquisition of a high standard of knowledge and skills in the doctor's specialty

There is a subtle distinction between the acquisition of knowledge and skills and the possession of knowledge which was discussed earlier. Although some of the points have already been made, the ability to assimilate new knowledge and skills is essential. "The advance of medicine depends on the union of clinical art with high technology science."[90] We do not need the existence of a programme of continuing medical education as much as the evidence that it is effective and that it reaches the practitioners in need of education.[91] This point will be considered further in Chapter 8 but it is relevant here to emphasize the place of practice audit. Without traditional methods of examination, it is difficult to define the knowledge and skill base of an individual doctor. Even with an examination, the actual performance of the doctor is not defined. Self-evaluation by practice activity analysis[33] which is concerned with individual performance in relation to that of colleagues and is ideally undertaken within a peer-group setting, is one approach to performance measurement. The individual practitioner must be willing to consider and even expose their own performance to the criticism of colleagues, with the intention of identifying and ceasing aberrant practice.

Willingness and ability to deal with common medical emergencies and with other illness in an emergency

It is anecdotally reported that doctors are sometimes frightened of assisting when accidents occur in case they do something "wrong" and find themselves the subject of litigation. The recommendation above is directly contrary to this pattern of behaviour. The Hippocratic oath is still relevant.

The ability to contribute appropriately to the prevention of illness and the promotion of health

There is no need here to argue either the importance of prevention or the general practitioner's role in it. It is important for doctors to understand the boundaries of prevention. We are not justified in interfering with people's lives without valid evidence. It is essential therefore that general practitioners can evaluate evidence properly. Statistical theory in relation to probability is not an option for the general practitioner. An understanding of the nature of distributions and appropriate statistical analysis is an important part of medical training.

Neither can doctors ignore the economics of medical care. By way of illustration, let us suppose that annual influenza vaccination is 100% effective in preventing illness caused by the virus subtypes included in the vaccine and that the total cost of the vaccine and its attendant administration costs are 10 ecus per recipient. In the United Kingdom population of 58 million people, 9 million are aged 65 years and over. If there were a policy of annual vaccination of all people over 65 years, then the cost would be 90 million ecus. It may not be the role of individual general practitioners to decide on the appropriate vaccination policy, but it is essential that they understand the economic arguments on which the decision is based and if necessary are equipped mentally to defend (or oppose) a specific national health policy.

The ability to recognise and analyse ethical problems so as to enable patients, their families, society and the doctor to have proper regard to such problems in reaching decisions

For many years, the primary ethical issues for general practitioners have been related to the confidentiality of information about specific patients. Today, however, many ethical issues are economically related and stem from the systems whereby general practitioners are remunerated. In a nationally based health care system, the doctor is paid by the state; in an insurance-based system, by the insurance company. To whom does the doctor owe allegiance? The question is rhetorical because, by the Hippocratic oath, a doctor's allegiance is to the patient, not the paymaster, but the conflict remains: can therapeutic action/inaction be determined by cost–benefit analysis? At a national level it must be

so, but at the individual patient level, can the principle be observed?

Critical issues are not simply related to cost. A person may be legally entitled to therapeutic abortion, a procedure which may be unacceptable to the doctor consulted. Medical advances may follow techniques in genetic research which are unacceptable to some. Technological advances in medicine as well as the economic issues force doctors into making choices. Doctors must be given training in ethical matters which allow them firstly to identify the ethical issues involved, secondly to give appropriate advice to patients and thirdly, where necessary, to make appropriate choices.

The maintenance of attitudes and conduct appropriate to a high level of professional practice

The doctor–patient relationship involves trust. It is the doctor's responsibility to honour that trust. It is the doctor's responsibility to advise a patient on the basis of that trust, and to be completely honest with regard to therapeutic intervention. Doctors must be aware of their own limitations. To treat a patient from a basis of inadequate knowledge is not an acceptable level of professional practice. They must therefore understand the decision-making process, work within the limitations of an inexact science and convey truthfully to their patients the merits of their proposed action (which should not exclude the importance of acting with compassion in circumstances of grave prognosis). These skills are not so much learned as derived from accumulated experience, but this is gained from critical self-evaluation as much as from scientifically established knowledge. (For further consideration of decision-making in general practice, see Sheldon et al.[92])

Mastery of the skills required to work within a team and, where appropriate, assume the responsibilities of team leader

Medical care can no longer be delivered by a single person. The skill mix necessary to deliver care cannot be vested in one individual. It is part of the general practitioner's role to optimize the delivery of care from all appropriate sources. Having had broadly based training in health-related matters, the general practitioner will usually be the team leader in primary care. Leadership skills are acquired and not inborn. The doctor therefore needs to be trained in the optimal use and deployment of related human resources. A team should be more effective than the combined skills of the individuals.

Acquisition of experience in administration and planning

Stemming from the doctor's role as team manager, at least some doctors will be required to take a more formal role in health care administration. General practitioners cannot abrogate responsibility for health care matters that relate specifically to primary care. Management training therefore has to be extended to cover the wider dimension of health service management. All doctors must play a part appropriate to their specialty.

Recognition of the opportunities and acceptance of the duty to contribute, when possible, to the advancement of medical knowledge and skill

The attribute proposed here gives opportunity to consider the relationship between the function of general practitioners and their potential contribution to research which might advance medicine. It is proposed here that the general practitioner should have proper grounding in research methods and skills in the proper interpretation of research findings. A commitment to participation in research seems an over-statement but doctors who willingly engage in research, whether on their own initiative or on that of others, must fully appreciate the ethical issues involved, and the validity and quality of their participation. The attitudes and skills appropriate to research are the same as those appropriate to analysis of practice activities and to self-evaluation. Since the latter should be universal and included in education at all levels from the earliest days, an aptitude for research should be a natural consequence.

Recognition of the obligation to teach others, particularly doctors in training

By definition, the doctor is a teacher. Teaching skills should be part of general practice. Here there is considerable overlap with the earlier section on communication skills. However, the task is not confined to the teaching of patients but is also concerned with the teaching of medical students and students in related medical activities. General practitioners must be willing to acquire those skills which will allow them to impart knowledge to others.

Provision for training

In following this list of attributes as a model, most of the issues surrounding medical education have

been covered. However, the list fails to convey a sense of priorities. A doctor cannot function without an adequate knowledge base. In this regard, knowledge of the disease process, natural history and epidemiology are fundamental; equally, the power and limitation of therapeutic intervention must be fully understood. The first responsibility of general practitioners is to their patients; communication in both directions is essential to effective practice. Their second responsibility is to society; they cannot opt out of the economic repercussions of their actions. Thirdly, general practitioners have a responsibility to themselves and to their profession which demands that they do not allow their knowledge base and their competence to fall behind the technological advances in medicine appropriate to their discipline.

To achieve the objectives implicit in these training goals, an adequate training programme is necessary. This can be established only if a proper infrastructure embracing all the various training methods is properly funded.[93] All potential training methods should be exploited and these include:

(a) formal lectures;

(b) clinical demonstrations and case conferences;

(c) distance learning:

- correspondence courses;
- television video training programmes;

(d) practice activity analysis:

- using appropriate practice generated data in discussion groups;
- using health care administrative data providing practice-specific feedback (for example, about activities such as prescribing and referral);
- using televised consultations to consider personal communication skills;
- random record reviews – medical records generated by colleagues or partners are selected randomly and the content assessed in an atmosphere of friendly but critical review;
- formal audit of relevant activities for which agreed criteria can be defined;

(e) workshop seminars (for example, journal clubs and meetings of research groups);

(f) practice inspection visits.

A corps of appropriately skilled persons needs to be identified and commissioned to organize training programmes. These people must have sufficient authority to identify inadequate performance and initiate procedures for improving it where necessary. Arrangements for continuing medical education must reach those most in need of it.

Finally we reproduce here a selection of the 19 recommendations made by a strategic action forum of experts from WHO and from WONCA in London, Ontario in 1994.[5] These recommendations were generated under the title "Making medical practice and education more relevant to people's needs. The contribution of the family doctor". Those particularly relevant to the training and education of general practitioners are listed using the summary titles and adding our own comments:

2. *Link funding policies to defined needs.*

5. *Define the status and role of family doctors.*

Comment: The needs of patients and the methods for measuring these needs are as important for defining the training curriculum of family doctors, as for the appropriate allocation of resources to them.

9. *Use well trained family doctors to provide better quality care more cost-effectively.*

Comment: A specifically trained family doctor can respond appropriately to most of the problems, most of the time. Training ensures that the response is clinically optimal. It also ensures that doctors understand issues of cost-effectiveness. A competent doctor working in primary care is fundamental for cost-effectiveness in disease management.

16. *Basic medical education (undergraduate) should provide a relevant foundation for subsequent specific training.*

17. *The discipline of family medicine should be taught in every medical school and provide a generalist/specialist balance.*

Comment: Basic medical education alone is insufficient training for family practice. Medical schools must train doctors in accordance with the relative numbers required to service the various vocational endpoints. A large number of doctors will always be needed for effective primary care and medical

schools must therefore recruit from appropriately experienced persons and provide relevant training which will often be community-based.

18. *Every country should provide specific postgraduate training in family medicine.*

19. *Continuing medical education should focus on performance improvement.*

Comment: Continuing medical education (CME) should be centred on the performance of doctors in meeting people's needs. As part of their professional task, all doctors should actively participate with their peers in a continuous review of their own performance in the light of published standards, guidelines and research. CME should include where necessary a commitment to change existing practice in response to the needs of individuals and communities. Each discipline, including family medicine, should accept responsibility for planning and delivering its own CME programmes.

Chapter 8 Quality and Quality Assurance

Issues concerning the quality of medical care and quality assurance are prominent in current medical literature. This is not an entirely new development, and it stems from the realization that there appear to be many unexplained differences in the quality of health care even within a single health care system. Whilst some of these differences relate to characteristics of people who are sick, there are many which relate more to doctors and to the service they provide. If decision-making by doctors in whatever branch of medicine cannot be shown to be consistent, providers of health care naturally turn their attention to the economic consequences of medical actions. Even if health care funders can accept variations if the cost consequences are neutral, they cannot accept them where there are major differences in cost-effectiveness. Professional freedom of action can only be granted within cost-containing limits. Whilst quality in medicine is not primarily concerned with the costs of care, the avoidance of wasteful expenditure is certainly one aspect of it.

Quality of medical care cannot be considered independently of other elements of quality of life. The quality of the environment, of working conditions and of educational facilities are equally important. Investments in programmes to improve the quality of life for a community will involve choices. The quality of care for patients with chronic obstructive pulmonary disease is important but an effective programme for the cessation of smoking and the limitation of industrial pollution could in many ways be seen as a greater priority. In this chapter, we will explore the concept of quality exclusively in health care, discuss its measurement and finally consider the implementation of a quality assurance programme.

The concepts of quality and quality assurance

Perhaps at its simplest level for the doctor, the concept of quality means "doing the right thing at the right time" but such a concept opens up opportunities for differing opinions. Quality of medical intervention can be defined only when actions are based on scientifically demonstrated facts and not on opinions. For the patient, other things matter: ease of access, choice of doctor, sympathy and friendliness in the delivery of health care. The concern of financial administrators is to avoid waste. Grol[94] has suggested that quality is determined by the relationship between the requirement and expectations of health care on the one hand and the actual care provided on the other. In this definition, Grol concentrates on the nature of the care delivered, but perhaps more rigorous measures of quality are needed. Historically, medicine has concentrated on survival data and life expectancy. The success of cancer treatments is commonly measured in the proportion of patients surviving five years post-treatment. Mere survival is only a limited measure and hence assessments have been introduced to measure the quality of life during the subsequent years. The number of "quality of life years gained" has become an outcome measure whereby the effectiveness of treatment can be judged.

Thirty years ago Donabedian,[95] the leading authority in quality assurance, defined three areas in which quality might be considered: structure, process and outcome. In the context of general practice, structure concerns the quality of premises, equipment and staff available to deliver primary care; process concerns the activity of doctors, their competence, the extent of investigation, referral to specialists, prescribing behaviour etc.; and outcome is concerned with changes in the patient's health status, actual or potential. (An immunization procedure does not improve a person's health but it provides protection against a particular risk.)

The compartmentalization of quality assessment in this way fails to recognize some of the relevant factors. Poor care can be delivered from the best premises; excellent outcomes can be observed regardless of process. It is in the nature of general practice that much care is delivered to patients with self-limiting illnesses who will get better anyway, and to persons with chronic degenerative illnesses for whom the best to be hoped for is a reduction in

the rate of degeneration, which is almost impossible to measure.[33] There is also the effect of the "total package of care". Health care is surely about the integration of structure, process and outcome. It is by consideration of the total package that quality should be measured.

The word "assurance" brings to the fore another element of the quality debate. Here doctors are concerned with showing to others (patients and peers), that quality standards have been reached. The educational approach to quality assurance is based on formal examinations or on continuous assessment. Unfortunately, examinations under test conditions do not necessarily equate with real performance.[96] Quality assurance has to stem from examination of a truly random sample of patients managed or treated. At this stage it is difficult to see how general practice can go so far as to deliver quality assurance of this standard.

Quality of care may be assessed in different ways for different purposes. Quality assessment is made partly to define those areas in which improvement is needed. Quality assurance has been defined by WONCA as a process for planned activities, based on performance review and enhancement, with the aim of continually improving standards of patient care.[94]

The assessment of quality, with the concomitant assurance of quality, must not be considered as an end in itself. The quality of medical care is a reflection as much of an attitude to work as of performance in a specific situation, and the willingness to examine one's own performance has been described as a proxy for quality.[33] It is a dynamic concept calling for a continuous striving towards improvement over the status quo.

The need for quality assurance can be summarized in relation to the escalating costs of health care, the increasing power of the consumer ("the customer is always right"), and increased litigation against doctors, much of which stems from an unrealistic expectation that doctors never make a mistake. There is also a place for quality assurance in establishing credibility for general practice as an academic discipline. Active participation in programmes of quality assurance are particularly necessary in countries where general practice has to fight for acceptance amongst other professionals in health care.

Quality assurance as a system

The quality loop

The WONCA definition mentioned above pointed to "planned activities" and a "continuous process" as core features of quality assurance. Quality assurance is part of a coherent system of interdependent elements which has been described as the quality loop or audit cycle (Figure 8.1). This starts with the identification of a problem, the definition of appropriate standards of care, the collection of data whereby adherence to standards can be measured, the analysis and interpretation of the data, the definition of a policy, perhaps for change, and the follow-up exercise to assess the achievement of desired change.

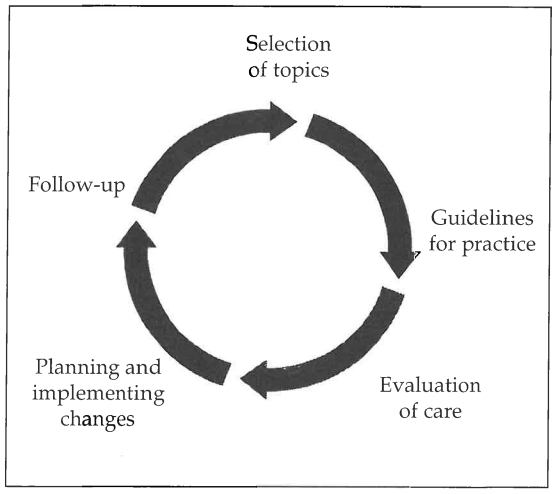

Figure 8.1 The quality assurance cycle.[94]

The quality loop is part of a dynamic process with a continuous agenda based on the principles that standards change over time and perfection is always on the horizon. In an ideal situation this audit cycle should become part of normal practice routine, with regular analysis of practice activities. However, the monitoring of activities involves time and effort and it is thus necessary for the needs of audit and quality assessment to be prioritized in relation to other practice commitments. In the next section we shall consider aspects of the elements in the cycle which help to define appropriate practice activities in relation to quality assurance.

Agreement on criteria for quality: guideline development

Guidelines can be understood as a set of explicit agreements with respect to relevant aspects (or identified problems) concerning the management of disease and the delivery of care. These may be related to the process of care, service to the patients or the practice administration. Guidelines may be made for use in a specific practice, in a local area or have national application. Some guidelines are implicit in the external contractual obligations of a doctor and therefore do not need further definition. Others require a practice consensus which will usually be derived from objective data about practice activity, and yet others are taken from national policy-making organizations. All are a potential help to the practice because in the first instance, the development of guidelines requires the members of the primary care team to measure their activities and to discuss the objectives of care and the targets which they will set themselves. Some of the benefits are considered here.

Source of reference

Guidelines can provide a source of reference to make standardized comparisons between the performance of individual doctors or between the performance at one time with that of another. At the time of writing much attention is given to the waiting list for specialist care in the United Kingdom and guidelines have been established to define a target for the maximum waiting lists for patients referred to specialists. By analogy, similar guidelines can be established for patients desiring to see their general practitioner. A target definition – for example, "90% of patient requests for appointments will be given within three days" – allows the continuous assessment of the appointment system.

Public relations

Guidelines can provide the basis for establishing patient expectations of care, and are thus often designed for the convenience of patients. Doctors working in other specialist disciplines may also find them useful with regard to their own professional expectations of general practitioners.

Guidelines for education

Medical education and vocational training are both helped by an appreciation of target objectives in practice. Guidelines have to be realistic and reflect conditions of the working environment. Targets should logically be placed at a point which is realistic: they become counter productive if too far out of reach.[97]

In the absence of scientifically established treatment regimes for a variety of conditions, it is difficult to define guidelines for all clinical situations. There are, however, some relevant topics for which guidelines can be developed. To be relevant, guidelines must concern common practice problems; should have a direct relationship to the benefit of patients; and should be presented with a reasonable prospect of consensus among doctors who work together. The acquisition of data for assessing the achievement of a target guideline must be practical in terms of time and effort, and finally there has to be some reasonable scientific basis for agreeing a particular guideline.

Even in circumstances in which a topic is readily agreed, there has to be a suitable forum whereby guidelines can be agreed. They will not emerge from thin air: factual information about general practice is essential if useful guidelines are to emerge. In this context, practice-based morbidity surveys describing the health problems presented and the results of standardized methods for practice activity analysis are invaluable resources for the development of guidelines.

Publicity and dissemination of information about guidelines depends on whether these are established at local practice level or as part of a national initiative. In the United Kingdom, for example, there are clearly established guidelines for annual influenza vaccinations. These are determined by the relevant committee of the Department of Health and dissemination of information takes place in the form of regular newsletters. It is a guideline that is published rather than a contractual obligation. Individually a practice may decide on a particular policy with respect to the issue of prescriptions or the follow-up care of diabetic patients and there is no occasion for publicity. This is an "in-house" guideline whereby the practice will judge its own performance. Self-evaluation is a fundamental part of quality assurance and can be undertaken in relation to standards set either within a practice or outside it.

Assessment in the evaluation of quality

Many practice activities and interventions are open to evaluation. At the structural level, premises, equipment, staffing and staff training are all

increasingly open to guideline development. There are difficulties, however, in deciding what is the basis whereby an acceptable minimum or norm can be defined. At the level of process, the quality of patient communication, the appropriate use of diagnostic procedures, the level of referrals to secondary care, the appropriateness of therapeutic intervention and the extent of lifestyle counselling are all possible examples of topics for assessment. In the Netherlands, the Dutch College has developed approximately 30 guideline management protocols. These include, for example, maturity onset diabetes, oral contraception, urinary tract infection and medical referral letters.[98] These protocols cover aspects of both structure and process. Donabedian's third element, "outcome", is the most difficult to assess. The concept of interim outcome measures has been introduced. For example, since smoking tobacco is harmful, indicators of smoking cessation can be accepted as an interim measure of outcome even if it is not known in a particular patient cohort by how much morbidity or mortality is actually improved. This example highlights two difficulties: firstly, any measurements need to have meaning in the statistical sense and this can be difficult when dealing with small numbers; and secondly, there can be long intervals between intervention and outcome benefit.

The patient perspective on the outcome of medical care has its place in the evaluation of quality. The satisfaction of patients, particularly in aspects of the structure of care, is highly relevant, though less so when it comes to the merits of therapeutic intervention. Nobody is satisfied if their requests are refused, yet high quality care may involve the doctor saying no to a patient's request for an antibiotic. The satisfaction of patients may be very dependent on particular experiences[99] and this is almost the opposite to a random sample of experiences. Complaints presented by patients should be taken seriously and the attention given to resolving them can be included as one of the assessments of the quality of a health care service.

The methods of quality assessment are similar to those outlined earlier when considering a training infrastructure for teaching and learning in general practice (Chapter 7: Provision for training). Direct observation by visiting colleagues undertaken in a mutually acceptable way is particularly commended. The insight of colleagues carrying out the same tasks provides a simple qualitative and broad appraisal of the quality of care delivered in the practice. It embodies the most effective means of delivering well directed feedback to the practices.

Quality improvements and follow-up

A wide range of methods is available for quality assurance and the choice depends mainly on the specific topic. Whatever methods are employed, the impact of the evaluation on practice policy is critical. Change of practice routine and general practitioner behaviour can be difficult to achieve. It is vital not to antagonize those whose cooperation is sought. In common with all people, doctors can feel threatened by external monitoring. These features are heightened where the monitoring is undertaken by financiers of health care or by a medical regulatory body. The result of an assessment may identify needs for further training in a given area. Currently, doctors generally determine their own postgraduate training needs; interference may be resented.

A strategy for quality improvement therefore must encourage doctors. As far as possible it should be set outside a regulatory environment. A small improvement in the quality delivered by a large majority of doctors has greater impact than a radical improvement in the quality of one. Regulatory intervention may force the one doctor to change but it has to be considered alongside the possible negative impact on the involvement of the majority in programmes of quality assurance. It is essential therefore that an appropriate environment is established. The major ingredients include reliable information about practice performance, the presentation of information in a simple and readily digestible form, assessment by a colleague rather than by external examiners, and encouragement to develop programmes for remedying identified problems. The place of external examination of competence as part of the quality assurance programme has not yet been determined but this can be seen as a logical development of the quality assurance initiative.

The organization of quality assurance

The organization of quality assurance programmes needs a critical mass. A small group may not contain sufficient people to argue against the opinion of a particularly dominant member. Quality assur-

ance therefore must be set within an organized structure. For highly specific practice administrative topics, quality assurance can perhaps be undertaken completely within the practice, but for those areas which concern medical management, quality assurance requires a wider input. This aspect of quality assurance has to be integrated with programmes for continuing medical education. Quality assurance and continuing medical education are the two faces of one coin.

Programmes of continuing medical education and quality assurance may eventually be part of an accreditation or recertification procedure; meanwhile they should become as much part as the general practitioner's working week as any of the fixed consulting sessions. There will be differing national programmes to achieve this end. Ideally, the thrust of the programme should be directed by national colleges but, if colleges cannot deliver, regulatory authorities will have to take on the task.

Chapter 9 Payment Systems

In this chapter we consider ways in which the various payment systems for remunerating general practitioners influence the services provided. In particular, we examine the influence on access to medical care, quality of care and the relative level of general practitioner remuneration and the impact of the remuneration structure on cost control. Reinhardt[100] identified three key questions bearing on this issue and we have added a fourth:

- How does money flow from individual citizens to the central fund? This question applies whether the health care is funded by taxation, by state insurance or by private insurance.
- How does money flow from the central fund to the providers of health care (by payments in the form of salary or capitation, by direct payments for items of service, or from the patient, with subsequent reimbursement by insurers)?
- What is the unit of payment? This may be based on population served (capitation), a specific job appointment (salary) or on a fee for services rendered.
- How much do general practitioners receive and how is that remuneration determined? Options include target incomes, direct "market force" negotiations, and income comparisons with comparative groups.

The transfer of money to a central fund

Three types of arrangement can be identified:

- a national health service where money is raised by taxation, as for example in Denmark and the United Kingdom;
- a public insurance system where money is raised by statutory insurance premiums (commonly income-related), as for example in Belgium, France, Italy and Norway;
- a private insurance system arranged by individuals insuring themselves privately, as for example, in the case of selected people in the Netherlands, and selected services in Belgium.

National health services apply to the entire population and the funds are regulated and distributed by government. Public health insurance schemes involve central coordination of sickness insurance funds with autonomous management in the regions. A system of this type was introduced in Germany by Bismarck in the nineteenth century and has been adopted in other European countries. Although an insurance-based system does not necessarily cover the entire population, in most countries using this system the proportion excluded is very small. Private insurance schemes can in some cases coexist alongside national health service or public insurance schemes. In the Netherlands, private insurance is commonly used to finance health care for people above a specified income level. In Belgium, private insurance schemes are used to pay for those general practitioner services which are not covered by national health insurance schemes.

National health schemes have greater security for the individual, but the absence of a direct financial link between the health care provider (doctor or hospital) and the health care user (patient) has potential disadvantages. On the one hand, users have no financial influence over the care they receive and on the other, the providers find it difficult to control use of the facilities. Private insurance schemes which do not exist alongside public health insurance schemes can exclude significant numbers of people, especially those who are most sick. By definition, a private scheme must be financially viable and must set its premiums according to market forces. The most sick are the worst risk.

Distribution of resources

Central funds can be used to pay providers of medical services either by direct payment or indirectly by reimbursing patients, who are responsible for paying the doctor. Reimbursement may be partial or complete. Schemes of partial reimbursement allow for financial influence on the transaction between doctor and patient. This element of cost sharing can take three forms:[101] "coinsurance", where the patient pays an agreed percentage of the cost; "copayment", where the patient pays a fixed sum per item, for example, per consultation or per prescription; "deductible", in which the patient pays all costs up to an agreed limit, usually based on income. Cost-sharing schemes are believed to curtail over-utilization of medical services for minor problems but potentially they can cause delays in patients consulting and therefore in receiving treatment for potentially serious health problems. Cost-sharing schemes have most impact on low-income groups and in a sense can be seen as limiting their access to services.

The principle of cost sharing need not apply to the initial decision to consult. Even in national health systems, cost sharing can apply to the prescribed drugs. Though some of the costs in this circumstance are borne directly by the patient, such measures do not prevent excess utilization of health care services.[102]

The unit of payment

Methods of payment can be based on:

- units of service – the fee-for-service method as used widely in the United States, Belgium, France and Germany;
- units of people – capitation, where at least the bulk of the payment is based on the number of people cared for rather than the services provided; this system predominates in the Netherlands, Italy and the United Kingdom;
- units of time – salary, a contractual arrangement where payment is made according to the hours worked; this system is used in Finland, Sweden and Norway and in many parts of the world outside western Europe.

In the examples given we have identified the countries by the predominant system of payment. In most, there are elements of more than one of these methods. In Austria and Denmark, for example, there is a mixed system of capitation and fee for service; in the United Kingdom some services attract fees and there is a basic practice allowance but the general practitioner's income is largely determined by the capitation component. Generally speaking, payment by capitation goes together with access to specialists being limited by referral from general practice (the role of gatekeeper to hospital access). The gatekeeper role, however, is not completely limited to payment by capitation; in Norway and Finland the general practitioners are paid by salary but maintain a gatekeeper role.

It would be unethical for physicians to allow the system of remuneration to influence their judgement about the treatment for a patient in need of health care. However, within the zone of "uncertainty",[1,8] the ethical issues are not the same and physicians can act in their own financial interest. It is in this area particularly that the three payment systems differ regarding the relation between income on the one hand and time invested in providing care on the other. In a fee-for-service system, a general practitioner is rewarded for the investment of extra time; the more services performed, the higher the income. Under a capitation system, no extra income can be achieved by performing more services; in fact, more services may involve greater time but not greater income. In a salaried service, the general practitioner contributes a fixed time component unless there is sufficient flexibility for the doctor to receive 'overtime' payments for additional services. Generally speaking, therefore, a fee-for-service system results in increased physician activity whereas remuneration by capitation and by salary result in low physician activity.

Care provided by general practitioners is less expensive than that provided by specialists. It is therefore sensible to develop payment systems which discourage unnecessary referral to medical specialists. A system of payment by fee-for-service would therefore seem the most cost-effective, but this argument does not hold for a number of reasons. Firstly, general practitioners with high activity levels do not necessarily have low referral rates. Flierman[103] distinguished between diagnostic and therapeutic services, pointing out that there was greater professional uncertainty in the diagnostic services. If cost-containment is an important ele-

ment of a fee-for-service system, then the fee should be based on therapeutic rather than diagnostic activity and even here there is a case for basing it on the morbid problem rather than the services rendered. Secondly, a system of fee-for-service might be seen to encourage the application of a particular service and discourage the services which cannot be quantified easily. For example, a fee might be provided for recording an electrocardiogram but no fee made for additional time provided in obtaining a good medical history or discussing the patient's lifestyle. Finally, remuneration by fee-for-service involves considerable administrative support and makes it hard to predict the total cost of the health care budget.

Remuneration levels

At the one extreme, remuneration may be left completely open to market forces; at the other, it may be rigidly controlled by national incomes policy. Between these two positions, remuneration can be determined using an established negotiating procedure (whether involving fee-for-service, capitation or salary) which may include specified limits in order that expenditure can be capped.

If market forces operate, the supply and demand for general practitioners is the dominant issue. In most countries, the state plays a large part in the establishment of medical school places and in funding medical students. This influence on the supply of doctors protects the supply from the most rigorous exposure to market forces. However, by accepting the costs of training a surplus of doctors, a government theoretically might be in a stronger position to limit their remuneration subsequently.

In situations where supply and demand for doctors is not in equilibrium, there is no real consideration of the worth of doctors nor of the quality of care they provide. Governments have to create a suitable environment for the operation of a health service, simply because people both demand and need one, but they are not primarily concerned with issues of quality of care. In open market situations it is difficult to budget accurately for demands on health care, which can vary for unpredictable reasons.

Whilst we can never be free from the influence of market forces, systems of fees and allowances give considerable scope for negotiation. One fee might be deemed acceptable and another not; selective acceptance of a fee scale is a powerful bargaining tool. Where doctors are paid on a fee-for-service basis, health care providers will need to ensure the acceptability of a comprehensive package of services: selective exclusion of key items will provide a major problem for sickness fund managers. If there is negotiation without proper procedures for quality control, this method of payment will tend to undermine efforts to improve family care, as well as being ineffective as a means of cost control.[104] A fee for the minimum service will tend to lead only to the minimum service being provided.

An extension of the fee-for-service method involves the use of expenditure capping. This procedure has proved very unpopular with doctors, though financers of health services have resorted to this method in order to exert overall budgetary control. The method has also been applied in capitation-based systems. In the United Kingdom a target income for general practitioners is determined by reference to the average earnings of people in equivalent professions. The reference comparison is made by a team of advisers to the government who take evidence from the government and from the profession itself. Once the target is determined, the relative distribution by capitation and fees-for-service is determined by negotiation with the profession. This arrangement is unpopular with doctors because it does not totally respond to increased demand in health care services. Though average income may have kept pace with inflation over the years, average workload has increased. A similar system operates in the Netherlands. It is fundamental to the system that the level of recruitment to the profession is controlled by government and this gives the general practitioners the advantage of greater job security than that experienced by doctors working on a fee-for-service basis.

Remuneration arrangements and income

The various payment methods have been considered above. The actual effects of remuneration arrangements have been researched by a number of people. Sandier[105] found no consistent relationship between the payment system of doctors in various European countries and the level of income achieved. Delnoij[106] reported a general decrease in Europe of general practitioner income relative to

gross domestic product over the period 1975–1990, but the decrease was not evident to the same extent in those countries where general practitioners had a strong position and whose position was not threatened by a surplus of doctors (Denmark, Netherlands, United Kingdom). In fact, physician density and the management of medical staff resources through control of medical school places, and control over the distribution between the specific specialties and general practice, are key determinants of income. Both have to be set against a background of increasing public expectations of medical services, advances in medical care and increased life expectancy, particularly among people with chronic illness, whose needs for medical attention extend over a much longer period than would have been the case 30 years ago.

Chapter 10 Human Resources Planning

Health care is labour intensive. Efficient practice organization and administrative computerization optimize the time available for general practitioners to provide clinical services. They require a long period of training and operate at a high level of responsibility where mistakes can have particularly serious consequences. This chapter is devoted to some detailed considerations of human resources planning.

Definition

Spurgeon's[107] original definition – "a strategy for the acquisition, introduction and improvement of an enterprise's resources" – is not ideal, since from a national perspective, general practice is not an enterprise in the usual commercial sense. Bramhan, in the same publication, proposed a preferable alternative – "Manpower planning is concerned with trying to establish a clearer relationship between the work to be done and the people available to do it, not only in the present but also as far in the future as is appropriate."

The "work to be done" therefore needs an agreed definition; the general practitioner's job description may vary from one country to another. The available workforce is the number of doctors seeking work. Medical registration in most countries can give information about the number of doctors, but the precise number wishing to work in the field of medical care is a different matter. Female doctors in particular may only be seeking part-time employment, and some doctors may be seeking work outside the medical role of caring, for example within the pharmaceutical industry. We have already emphasized the importance of training for general practice and within this context we are concerned particularly with the numbers of appropriately trained doctors who are seeking work. In a recent review of 166 newly trained general practitioners not yet established as principals, Baker et al.[108] found that approximately half were not working in general practice. The methodology of this study does not permit extrapolation to other situations or to other times. However, it was very evident that the income and working conditions prevailing when newly trained general practitioners are making decisions about career opportunities have implications for human resources management.

Human resources management for general practice has to be seen in the wider context of resource management for the whole of medicine. Strategies to achieve an appropriate balance exist in comparatively few countries. The task is more difficult where doctors can operate as independent practitioners in either specialist or general practice. It is in this situation that the effects of an over-supply of doctors are most problematic.

Bramhan's definition refers both to the present and future. Advances in medical technology are more rapid than the lead time in medical education. There is nevertheless the need for planners to make what predictions they can. This not only involves predictions about the role of the doctor, but also predictions about the human resources available. Over the last 40 years there has been a dramatic increase in the number of females recruited to medicine, there has been a reduction in the usual working life of doctors arising from longer training and earlier retirement, society has come to expect longer holidays, and the absence from work for the purpose of continuing medical education is seen as desirable. All these have an impact on human resource planning; how many of them could have been forecast? In spite of all the difficulties, strategic planning of human resources is sensible, but limitations of plans must be recognized.

Parties involved

The parties concerned are dependent upon the health care situation in a country. Government must always be involved with the welfare of its nationals, even where it is not directly involved with the financial arrangements for health care. There is a financial aspect not only to the remuneration of doctors and the large numbers of associated health care workers, but also to the impact of health problems on the

workforce of the country and the state of health of the community generally.

The managers of health care, whether responsible to government, to regional health authorities or to sickness insurance funds, obviously have a role in determining the distribution of doctors between the different parts of the country or between the specialties. However, though managers may have to consider budgetary issues and the distribution of money, they do not necessarily determine the total budget for health care. Thus, the financiers of health care are involved and in many cases they are another branch of government. The various medical training institutions have an important role: the universities with respect to undergraduate education and the academic colleges with respect to continuing medical education and the maintenance of professional standards. Finally, the opportunity must be given to organizations representing patients to influence the response to their legitimate expectations of a health service.

Projections and forecasts

Projections must be based on supply and requirements[109] and it is necessary to start with the principle that trends observed over time will continue.[110] This, however, does not preclude the introduction into a predictive model of assumptions based on a scientific insight or on deliberate policy decisions.

Projections of supply

Many of the issues concerned with the supply of medical graduates have already been considered above. The key factors are:

- the number of doctors qualifying each year, which is linked to the national policy of student intake;
- the distribution of qualified doctors within the specialties;
- the average working life of a trained doctor, with suitable adjustment for time spent on continuing medical education;
- the willingness and ability of trained doctors to continue working.

Projection requirements

The stock of available general practitioners to some extent influences requirements because if doctors are available to provide extra services, patients gradually come to expect them. However, notwithstanding this limitation, the major factors are:

- demographic trends – here we are concerned not only with the absolute numbers of people but also with expected changes of age distribution;
- development of health needs – advances in health care continuously redefine needs and the quality of services required to meet those needs;
- development of health demands – this can be very difficult to forecast partly because it depends on the availability of doctors to supply the demands, in addition to factors such as price and accessibility; however, where trends in health care utilization can be identified, they should be taken into account;
- service targets – these are policy decisions; for example, a revision of immunization policy, the introduction of a health screening programme or a revised definition of an optimal ratio between patients and doctors all have an impact on forecasting.

Deliège[109] considered that these factors had different impacts depending upon the development of the health service in a given country. Health needs are the most useful parameter in countries where health services are already good and approaching the maximum standards of care which medical science can reasonably offer, or in countries where new services are being considered. Health demands must be used as the parameter in countries where a substantial segment of the health services is in the private sector or where major changes in demand are anticipated. Service targets should be used in all other situations.

Modelling human resources

In 1992 in the Netherlands, the NIVEL Institute was asked to provide an estimate of training requirements sufficient to service adequate recruitment to general practice by the year 2005. A model for the purpose had been developed some years earlier by Hingstman et al.[111] This model calculated the number of general practitioners needed at any one time from the fraction of total demand for general practitioner services divided by working capacity of

general practitioners at that time. Total demand was equivalent to the total number of hours per year spent by general practitioners on patient care, with assumptions for changes anticipated by the year 2005. These included an increase of 12.5% for demographic change. (Assumptions for epidemiological, cultural and technical changes were considered not to be quantifiable and thus were ignored.) The working capacity of general practitioners was taken to be the total number of hours per year that general practitioners would be available for patient care. The assumptions appropriate to the year 2005 included increases of 17.7% allowing for anticipated reductions in working hours, 2.3% for reducing the number of weeks worked from 48 to 45 per year, 16.6% representing reduced availability because of increased commitment to continuing medical education and 3.7% because of anticipated increases in the average duration of consultations. Estimates were also made to cover losses due to migration. In many countries, anticipated changes in the relative proportion of female general practitioners is an important parameter, since the number of years spent in full time employment is less than that for males.

The estimates made in the Netherlands suggested a number considerably in excess of the number of established training practices. Indeed, existing facilities were only sufficient to respond to anticipated demographic changes.

Research and human resources planning

A prerequisite of human resources planning is the maintenance of a comprehensive longitudinal record of the "stock" of available general practitioners – the "inflow" and "outflow". Details of age, sex, training experience, geographical location, emigration and immigration of available doctors are needed in order to evaluate possible effects of changes in policy.

Equally important is the ability to make realistic assumptions about trends in workload. The transfer of hospital-based care into the community has considerable effects on the workload. Martin[112] listed a variety of factors impinging on general practitioner workload and some of these are quoted here:

- more patients with chronic diseases are cared for in general practice;
- there has been a transfer of care of patients with chronic mental illness and mental handicap from hospital to community;
- screening in general practice has increased;
- increased involvement of general practitioners with additional appointments, for example in school health and occupational health etc.;
- increased length of consultation time.

The impact of ethnic minorities both with their language differences and the differing ranges of morbidity affect the general practitioner's workload. However, before these factors are accepted automatically as likely to increase the workload, there is a need for objective evidence. Improved education and improved health status may minimize differences between ethnic minority groups and the indigenous population by the time old age is reached and the impact of chronic diseases increases substantially.

The relationship between consultation rate and remuneration system is not simple. There are wide differences between practices in the average number of consultations per patient. In the Netherlands, consultation rates are higher for the 60% of the population who are covered by a publicly insured health care scheme than for the 40% of patients covered by a private scheme. The interaction between payment systems has already been discussed (Chapter 9) but here it is important to emphasize that changes in the payment system will impinge on human resources planning considerations.

Instruments for human resources policy

The objective of human resources planning is to prevent both shortage and over-supply. The means available to achieve this objective focus chiefly on the level of recruitment into the profession and adequate training for general practice. Additionally, it is necessary to ensure that the position of general practice is sufficient to maintain its attraction amongst other medical specialties and amongst other vocations which potential medical students may view as more attractive. Some additional consideration may be needed to ensure adequate recruitment of general practitioners to the various parts of the country and also to make the most of a

workforce which may be available in some cases for part-time, and in others for full-time employment. The combined effect of a long undergraduate course and postgraduate vocational training period means that there is a very long lead time between policy decisions and practical impact on the supply of doctors. It is thus theoretically possible that a reduced training period could be considered as a policy option to deal with an emergency situation. However, the major thrust of this book is concerned with high-quality medical care delivered by well trained doctors and a policy of reduced training surely could be justifiable only in an extreme emergency (for example, in wartime).

A career structure within general practice could be seen as a way of dealing with the problems of under-served areas. It may be considered desirable for doctors to obtain experience in a variety of different practice settings, including both rural and urban, in young communities and in old. There may be advantages here for the planners to ensure an adequate service in under-doctored areas but if quality of care has anything to do with continuity of care, then one of the main planks of good general practice is undermined. Financial inducements have been used widely in Britain to attract doctors to under-doctored areas but these have a particular disadvantage in that they are given on a temporary basis.[114, 115]

Finally, the working conditions for general practitioners can be used to influence recruitment. Good practice premises can be provided on a preferential basis to areas where recruitment has been limited. New doctors would be attracted to high-quality premises and good facilities.

Part II

European Survey of the Task Profiles of General Practitioners

Chapter 11 Survey Methods

The European Survey of the Task Profiles of General Practitioners sought to describe and explain differences in the position of general practitioners and primary care physicians in the countries of Europe. The role of general practitioners as the access point to health care and the breadth of services provided by them are key elements. These have been considered in the context of the management and follow-up of diseases, the application of minor surgery and technical procedures, and the provision of preventive services and screening routines. The survey has also sought to describe the working environment in the practices, the primary care team, working hours, consulting availability, practice equipment, home visiting arrangements and out-of-hours cover. The questions used to ascertain this information are summarized in Annex 2.

The survey was concerned with identifying national differences, hence questions about the most obvious tasks of general practitioners were not included. We were particularly interested in the activities which might influence the interface between primary and secondary care. Questions about minor surgery and more serious diseases were particularly important to illuminate this area. The survey was not intended to provide a complete description of all the tasks and activities of general practitioners nor to assess the quality of health care. It was focused on the organization. The services provided by a general practitioner in one country may be provided by a different health professional in another. In this book the results of the survey are described. Variation in relation to the structure of health care systems has been reported separately.[116]

Organization and sampling

The survey was funded by the European Commission in the framework of the BIOMED 1 programme and supported by the WHO Regional Office for Europe. It was carried out by NIVEL in the Netherlands in collaboration with a network of national coordinators (see Acknowledgements) who were involved in all stages.[117] Information was collected by means of a standard questionnaire translated in the national languages. Altogether there were 26 versions of the questionnaire. The aim was to obtain 200 completed questionnaires in each country, preferably from respondents recruited using a random sampling procedure (except in Iceland and Luxembourg where the populations of general practitioners were very small). The size of the sample in each country was dependent upon the expected response rate. In some countries the samples drawn were larger than necessary, anticipating a limited response. In many countries of central and eastern Europe, general practitioners were virtually unknown and in these countries, district doctors (general therapists) were recruited. The objectives of the study could not be achieved in all countries, though this is hardly surprising given the large number of countries involved. Health service research was in its infancy in many countries and the necessary infrastructure was not available. In many countries, especially in eastern Europe, general practitioners were recruited regionally, taking note of the degree of urbanization. Where this was not practicable, a sample of doctors working in polyclinics or health centres was asked to participate and this proved very effective. In countries where participation was expected to be very low, we also made concessions in the recruitment procedure in order to arrive at the desired number of respondents. In Belgium, for instance, in addition to a random sample, general practitioners affiliated to the Belgian College of General Practitioners were approached. In Germany, questionnaires were distributed to a random sample in one region and to teachers in general practice elsewhere. In France recruitment was achieved by opportunistic sampling using advertisements in two popular medical journals.

Practitioner response

In most countries, a random sampling procedure was achieved (Table 11.1). However, because in many of them (especially in the west), response rates were below 50%, selection bias may have occurred. We can only speculate whether bias due to selective recruitment among the random sample is different from bias due to selective recruitment for other reasons. Comparison of the results with relevant national data has shown that in general, the youngest and oldest groups of general practitioners were under-represented. With the exception of Turkey, there was general under-representation of urban doctors. In countries with poorly developed general practice (for example, Greece and Latvia), the small group of qualified general practitioners were deliberately over-represented. Despite these reservations, in the majority of countries, responding general practitioners appeared to be fairly representative of the national position. Altogether, 7233 general practitioners and primary care physicians participated.

Table 11.1 Response and sampling procedures by country.

Country	Number of completed questionnaires	Response rate (%)	Sampling procedure
Austria	301	50	Random (national)
Belgium	518	28	Other
Bulgaria	242	84	Random (regions)
Croatia	202	59	Random (regions)
Czech Republic	132	51	Random (regions)
Denmark	196	56	Random (national)
Estonia	165	70	Random (national)
Finland	239	42	Random (national)
France	235	n.a.	Other
Germany	169	44	Other
Greece	179	33	Random (national)
Hungary	162	36	Random (national)
Iceland	52	37	All active GPs
Ireland	130	65	Random (national)
Israel	673	78	Random (national)
Italy	345	51	Other
Latvia	227	45	Random (regions)
Lithuania	333	87	Random (regions)
Luxembourg	54	30	All active GPs
Netherlands	210	53	Random (national)
Norway	164	52	Random (national)
Poland	277	46	Random (regions)
Portugal	151	38	Random (national)
Romania	232	52	Other
Slovenia	162	65	Other
Spain	574	42	Random (national)
Sweden	209	52	Random (national)
Switzerland	200	50	Random (national)
Turkey	199	50	Random (regions)
United Kingdom	301	30	Random (national)
Total	7233		

The scoring of questionnaires

The role of the general practitioner in the first contact with health problems, in the application of medical techniques and in the treatment and follow-up of diseases was examined in a series of questions. Respondents answered on a four-point scale indicating the extent to which the specific health problems were presented to them, and the extent to which specific therapeutic interventions were made by them.

In the analysis of the data, a scaling procedure[116] was used to identify skewness and inconsistency, and this led to the exclusion of some items. This exercise facilitated linkage of questions which could be analysed as a single group: for example, amongst the questions relating to first contact with the health service, the problems of children and the problems causing acute emergencies were consolidated into groups.

Presentation of data

In the presentation of the results of this survey, national scores are given in the tables. In the text, relevant material is summarized listing countries in rank order or ranked groups according to the scores reported.

Chapter 12 The Position of General Practitioners in Health Care

Supply of general practitioners and formal position

General practitioner density

The average number of inhabitants per general practitioner varies widely in European countries (Table 12.1). In 1991 when data for the European Survey of Task Profiles were collected, Belgium had the lowest ratio (588:1); in Italy and France, there were also fewer than 1000 inhabitants per general practitioner. These situations make it difficult to maintain a reasonable income and they increase competition both between general practitioners and between general practitioners and medical specialists. On the other hand, some countries have few general practitioners. For instance, in 1991 in Greece there were large parts of the country with no general practitioners and primary care was provided by medical specialists. In relative terms, general practitioner density was low in Sweden, the Netherlands, Switzerland and Croatia, though these countries differed markedly in the delivery of health care. In Sweden and Switzerland, general practitioners were not the only providers of primary care, while in the Netherlands and Croatia, their role was pivotal. Not surprisingly, in Belgium and Italy, where general practitioner density was particularly high, several physicians worked as general practitioners. In France, general practitioners made up a large part of the total number of physicians. On the other hand, in Bulgaria, Sweden and Spain, western Germany, Switzerland and the Netherlands, general practitioners comprised less than 20% of the total.

Gatekeeping role

In 12 countries general practitioners held a gatekeeper role to secondary care. (In Table 12.1 this has been indicated by an asterisk after the country name.) Hence patients normally see their general practitioner first, even if they require specialist services. It is probable that the gatekeeper role would be observed with varying degrees of adherence. Furthermore, in some countries (for example Italy and Spain), general practitioners were not the only gatekeepers, community-based paediatricians controlled access to some specialist services.

Employment status

The employment status of general practitioners was closely associated with the structure of the health care system. In most countries of western Europe (Austria, Belgium, Denmark, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Switzerland and the United Kingdom), general practitioners were predominantly self-employed. In Finland, Portugal, Spain and Sweden, they were salaried. In Norway, about 60% were self-employed and 40% salaried. In the countries of eastern Europe, general practitioners used to be civil servants, though this situation was changing at the time of the survey, rapidly so in the Czech Republic, Hungary and Poland. The employer of the salaried general practitioner varied and included state, local municipality or health authority or sometimes a private institution or employer group.

Age

The average age of general practitioners was between 40 and 45 years in 18 countries and between 45 and 50 years in a further 9. In Turkey, the average age was 30.6 years, largely because in the first year after graduation all doctors were obliged to work in rural primary care before starting specialist training. The oldest doctors were in Hungary (51), though in Germany, Denmark and Switzerland, the average age exceeded 48 years. The average age was generally higher in those countries where general practitioners were self-employed.

Gender

The proportion of female general practitioners ranged from 7% in Switzerland to 94% in Estonia.

Table 12.1 GP gatekeeping position, density, employment status, age and gender.

Country	Inhabitants per GP (1)	% GPs self-employed (2)	Average age (2)	% GPs who are female (2)
Austria	1532	99	45.0	12
Belgium	588	97	42.3	14
Bulgaria	n.a.	1	38.4	63
Croatia *	2010	0	43.7	66
Czech Republic	1527	33	42.9	62
Denmark *	1609	100	49.0	16
Estonia	n.a.	1	43.9	94
Finland	1582	2	40.2	54
France	943	97	42.8	13
Germany (western)	2110	100	49.2	16
Germany (eastern)	1870	n.a.	n.a.	n.a.
Greece	n.a.	30	45.1	25
Hungary	1975	12	51.0	32
Iceland *	1594	25	42.6	12
Ireland *	1559	91	45.8	25
Israel *	n.a.	17	46.6	37
Italy *	930	98	44.1	16
Latvia	n.a.	3	42.3	77
Lithuania	n.a.	0	43.1	89
Luxembourg	1680	98	41.1	17
Netherlands *	2310	93	44.8	19
Norway *	1360	58	43.1	25
Poland	n.a.	0	44.8	42
Portugal *	1476	1	40.9	49
Romania	n.a.	6	40.8	74
Slovenia *	n.a.	1	41.4	55
Spain *	1970	4	41.5	34
Sweden	2870	1	47.0	35
Switzerland	2030	99	48.2	7
Turkey	n.a.	3	30.6	34
United Kingdom *	1892	99	46.2	22

Notes
(1) *Sources:* Boerma et al. 1993; World Bank reports; OECD Health Data, 1993, reference years between 1989 and 1992.
(2) *Source:* NIVEL/European Survey of the Task Profiles of General Practitioners.
n.a.: not available
* General practitioners in gatekeeping position

In general there were fewer female general practitioners in the countries of western Europe and countries in which a self-employed status was usual. Countries in which more than 50% of general practitioners were female, were all in eastern Europe. Amongst the countries of western Europe, a relatively high proportion of female general practitioners was found in Portugal (49%).

As a generalization, in those countries with a large preponderance of male general practitioners, the income and status was higher than those with a preponderance of females. However, these relationships are constantly changing. By 1995, in the Netherlands and United Kingdom for example, entry into medical schools was roughly equal between the sexes.

Training and workload

Vocational training

Entry into general practice now involves vocational training in most countries. The EU directive of 1993 made a minimum two-year period of vocational training obligatory. In Turkey, a 12-month period in primary care after graduation is mandatory for all doctors before specialization but this is not a specific training exercise. General practitioner vocational training is in a developmental phase in eastern Europe, but unfortunately the products of a training programme are visible only after many years. In the United Kingdom and the Netherlands, vocational schemes have existed for more than 20 years. In the survey, two-thirds of all general practitioners in these countries were vocationally trained (Table 12.2).

Table 12.2 Competence and working hours of GPs: proportion vocationally trained, average number of hours for keeping up-to-date, average number of working hours and involvement in additional jobs.

Country	% GPs vocationally trained (1)	Hours per month for CME (2) etc.	Working hours per week (in regular services in main position)	% GPs with additional job
Austria	54	16.5	49.6	43
Belgium	71	13.4	51.1	33
Bulgaria	15	30.5	39.8	14
Croatia	57	19.3	40.6	6
Czech Republic	90	19.1	42.5	18
Denmark	99	13.8	42.8	28
Estonia	12	19.5	36.7	13
Finland	34	13.9	38.0	21
France	16	18.5	53.8	42
Germany	75	17.6	53.8	27
Greece	67	29.9	35.6	21
Hungary	33	25.9	30.0	38
Iceland	82	10.8	41.2	67
Ireland	45	10.9	43.6	38
Israel	42	22.5	33.6	47
Italy	11	20.0	30.2	44
Latvia	49	18.1	30.2	13
Lithuania	16	19.4	34.2	25
Luxembourg	35	13.3	51.4	17
Netherlands	66	13.2	46.1	19
Norway	45	12.4	36.4	46
Poland	19	19.3	37.0	42
Portugal	65	18.9	36.4	40
Romania	26	25.7	28.6	6
Slovenia	45	20.2	38.9	6
Spain	27	28.2	35.2	29
Sweden	96	12.6	38.3	22
Switzerland	86	14.1	50.2	29
Turkey	0	37.4	41.5	13
United Kingdom	71	13.4	42.0	35

Notes
(1) Not necessarily a regular vocational training programme for general practice.
(2) Continuing medical education.

In some countries, vocational training courses have been introduced for established general practitioners and in these (for example, Sweden and Switzerland), there were very high proportions of vocationally trained general practitioners. Countries in which fewer than 20% of recruited general practitioners were vocationally trained included Turkey, Italy, Estonia, Belgium, France, Lithuania and Poland. However, for some countries (for example, Belgium and Germany) there was over-representation of vocationally trained general practitioners in the survey.

Continuing medical education

Estimates of time spent in keeping up to date are given in Table 12.2. In north and north-western Europe (the five Nordic countries, Ireland, the Netherlands, Belgium, United Kingdom and Switzerland), general practitioners spent less than 15 hours per month on continuing medical education. Averages of more than 25 hours per month were reported from Bulgaria, Greece, Spain, Hungary and Romania. Most time was spent in Turkey (37 hours), though here the results were dominated by young graduates preparing for competitive entrance examinations for specialization.

Working hours

Recorders were asked to describe hours worked in their main job (some general practitioners held additional appointments) but excluding emergency "on-call" commitments. Working hours ranged from 29 in Romania to 54 in France and Germany. Other countries in which the working week exceeded 50 hours included Luxembourg, Belgium and Switzerland. This cluster of countries in mainland Europe had much in common: few females, self-employed status, comparatively few hours spent on continuing medical education. In general, the countries of eastern Europe, Spain, Greece and Portugal had a shorter working week than those in western Europe.

Additional jobs

Many general practitioners surveyed held additional part-time appointments in university departments, nursing homes, hospitals, school medical services, forensic health care etc. and some were also permitted to engage in independent private practice. Relatively few general practitioners in Slovenia, Romania, Croatia, Estonia, Latvia and Turkey held such appointments and there was a general trend of fewer additional appointments in the countries of eastern Europe. In Iceland, two-thirds of general practitioners and in Israel, Norway, Italy, Austria, France, Poland and Portugal, almost half the general practitioners held additional appointments committing them for approximately 10 hours per week.

Professional contacts in primary and secondary care

Solo working

In many countries, general practitioners commonly work in groups or partnerships and in the survey this occurred in both eastern and western countries (Bulgaria, Finland, Portugal, Sweden and Turkey). In the United Kingdom, most general practitioners worked in groups, which until 1989 were encouraged by governmental financial incentives. However, for doctors in isolated rural areas, there were few opportunities for group practice and sometimes the high cost of premises within the cities deterred young doctors from joining established partnerships. Though solo practice was declining, as Table 12.3 shows, there were still many countries in which it was the norm, with more than two-thirds of general practitioners working by themselves (Austria, Italy, Poland, Switzerland and Belgium). In some countries of eastern Europe, there has been a drift of doctors away from polyclinics to establish themselves in solo practice.

Other general practitioners

In most countries, the majority of general practitioners met colleagues at least once a month. In countries where general practitioners worked in groups, meetings were obviously more frequent. However, meetings were also frequent in countries such as Germany, Switzerland and Austria where most general practitioners worked alone.

Hospital specialists

Meetings with hospital doctors perhaps indicated the relationship between primary and secondary

Table 12.3 Solo working and regular meetings of GPs with other professionals in primary and secondary care.

Country	% GPs working solo	% GPs with meetings at least once per month			
		Other GP	Hospital medical specialist	District nurse	Social worker
Austria	93	76	54	58	14
Belgium	69	51	49	38	12
Bulgaria	10	83	42	57	4
Croatia	36	76	12	86	21
Czech Republic	43	65	30	58	24
Denmark	29	34	6	26	7
Estonia	24	64	32	48	22
Finland	8	98	31	98	47
France	58	68	45	60	12
Germany	67	86	65	78	18
Greece	40	57	52	42	35
Hungary	55	52	43	65	51
Iceland	15	79	31	84	17
Ireland	54	63	13	52	9
Israel	24	77	55	65	41
Italy	86	55	47	30	12
Latvia	17	70	39	54	7
Lithuania	29	77	46	90	13
Luxembourg	61	48	46	43	46
Netherlands	46	77	29	43	25
Norway	25	52	6	58	16
Poland	76	60	50	87	47
Portugal	12	81	35	83	25
Romania	31	61	25	79	49
Slovenia	20	49	4	59	9
Spain	23	64	9	18	31
Sweden	2	84	16	93	10
Switzerland	72	82	72	66	19
Turkey	4	52	30	38	12
United Kingdom	16	75	32	89	24

care. The proportion of general practitioners reporting monthly meetings with specialists exceeded 50% in Switzerland, Germany, Israel, Austria, Greece and Poland.

District nurses

Community nurses or district nurses are particularly important in primary care, especially in the care of the elderly and young children. Although district nursing has not been well developed in all countries, most general practitioners had working relationships with district nurses. In Finland, Sweden, Lithuania, the United Kingdom, Poland and Iceland, most general practitioners reported frequent meetings with district nurses. Contacts were least in Spain, Denmark, Italy, Belgium and Turkey.

Social workers

Although strictly speaking social work is independent of health care, it is nevertheless highly relevant to general practice because of the social impact of the problems presented to general practitioners. In

most countries contacts with social workers were much less than with district nurses. Meetings were more frequent in Hungary, Romania, Poland, Finland and Luxembourg and rarely occurred in Bulgaria, Denmark, Latvia, Slovenia and Ireland.

Considering meetings overall, there were some countries in which there were frequent meetings with most of the other professional groups: for example, Israel, Poland and Switzerland, though even here, the pattern of meetings with social workers did not match that with the other groups. Relatively frequent meetings within primary care, especially with other general practitioners and district nurses, were reported in Finland, Sweden, Iceland, United Kingdom and Croatia. In Denmark, Italy and Belgium, interdisciplinary contacts in primary care were less frequent than in most of the other countries.

Chapter 13 Curative Tasks of General Practitioners

This chapter is concerned with the involvement of general practitioners in curative care. There were obvious differences between countries where access to health care is universally via the general practitioner and those where direct access to specialist care is possible. General practitioners are able to deal with most health problems presented to them, but there are some which can be managed either in primary or secondary care and some which invariably require treatment in secondary care. The choice often depends on the general practitioner and is made according to their own competence and the availability of suitable equipment and resources. These issues were explored through a series of questions and the results are presented here. The questions posed were selected deliberately to highlight possible national differences. Respondents were required to answer on a four- point scale:

- never treated in general practice
- rarely treated in general practice
- commonly treated in general practice
- always treated in general practice.

The results for each subgroup of questions were aggregated and averaged and the results for each of the major topic groups were also averaged.

Access to health care

The role of the general practitioner in the first contact with health problems was scored on the following items:

(a) Acute problems

- man aged 50 with a burn on his hand;
- woman aged 60 with acute symptoms of paralysis/paresis;
- man aged 35 with sprained ankle;
- man aged 28 with a first convulsion;
- anxious man aged 45.

(b) Problems related to children

- child with a rash;
- child with severe cough;
- child aged 7 with enuresis;
- child aged 8 with a hearing problem;
- physically abused child aged 13.

(c) Problems related to women

- woman aged 18 asking for oral contraception;
- woman aged 20 for confirmation of pregnancy;
- woman aged 35 with irregular menstruation;
- woman aged 50 with a lump in her breast;
- woman aged 60 with deteriorating vision.

(d) Psychosocial problems

- couple with relationship problems;
- man with suicidal inclinations;
- woman aged 50 with psychosocial problems related to her work;
- man aged 32 with sexual problems;
- man aged 52 with alcohol addiction problems.

Analysis of the data concerning the general practitioner's role as the doctor of first contact is summarized on the map in Figure 13.1 and in Table 13.1. Scores of 3.25 or more were recorded in the Netherlands, Denmark, Ireland and the United Kingdom. Also in these countries, scores were uniformly high across the range of problems considered. Similarly, where overall scores were low (Bulgaria, Lithuania, Latvia, Turkey and Estonia), they were low across the range. Scores in the countries of central and eastern Europe were generally lower than those in the west, though scores in Croatia, Slovenia and Hungary indicated a relatively strong position for general practitioners as the access point to health care. Amongst the indi-

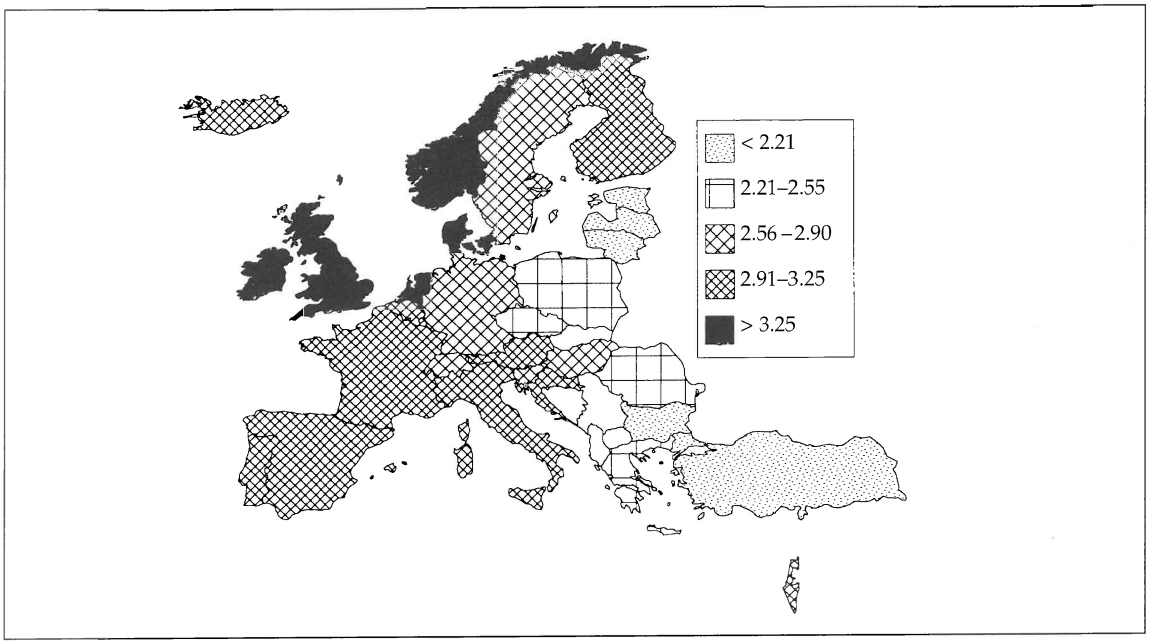

Figure 13.1 The role of general practitioners in the first contact with health problems (possible scores range from 1 to 4).

vidual categories, scores were higher for questions concerned with acute illness than for other problems, indirectly emphasizing the importance of the availability of general practitioners to respond to emergencies. Differences in scores amongst the problems related to children and problems related to women occurred where paediatricians and gynaecologists worked in primary care: for example, in the Czech Republic, Germany, Luxembourg, Spain and Turkey.

Use of medical technical procedures

The application of medical techniques was measured in the following items:

- wedge resection of an ingrowing toenail
- removal of sebaceous cyst from the scalp
- wound suturing
- excision of warts
- insertion of IUD
- removal of rusty spot from the cornea
- fundoscopy
- joint injection
- strapping an ankle
- cryotherapy (warts).

Data are presented in the map in Figure 13.2 and in Table 13.2 summarizing the use of technical procedures. The highest scores occurred in Finland, Iceland, the Netherlands, Norway, Switzerland, Denmark, United Kingdom and Sweden. The lowest scores occurred in Bulgaria, Lithuania, Estonia, Poland, Hungary and Italy. Procedural interventions by general practitioners were in general higher in the countries of western Europe than those in the east.

Involvement in the treatment and follow-up of disease

General practitioner involvement in the management of disease was measured in the following items:

- hyperthyroidism
- herniated disc lesion
- acute cerebrovascular accident

Table 13.1 The role of general practitioners in the first contact with health problems (possible scores range from 1 to 4).

Country	Total scale	Child problems	Women problems	Psychosocial problems	Acute problems
Austria	3.0	3.0	2.7	2.8	3.4
Belgium	3.0	3.0	2.8	3.1	3.3
Bulgaria	1.7	1.7	1.7	1.8	2.0
Croatia	3.1	2.8	2.9	3.2	3.7
Czech Republic	2.3	1.5	1.9	2.6	3.4
Denmark	3.5	3.6	3.7	3.6	3.3
Estonia	2.1	2.1	1.8	1.9	2.5
Finland	3.0	3.2	3.1	2.7	3.3
France	3.1	3.2	2.9	3.1	3.4
Germany	2.8	2.8	2.4	3.0	3.3
Greece	2.5	2.5	2.2	2.2	3.2
Hungary	2.7	2.4	2.5	2.9	3.5
Iceland	3.1	3.4	3.1	2.9	3.3
Ireland	3.5	3.6	3.7	3.2	3.5
Israel	3.1	3.1	3.0	2.9	3.4
Italy	3.1	3.3	3.2	2.8	3.1
Latvia	2.0	1.7	1.8	2.0	2.4
Lithuania	1.7	1.5	1.6	1.6	2.3
Luxembourg	2.6	2.7	2.2	2.6	3.1
Netherlands	3.7	3.8	3.9	3.6	3.8
Norway	3.3	3.3	3.6	3.0	3.4
Poland	2.3	2.3	2.0	2.1	3.1
Portugal	3.2	3.4	3.6	3.1	2.7
Romania	2.4	2.5	2.3	2.2	2.7
Slovenia	2.9	2.4	2.6	3.0	3.7
Spain	3.2	2.8	3.4	3.0	3.5
Sweden	2.8	3.0	2.7	2.8	3.0
Switzerland	2.9	2.7	2.6	2.9	3.4
Turkey	2.0	2.4	2.0	1.4	2.3
United Kingdom	3.5	3.6	3.7	3.5	3.4
Average	2.9	2.8	2.8	2.8	3.2

- congestive heart failure
- peritonsillar abscess
- ulcerative colitis
- salpingitis
- concussion of brain
- Parkinson's disease
- rheumatoid arthritis
- depression
- myocardial infarction.

The data about the management of diseases are summarized in Figure 13.3 and in Table 13.2. National results with respect to disease management showed less variation than was shown for the use of medical technical procedures. The highest scores were reported in the United Kingdom,

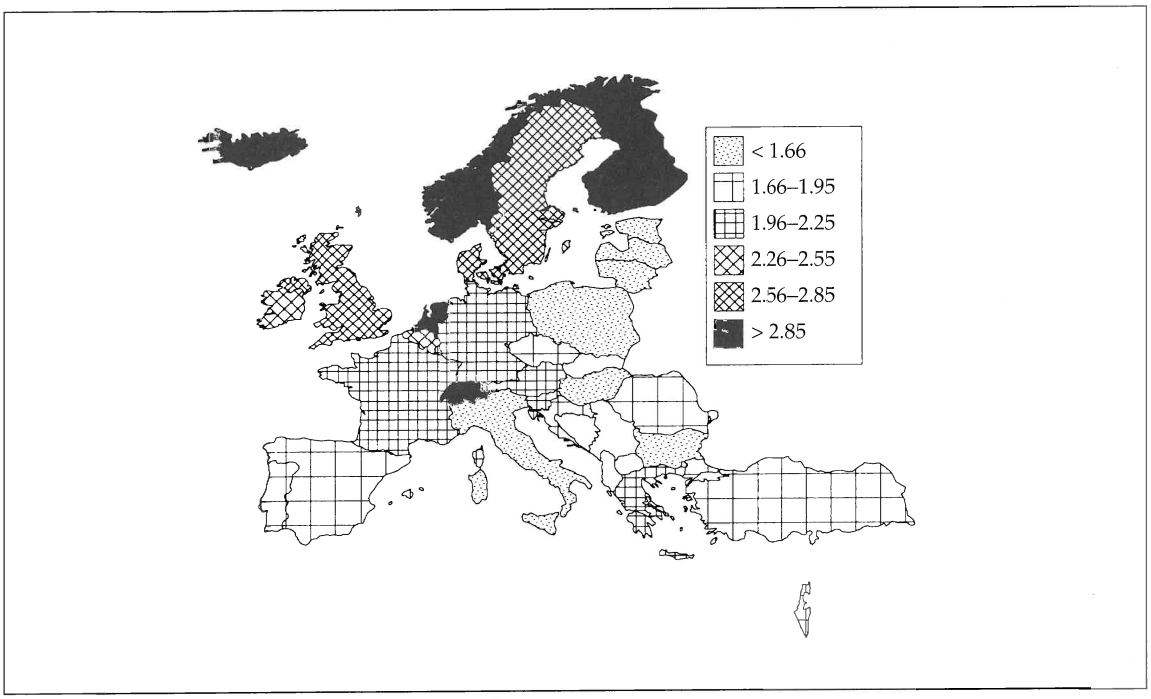

Figure 13.2 The involvement of general practitioners in the application of medical technical procedures (possible scores range from 1 to 4).

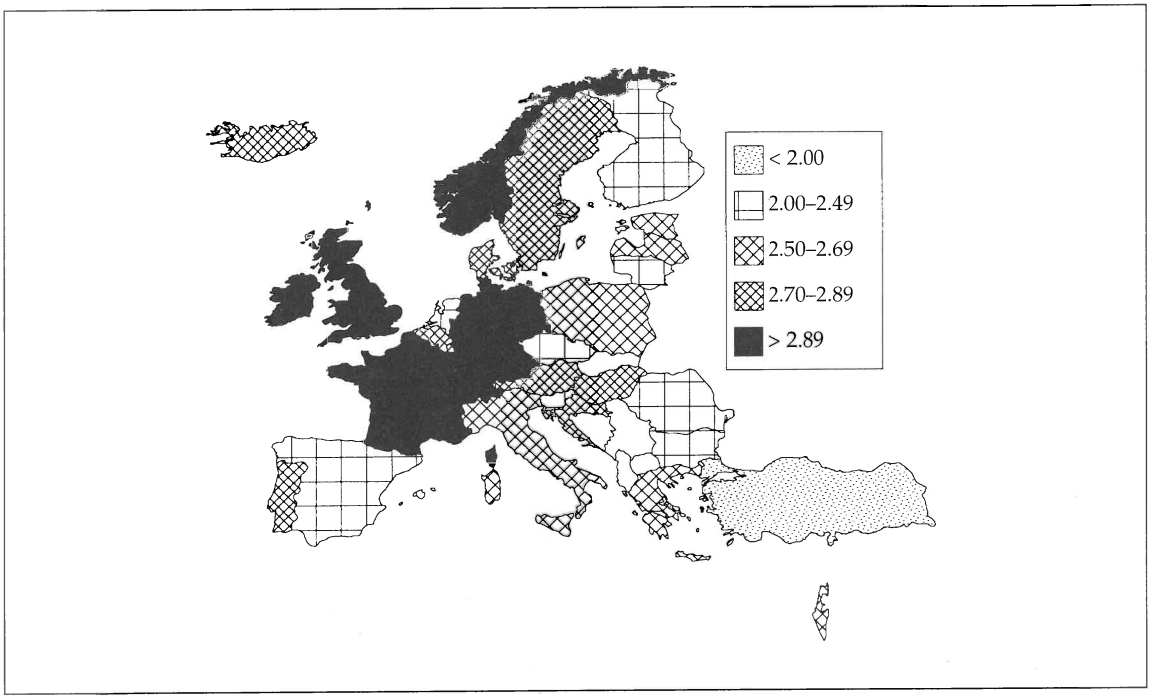

Figure 13.3 The involvement of general practitioners in the treatment and follow-up of disease (possible scores range from 1 to 4).

France, Germany, Ireland and Norway and the lowest in Turkey, Bulgaria, Romania, Lithuania, Slovenia and Spain. Comparatively low values in the Netherlands (2.4) were surprising.

Table 13.2 The involvement of general practitioners in the application of medical technical procedures and in the treatment and follow-up of disease (possible scores range from 1 to 4).

Country	Medical techniques	Management of disease
Austria	2.1	2.9
Belgium	2.5	2.8
Bulgaria	1.1	2.2
Croatia	1.8	2.8
Czech Republic	1.7	2.4
Denmark	2.8	2.9
Estonia	1.3	2.5
Finland	3.5	2.5
France	2.0	3.0
Germany	2.2	3.0
Greece	2.0	2.6
Hungary	1.4	2.8
Iceland	3.2	2.8
Ireland	2.5	3.0
Israel	1.7	2.6
Italy	1.4	2.6
Latvia	1.6	2.6
Lithuania	1.1	2.4
Luxembourg	2.2	2.7
Netherlands	3.1	2.4
Norway	3.0	3.0
Poland	1.3	2.6
Portugal	1.7	2.7
Romania	1.8	2.3
Slovenia	2.0	2.4
Spain	1.8	2.4
Sweden	2.8	2.7
Switzerland	2.9	2.9
Turkey	1.7	1.7
United Kingdom	2.8	3.1
Average	2.1	2.6

Interim conclusion

Summarizing the results on the role of general practitioners in the first contact with health problems, the application of medical techniques and in disease management and follow-up, we conclude that the position of general practitioners in these curative services was strongest in the United Kingdom, Denmark, Norway, the Netherlands and Ireland. This leading group was followed by countries reporting an above-average general practitioner role in curative care: Iceland, Switzerland, France, Germany, Portugal and Croatia. There was an obvious distinction between the eastern European countries, where primary care was in a transitional stage of development, and the remaining countries.

Involvement in maternity care

Strictly speaking, antenatal and intrapartum care are preventive rather than curative. During recent years, obstetric care has become increasingly hospital- and specialist-based and consequently in some countries general practitioners have completely withdrawn from this field. More commonly, however, they have withdrawn from intrapartum care but retained responsibility for antenatal care, notably in those countries of western Europe where general practitioners hold a gatekeeper role: Denmark, Ireland, United Kingdom, Norway, Portugal, Iceland and France (Table 13.3). In Germany, Slovenia, Luxembourg, Hungary, Sweden, the Czech Republic, Poland and Lithuania, antenatal care was provided by specialist obstetricians and less than one-third of general practitioners reported involvement. The role of general practitioners in intrapartum care was much less: Iceland was a notable exception, with over half the general practitioners involved. About one-third of general practitioners reported some involvement in the United Kingdom, Slovenia, Turkey and the Netherlands. Intrapartum care was not provided by general practitioners in Sweden, Finland, Italy, Lithuania and Luxembourg and rarely so in Spain, Portugal, France and Israel.

Involvement in homeopathic medicine

Scores for involvement in homeopathic medicine are given in Table 13.3. Homeopathy is a controversial subject in medicine and in general practice. Although homeopathic principles and treatments are not accepted by all, homeopathy was often used

Table 13.3 The involvement of general practitioners in antenatal care, intrapartum care and homeopathic medicine.

Country	% GPs active in antenatal care	% GPs active in intrapartum care	% GPs involved in homeopathic medicine
Austria	74	14	41
Belgium	73	22	9
Bulgaria	53	23	15
Croatia	37	9	19
Czech Republic	29	10	61
Denmark	99	22	4
Estonia	79	8	13
Finland	69	2	1
France	85	6	16
Germany	18	11	52
Greece	36	12	5
Hungary	27	13	18
Iceland	94	54	8
Ireland	99	17	5
Israel	54	6	6
Italy	64	2	5
Latvia	47	24	47
Lithuania	32	2	71
Luxembourg	23	2	17
Netherlands	45	29	17
Norway	96	9	1
Poland	30	19	18
Portugal	96	5	1
Romania	71	19	29
Slovenia	18	32	14
Spain	48	4	5
Sweden	28	1	1
Switzerland	77	12	12
Turkey	48	31	28
United Kingdom	98	36	6

at the request of patients. There was a large variation in its use: in Lithuania, the Czech Republic and Germany, the majority of general practitioners were involved and so were large minorities in Latvia and Austria. Homeopathy was rarely used by general practitioners in Scandinavia, Ireland and the Mediterranean countries. The varying use of homeopathy probably reflects national cultural differences.

Chapter 14 *Involvement of General Practitioners in Preventive Services and Health Promotion*

In many countries, general practitioners deliver preventive services, such as immunization, antenatal care and paediatric surveillance. Medical science has shed light on the causes of our 'diseases of affluence', opening up new areas for prevention. Early detection of disease, identification of risk factors and the promotion of healthy lifestyles are encouraged to reduce coronary heart disease, stroke and cancer. Although awareness has grown that general practitioners can play an important role in these preventive activities, there remain practical obstacles for implementation.

This European Survey of the Task Profiles of General Practitioners considered prevention and health under the following headings: case-finding, health education, paediatric surveillance and childhood immunization.

Case-finding routines

Respondents were asked to report whether the case-finding examinations were undertaken routinely when patients attended the surgery regardless of the primary problem or on request in relation to relevant clinical conditions. Only where the procedure was carried out routinely was it regarded as preventive case-finding and these percentages are given in Table 14.1 and Figure 14.1.

Blood pressure

Routine blood pressure measurement was recorded by 78% of general practitioners, a value which was higher than for the other three examinations. There were large national differences, with three countries averaging less than 50% (the Netherlands, Sweden and Norway), and ten countries more than 90% (France, Portugal, Luxembourg, United Kingdom, Belgium, Poland, Lithuania, Hungary and Germany). Most countries of central and eastern Europe were above average. When considering these data, it should be recognized that case-finding for hypertension is undertaken using other methods in some countries.

Blood cholesterol

Routine assessment of blood cholesterol was not commonly undertaken in most countries, though in Spain, Germany and Israel, more than 70% of general practitioners described it as routine. In Austria, United Kingdom, Italy and Switzerland, a majority reported involvement.

Cervical smear

At least 90% of general practitioners in Denmark, the Netherlands, United Kingdom and Portugal reported routine involvement and less than 10% in the Czech Republic, Hungary, Croatia, Slovenia and Turkey.

Conclusion

In the general assessment of case-finding procedures, cholesterol screening does not fit well with the other tests. Opportunistic case-finding was common in the United Kingdom, Portugal and Italy and much less so in Croatia, Turkey, Romania, Sweden and Slovenia.

Health education, paediatric surveillance and childhood immunization

The results pertaining to the questions on health education, paediatric surveillance and childhood immunization are given in Table 14.1 and Figure 14.2. Three measurements were reported: health education (group sessions concerning diet, tobacco

Table 14.1 Involvement in preventive services: routinely assessing blood pressure and blood cholesterol level; child surveillance and immunization (possible scores range from 0 to 2) and family planning.

Country	Blood pressure (%)	Blood cholesterol (%)	Child surveillance/ immunization score	Involved in family planning (%)
Austria	87	61	1.8	74
Belgium	92	39	1.6	92
Bulgaria	81	32	0.8	29
Croatia	65	26	0.8	78
Czech Republic	89	38	0.1	19
Denmark	71	29	2.0	99
Estonia	88	22	1.1	24
Finland	54	44	1.4	83
France	99	27	2.0	83
Germany	91	79	1.6	86
Greece	68	40	1.3	48
Hungary	91	30	0.6	90
Iceland	60	33	2.0	94
Ireland	87	45	1.7	99
Israel	87	73	1.0	72
Italy	83	54	0.6	69
Latvia	92	24	0.6	33
Lithuania	91	39	0.4	14
Luxembourg	93	26	1.7	81
Netherlands	37	14	0.8	99
Norway	46	31	0.8	90
Poland	92	35	1.5	31
Portugal	94	29	1.9	97
Romania	68	15	1.1	47
Slovenia	71	36	0.7	50
Spain	86	80	1.0	60
Sweden	40	33	1.8	35
Switzerland	90	52	1.7	91
Turkey	55	9	1.4	69
United Kingdom	93	58	1.7	99

and alcohol, and for these an aggregate health education score is given – theoretical maximum = 3); paediatric surveillance (regular monitoring of child health) and immunization (maximum score = 2); and involvement of general practitioners in family planning and contraceptive care (percentage of general practitioners involved).

Health education scores were low in all countries. Portugal achieved the highest score of 1.1. Scores in Romania, the United Kingdom and Germany were also above the average. Paediatric surveillance and immunization scored the maximum of 2 in Denmark, France and Iceland, indicating universal involvement of all general practitioners. General practitioners in the Czech Republic and Lithuania were rarely involved in these tasks. There was no consistent scoring pattern in specific regions or areas of Europe.

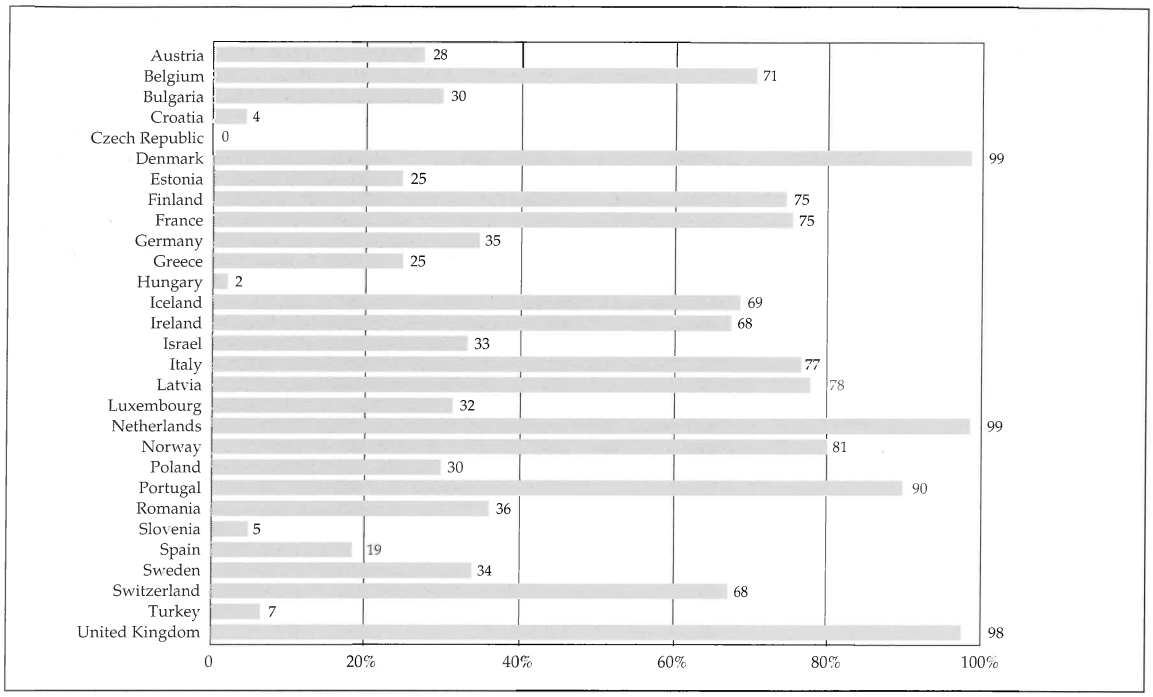

Figure 14.1 Percentage of GPs routinely taking cervical smears.

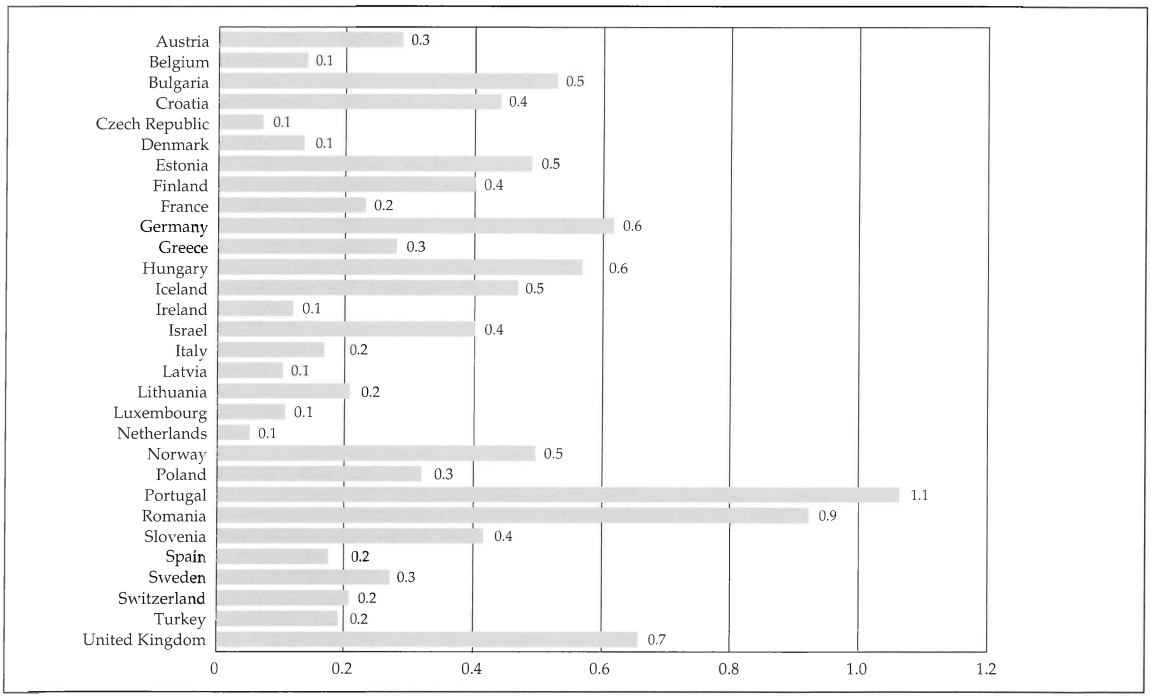

Figure 14.2 Involvement in health education in groups/clinics for smoking, drinking and diet (possible scores range from 1 to 3).

More than 90% of general practitioners were involved in family planning/contraceptive services in Denmark, Ireland, the Netherlands, United Kingdom, Portugal, Iceland, Belgium, Switzerland, Hungary and Norway. Scores were lowest in Lithuania and the Czech Republic. In general, involvement of general practitioners in family planning was lower in eastern Europe. Among western countries, Swedish general practitioners reported low involvement.

Conclusion

The national variation between practice activities for preventive and health education services was greater than that for curative services. There was a general pattern of comparatively high involvement in family planning and contraception, modest involvement in paediatric surveillance and immunization and minimal involvement in health education. General practitioners in Denmark, United Kingdom, Portugal, Ireland and France reported substantial involvement in both curative and preventive services, whereas in some countries, for example in the Netherlands, there was less emphasis on preventive than curative activity.

Chapter 15 *Practice Management and Facilities*

The results presented in this chapter provide some general details about practice management and describe the facilities available. The number of contacts in the surgery, at the patient's home or on hospital visits reflect elements of the general practitioner's workload and differences in access. Access is also considered in the context of the out-of-hours services and in the arrangements for practice consulting sessions, the employment of practice ancillary staff and the maintenance of medical records. The scope of the general practitioner in relation to the equipment available is also considered here.

Contacts with patients

Summary data describing contacts between general practitioners and their patients in four modes of contact are given in Table 15.1 and Figures 15.1 and 15.2.

Surgery contacts

There was a threefold difference in the number of contacts in an average working day, with general practitioners in Germany, Austria, Hungary and the Czech Republic seeing on average between 45 and 50 patients per day and those in Latvia, Estonia, France, Sweden, Belgium, Iceland and Lithuania reporting 17 or fewer.

Telephone contacts

Telephone consultations ranged between 2 and 16 per day, with most contacts made in Denmark, Iceland, Austria, the Netherlands, Norway, Germany, Italy and Luxembourg. In eastern Europe, Portugal, Spain and Turkey, numbers of telephone consultations were lower. This may be related to lower availability of telephone lines in these countries.

Home visits

Home visiting by general practitioners is commonplace in most European countries. Three exceptions were found: Turkey, where only 19% of general practitioners made home visits, Finland (47%) and Greece (68%). By far the highest number of home visits were made by Belgian general practitioners – 44 per week which contrasted with the comparatively low number of surgery contacts. A home visit may be a way of gaining and keeping patients in a country with a high density of general practitioners. General practitioners in Germany reported the highest number of surgery contacts but also reported 34 home visits per week. Relatively high numbers were reported in Austria, France and Hungary. In contrast, home visiting was infrequent in Portugal, Sweden, Finland, Iceland and Israel. In health care systems where general practitioners act as gatekeepers to secondary care, the numbers of home visits were generally lower than in countries with open access.

Hospital visits

In the interests of continuity of care and of patient advocacy, some general practitioners visit their patients in hospital even if they have no management role for hospitalized patients. About three-quarters of general practitioners (who responded in the survey) in the Netherlands and Belgium and a small majority in Israel, Portugal and Romania, commonly visited patients in hospital. In the other countries hospital visiting was infrequent.

Access and organization of surgery hours

Data describing the extent and organization of practice appointment systems are given in Table 15.2.

Appointment systems

Appointment systems benefit the doctor in time-planning and the patients in reducing waiting times; however, they can be an obstacle to patient access. Among the general practitioners surveyed in the Nordic countries, Switzerland, the Netherlands and the United Kingdom, appointment systems were usual. The time elapsing between an appointment

Table 15.1 Patient contacts by telephone, in the patient's home and in hospital.

Country	Contacts by telephone per day	% GPs making home visits	% GPs making hospital visits
Austria	12	98	14
Belgium	8	98	72
Bulgaria	4	88	13
Croatia	6	93	12
Czech Republic	9	90	12
Denmark	16	97	7
Estonia	4	95	11
Finland	6	47	38
France	7	97	46
Germany	11	98	19
Greece	7	68	26
Hungary	7	96	38
Iceland	15	94	37
Ireland	9	95	22
Israel	9	86	60
Italy	10	98	43
Latvia	4	98	7
Lithuania	3	95	14
Luxembourg	10	93	26
Netherlands	12	99	77
Norway	11	82	–
Poland	2	91	25
Portugal	3	88	52
Romania	4	84	52
Slovenia	8	86	8
Spain	4	97	10
Sweden	7	85	9
Switzerland	7	96	22
Turkey	5	19	27
United Kingdom	6	96	33

and the consultation is a major determinant of access and availability of care. In Sweden, Norway and Finland, where most patients were seen by appointment, at least 80% of the general practitioners reported delays of two or more days. In Portugal (64%) and Denmark (45%), these proportions were also relatively high. This contrasted markedly with Iceland and the Netherlands, where appointment systems were almost universal and where only 6% of the general practitioners reported lengthy delays. In Hungary, Turkey, Latvia, Czech Republic, Slovenia, Italy, Romania and Greece, appointment systems were uncommon. The interpretation of data concerning delays in appointment systems can be difficult if, as in a group practice, a choice of doctors is available.

Booking intervals

The average time allocated per patient in the appointment system is shown in Figure 15.3. The length of consultation depends on several factors, including the nature of the health problem, the personal characteristics of the patient, the competence, and the patience, of the doctor, and conflict from other demands on the doctor's time. Nevertheless, booking intervals reflect a practice-based estima-

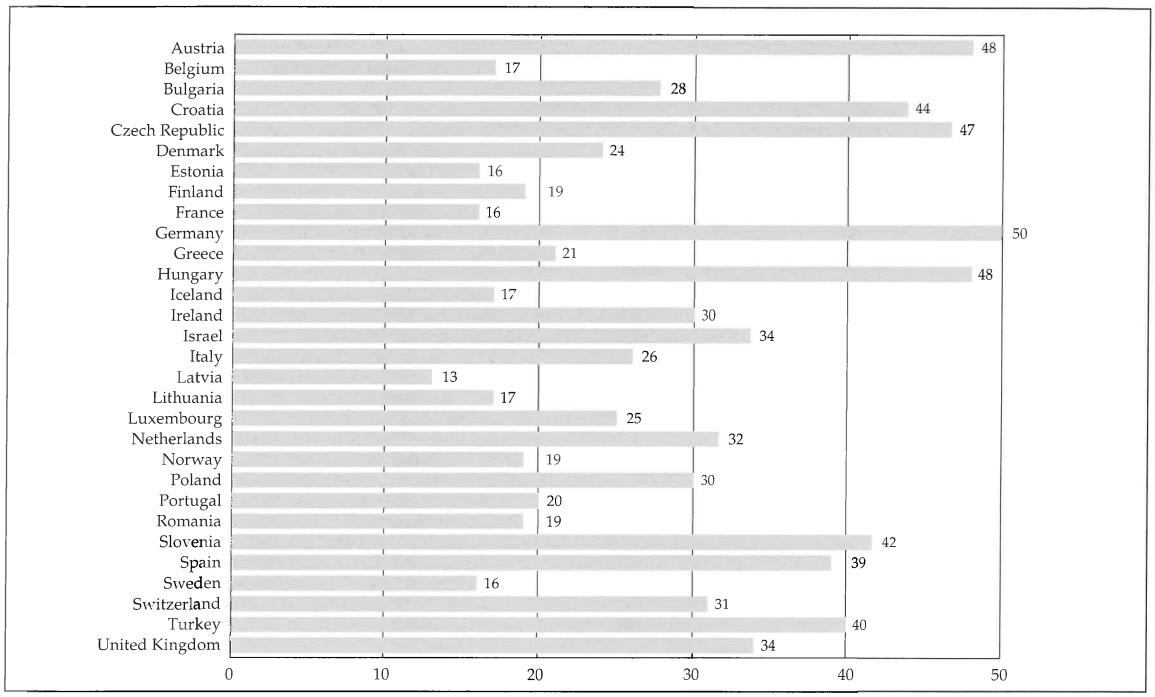

Figure 15.1 Average number of patient contacts per day in the surgery.

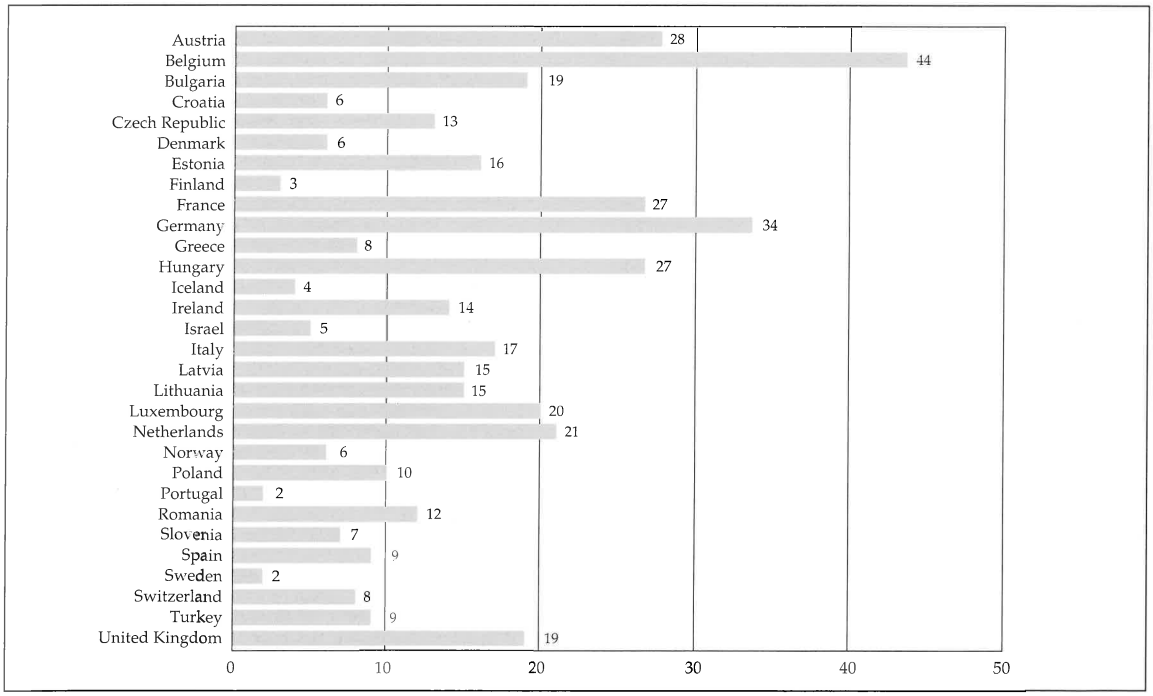

Figure 15.2 Average number of home visits per week (of those GPs who are making home visits; see Table 15.1).

Table 15.2 Access and organization of surgery hours: appointment system and delay of consultation.

Country	% GPs with appointment system (1)	% GPs with average delays of 2 or more days (2)
Austria	20	15
Belgium	19	21
Bulgaria	26	3
Croatia	17	11
Czech Republic	11	12
Denmark	93	45
Estonia	26	3
Finland	96	80
France	44	12
Germany	55	25
Greece	11	23
Hungary	6	0
Iceland	96	6
Ireland	23	7
Israel	71	23
Italy	8	20
Latvia	9	4
Lithuania	20	0
Luxembourg	24	32
Netherlands	91	6
Norway	98	87
Poland	15	15
Portugal	72	64
Romania	12	22
Slovenia	15	18
Spain	49	23
Sweden	88	91
Switzerland	94	37
Turkey	3	0
United Kingdom	84	31

Notes
(1) For majority of non-acute patient consultations.
(2) In appointment systems, between making appointment and consultation.

Table 15.3 Practice assistance and personal involvement of general practitioners in out-of-hours services.

Country	% GPs with any practice assistance (1)	% GPs actively involved in out-of-hours services (2)
Austria	100	85
Belgium	30	91
Bulgaria	98	40
Croatia	100	27
Czech Republic	99	76
Denmark	98	68
Estonia	97	26
Finland	100	84
France	46	75
Germany	99	65
Greece	59	62
Hungary	97	77
Iceland	100	85
Ireland	86	85
Israel	93	16
Italy	18	15
Latvia	98	45
Lithuania	100	24
Luxembourg	42	83
Netherlands	98	98
Norway	98	79
Poland	99	21
Portugal	95	39
Romania	100	42
Slovenia	100	76
Spain	97	44
Sweden	98	87
Switzerland	98	81
Turkey	99	57
United Kingdom	100	81

Notes
(1) Medical secretary, receptionist, general assistant, practice nurse or assistant for laboratory work.
(2) By participation in a rota; in a few cases GP is almost permanently on duty for emergency.

tion of the consultation time and these differed widely, from an average of 9 minutes in the United Kingdom and 10 minutes in the Netherlands and Spain to 21 minutes in France and 25 minutes in Latvia.

Practice ancillary staff and out-of-hours services

The use of ancillary staff and arrangements for out-of-hours services are summarized in Table 15.3.

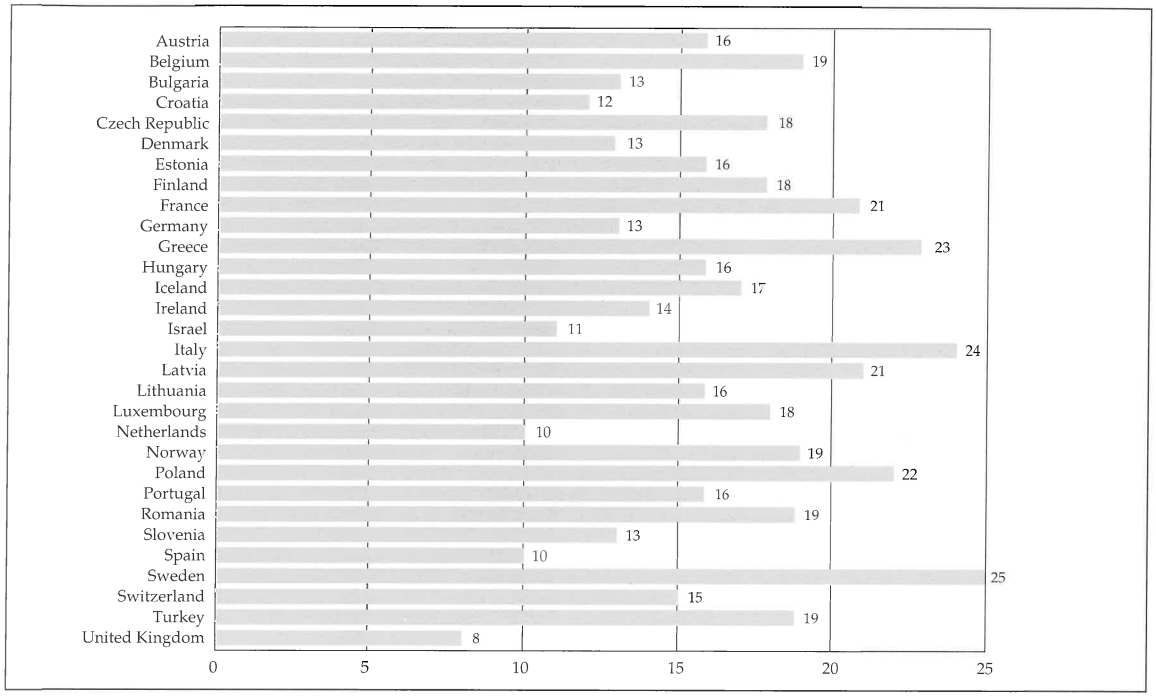

Figure 15.3 Booking intervals in the appointment agenda (in minutes).

Practice ancillary staff

In large practices, the functions of individual members of the practice ancillary staff are often highly specific, but in small practices one person may have several functions. The countries where general practitioners reported least support staff were Italy (82% of general practitioners had no support), Belgium (70%), Luxembourg (58%), France (54%) and Greece (41%). Three of these countries (Belgium, Italy and France), have a particularly high density of general practitioners and in some cases, the cost of employing ancillary staff is probably too high for the doctor.

Out-of-hours services

Responsibility for out-of-hours services does not always mean that the general practitioner provides a service personally. In the results presented in Table 15.3, the numerator includes only those general practitioners who were personally involved in providing out-of-hours services. In the Netherlands and Belgium, more than 90% of general practitioners provided these services. In Italy, Israel, Poland, Lithuania, Estonia and Croatia, fewer than 30% did so.

Medical practice equipment

The use of 25 items of equipment will be described in this paragraph. These are considered both individually and as a package of eight selected items. Some information is also provided about computer availability and usage.

In Table 15.4, the general level of medical equipment has been summarized on the basis of the scores on each of the 25 items described (maximum score 25). In the second column of the table, a calculation has been made on the basis of a selection of 4 key items out of the 25: the ophthalmoscope, otoscope, disposable syringes and peakflow meter. Equipment used everywhere, for example the sphygmomanometer, was not included amongst this selection of key items.

Laboratory

- *Haemoglobinometer* Widely used in Scandinavia, the Netherlands and Switzerland, and rarely in Belgium, France, Italy, Luxembourg, Portugal and the Czech Republic.

Table 15.4 Use of medical practice equipment and computers.

Country	Average number of items of diagnostic equipment		% GPs using the computer for patient records (3)
	25 items package (1)	4 essential items (2)	
Austria	11.7	2.8	36
Belgium	9.9	3.1	48
Bulgaria	8.9	1.6	19
Croatia	7.6	2.3	7
Czech Republic	4.5	1.7	12
Denmark	13.6	3.8	44
Estonia	9.5	2.0	1
Finland	20.5	4.0	23
France	9.0	3.2	31
Germany	13.9	2.7	42
Greece	8.6	2.5	17
Hungary	6.3	2.7	43
Iceland	17.2	4.0	67
Ireland	9.5	3.7	14
Israel	8.7	3.0	14
Italy	6.0	2.2	30
Latvia	9.7	2.6	3
Lithuania	12.8	2.7	0
Luxembourg	10.1	3.2	17
Netherlands	12.7	3.8	51
Norway	16.1	3.9	74
Poland	5.3	1.2	1
Portugal	6.4	2.5	32
Romania	5.5	1.6	7
Slovenia	12.1	2.9	13
Spain	8.0	2.9	14
Sweden	15.7	3.7	39
Switzerland	16.0	3.6	5
Turkey	9.8	2.2	9
United Kingdom	10.5	3.8	70

Notes
(1) Maximum score is 25.
(2) A selection from the 25 items; maximum score is 4.
(3) Percentage of all general practitioners.

- *Blood glucose test* In 18 countries, at least 70% of the general practitioners reported that they undertook these tests.
- *Cholesterol meter* With the exceptions of Austria, Finland and Switzerland, this equipment was reported to be used rarely.
- *Blood cell counter* Rarely used in the countries of western and southern Europe; in Finland it was used by 85% of general practitioners.

Imaging

- *Ophthalmoscope* Reported to be used widely everywhere except in the Czech Republic and Poland.
- *Proctoscope* Used by almost all general practitioners in the Scandinavian countries but by very few in Austria, the Mediterranean countries and most countries of eastern Europe.
- *Otoscope* There were only nine countries, all situated in the eastern part of Europe where fewer than 70% of general practitioners reported using it; elsewhere it was used almost universally.
- *Gastroscope* Seldom used in general practice; a minimum of 10% of general practitioners reported its use in five countries.
- *Sigmoidoscope* This was used even less frequently than the gastroscope.
- *X-ray machines* These were not commonly available in general practices; in five countries (Bulgaria, Finland, Latvia, Lithuania and Switzerland), more than half the general practitioners took x-rays.
- *Microscope* This was widely used in the Netherlands, Germany, Iceland, Norway, Sweden and Switzerland, but was not used in France, Italy, Portugal, Spain, the Czech Republic and Hungary.
- *Ultrasound* With the exception of Finland, the use of ultrasound for imaging the abdomen or fetus was low; in 18 countries it was used by no more than 10% of general practitioners.

Functional measurements

- *Audiometer* In Finland, Iceland and Sweden, its use was reported by at least 80% of general practitioners; there were 13 countries in which this instrument was used by fewer than 10%.
- *Bicycle ergometer* Widely used in Germany but rarely elsewhere.
- *Eye tonometer* Commonly used in Finland, Iceland, Norway and Sweden; elsewhere it was seldom used.
- *Peakflow meter* Peakflow measurements were made by large majorities of general practitioners in 10 countries of northern and western Europe; the opposite was true in eastern Europe, Portugal and Turkey, where these measurements were made by fewer than 10% of general practitioners.
- *Spirograph* Used by 71% of general practitioners in Germany but only 2% in the Netherlands; there were only four countries in which more than half the general practitioners used it.
- *Electrocardiograph* Was used by at least 70% of general practitioners in 19 countries; use was lowest in the Czech Republic, Italy, Portugal and Romania.
- *Sphygmomanometer* Almost all general practitioners in all countries used it.

Other medical equipment

- *Urine catheter* In 12 countries more than 70% of the general practitioners inserted catheters; in only four countries was the proportion less than half of the general practitioners.
- *Coagulometer* Use in primary care was very low except in Switzerland and Finland.
- *Minor surgery set* More than 70% of general practitioners had access to a minor surgery set in 18 countries; in Bulgaria, Estonia, Hungary, Latvia and Poland, the majority of general practitioners did not have access to this equipment.
- *Suture set* The situation was similar to that with the minor surgery set.
- *Defibrillator* Rarely used in half the countries, but in four countries, the majority of general practitioners used this machine; in Finland 86% reported using it.
- *Disposable syringes* Universally available in all countries except Italy, where only two-thirds of the general practitioners reported using them.

Summary and analysis of four key items

An overall consideration of the material presented in Table 15.4 shows that general practitioners in the Nordic countries, Germany and Switzerland have the most equipment. Lowest levels were found in the Czech Republic, Poland, Romania, Italy, Hungary and Portugal. Reported use was re-evalu-

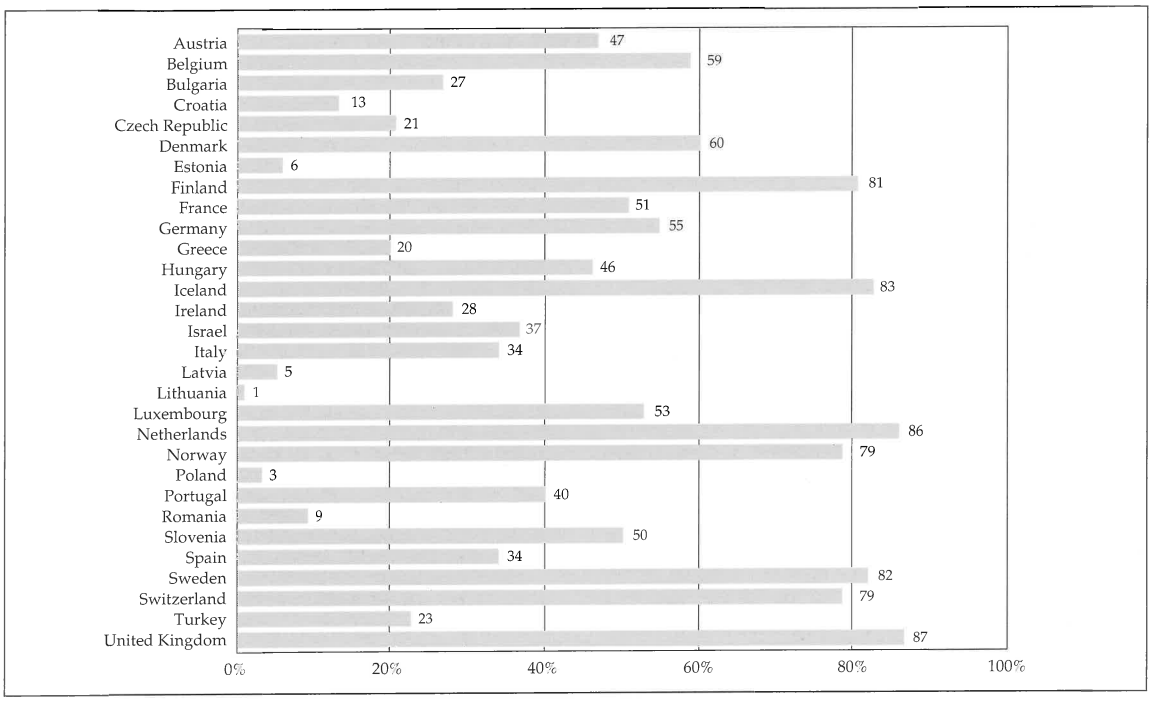

Figure 15.4 Percentage of GPs using computers in the practice.

ated using a selection of the four key items of equipment. This consideration has brought about a few changes in the rank order as compared with the data presented for the 25 items. Countries scoring low in the 25 and 4 key item analyses included Poland, Romania, Czech Republic and Italy. Bulgaria, Estonia and Turkey ranked lower in the analysis of four key items than in the analysis of the entire list, and Germany did not retain its high position.

Use of computers

Computers can be used for many purposes: administration, planning of surgery hours, prescribing, medical record-keeping and audit. The proportions of recruited general practitioners using a computer in their practice are given in Figure 15.4 and the proportions using a computer for maintaining medical records in Table 15.4. The two proportions are sometimes very different. For instance, in Finland, 81% of the general practitioners used a computer but only 23% used it for medical record-keeping. In Norway, Italy and Portugal, most general practitioners who used a computer did so for the purpose of maintaining patient records. More than 75% of general practitioners used computers in Finland, the Netherlands, Norway, Switzerland and the United Kingdom. At the opposite extreme, in the Baltic countries, Poland and Romania, fewer than 10% of general practitioners used computers. There were clear differences in use between practices in eastern and western Europe.

Chapter 16 Job Satisfaction

Job satisfaction was measured from questions to which respondents indicated their agreement on a five-point scale varying from strongly agreed to strongly disagreed. In Table 16.1, the answers "agree strongly" and "agree more or less" are combined to provide an index of job satisfaction from the total number of general practitioners recruited. Most general practitioners indicated a continuing interest and enjoyment from their work and only 14% would as soon do other work. Seventy per cent of the general practitioners thought there was an administrative overload and about half felt some aspects of their work did not make sense. Reward and effort were considered commensurate by only a minority (32%).

There was a consensus in all countries regarding the first two questions, but international differences for the others were examined in more detail by country. In Figures 16.1 and 16.2, the national results in response to two of the four remaining statements are presented in a way that emphasizes job satisfaction (the longer the bars the more satisfied the general practitioners). There was no consistency of response to these four statements, whether considered from the perspectives of health care systems, political structure or geographical region. Satisfaction measured in these four statements disclosed generally high levels in Scandinavia and Switzerland but there was no clear identification across the statements for the most dissatisfied.

Table 16.1 General practitioners' agreement with six statements (n=7233).

Statement	% agree
My work still interests me as much as it ever did	87
I find real enjoyment in my work	84
I feel that some parts of my work do not really make sense	50
My work is overloaded with unnecessary administrative detail	70
Assuming that pay and conditions were similar, I would just as soon do non-medical work	14
In my work there is a good correspondence between effort and reward	32

As regards specific items, more than two-thirds of general practitioners in Switzerland, Norway and Iceland were most positive about the sense of their work, while general practitioners in Lithuania, Bulgaria, the Netherlands and the United Kingdom considered that some parts did not make sense. Satisfaction with income seemed to be relatively high in Finland, the Netherlands, Iceland and Switzerland and generally low in eastern Europe. The tendency to leave medicine was least among general practitioners in Hungary, Lithuania, Israel and Croatia while relatively high in Turkey, Finland and Romania. Dissatisfaction with administrative duties was most strongly expressed by general practitioners in the Czech Republic, Italy and Germany. A number of general conclusions can be made:

- the interest and enjoyment of general practitioners in their professional work was generally at a high level;
- there was little tendency to leave medicine and take up non-medical work;
- there was considerable dissatisfaction with specific aspects of the job, especially the administrative demands and the remuneration;
- general practitioners in eastern Europe were less satisfied than their colleagues in other parts of Europe, especially with their level of payment.

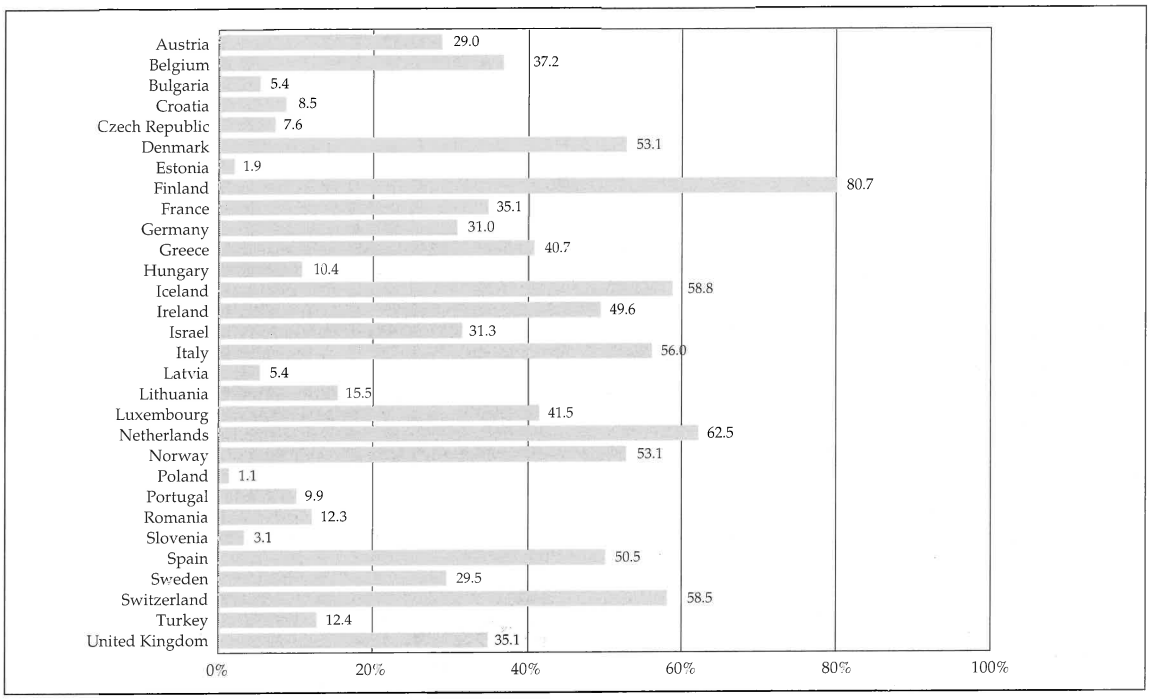

Figure 16.1 Percentage **agreement** with the statement: "In my work there is a good correspondence between effort and reward."

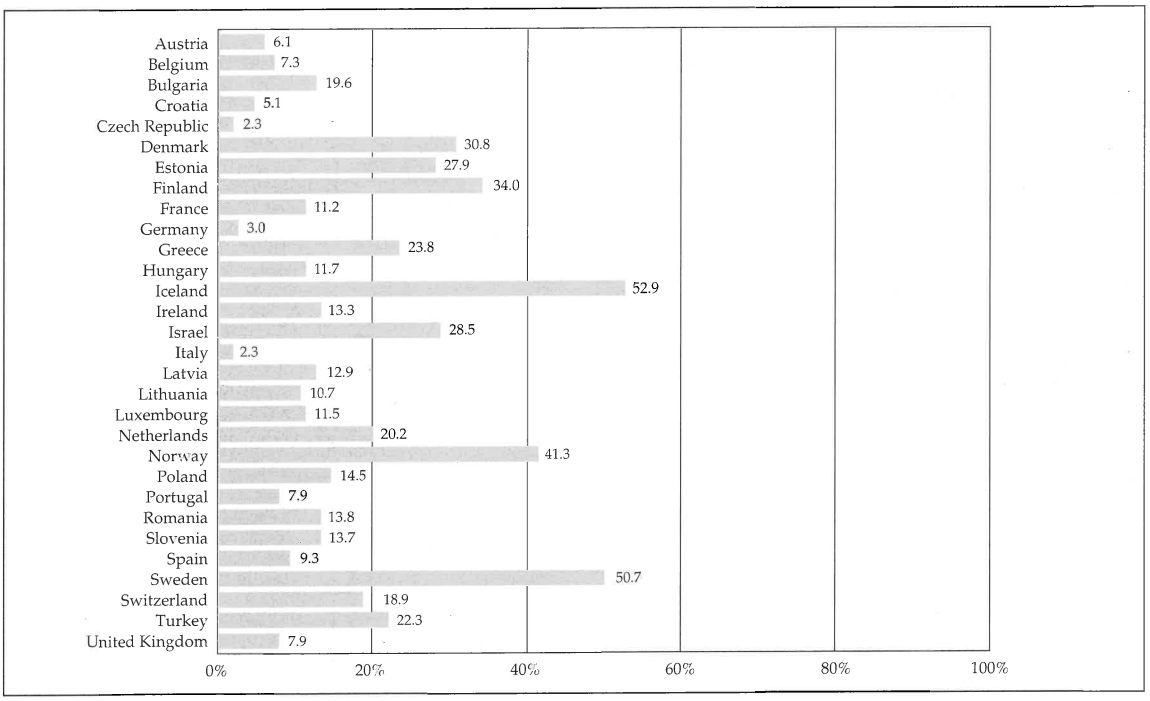

Figure 16.2 Percentage **disagreement** with the statement: "My work is overloaded with unnecessary administrative detail."

Chapter 17 National Profiles of General Practice

The results of the European Survey of Task Profiles of General Practitioners have been presented in Chapters 12 to 16. This chapter briefly summarizes the results from each country. Relative expressions such as high and low, increase and decrease, relate to the European average defined by the study. In the descriptions the term "general practitioner" is generally used, although doctors working in primary care are named differently in the various countries. Since these are results of a completed study, the past tense is retained for presentation though the situation described accords with the authors' knowledge at the time of writing.

Summary profiles by country

Austria

The number of general practitioners was above the European average. Most were self-employed and worked alone; they did not have a gatekeeper role. Few were female and the average age was above the European average. In their general practitioner role they worked long hours yet many held additional appointments. A relatively large proportion were vocationally trained. There was good cooperation with colleagues in both primary and secondary care, though not so with social workers.

As doctors of first contact, and in their use of medical investigation techniques, their activities were comparable to those of other European general practitioners. Therapeutic activities were relatively high. They were particularly involved in the care of children including preventive surveillance and immunization, and in case-finding for hypertension and raised blood cholesterol. The use of homeopathic medicine was above average.

Involvement in acute problems was less than average. As a group they were active in family planning and in antenatal care though not in intrapartum care. Paradoxically they were not involved in other areas of preventive care for women.

The number of patient contacts including home visits and out-of-hours work was very high and telephone consultations frequent. General practitioners did not often visit patients in hospital. Appointment systems were not commonplace. Half the general practitioners used computers, many for maintaining patient records. In general, job satisfaction was high though there was considerable unease about the relationship between effort and reward.

Belgium

Relative to the population of the country, there were more general practitioners in Belgium than in any other European country. Doctors worked mainly in solo practice. They did not have a gatekeeper role and were paid by the patient who was usually reimbursed through insurance. There were few female general practitioners and the average age was below the European average. They worked long hours yet many had additional appointments. The majority were vocationally trained. Collaboration with other primary care personnel was poor though they had good contacts with specialists.

The position of general practitioners as first contact doctors was about average. They were closely involved with the problems of children and with psychosocial problems and were active in preventive care, health screening, immunization, antenatal care and family planning. They were above average in the application of medical techniques, in the follow-up of diseases and in case-finding for hypertension. Homeopathic medicine was not popular.

The work pattern of general practitioners differed from most European countries in many respects. Home visiting was particularly strong; surgery contacts were few by comparison with other countries and most were not arranged by appointment. The majority of general practitioners had no ancillary help. Computers were used by the majority; half of them for medical record-keeping. Hospital visiting was common and most general practitioners provided out-of-hours services. Job satisfaction was about average but the volume of administration was criticized.

Bulgaria

General practitioners were young and many were female. Few had been vocationally trained but more than average time was committed to continuing medical education. They worked in salaried employment and generally were organized in groups. Their working hours were about the European average and few had additional appointments. They did not act as gatekeepers to secondary care. Collaboration with other medical professionals was well developed but few regularly saw social workers.

The task profile was limited in almost all areas of activity measured. Only case-finding for hypertension was slightly above the average. The workload as measured by patient contacts in the surgery was about average and by home visits, above average. Telephone contacts with patients and hospital visits were infrequent. Appointment systems were infrequent, computers were rarely used and diagnostic equipment limited. Job satisfaction was low and remuneration considered to be inadequate.

Croatia

The density of general practitioners was below the European average. Most were salaried and few had external additional appointments. Vocational training was well established and time given to continuing medical education above average. General practitioners did not have a gatekeeper role. Two-thirds worked in groups. They collaborated well with other primary care workers (excluding social workers) but links with specialists were poor.

General practitioners were the usual first contact for health problems and they were active in the management of chronic disease. Medical techniques were used sparsely. Homeopathic medicines were not commonly used. With the exception of family planning, they were not often involved in most of the forms of preventive care.

The workload was high as measured by the number of consultations in the surgery which were not usually arranged by appointment. The duration of consultation was short. Telephone consultations, home and hospital visits and involvement in out-of-hours services was less than average. The level of diagnostic equipment and computer use were low. General practitioners were satisfied with their job if not with their pay nor with the burden of administration.

Czech Republic

There was a high density of general practitioners; two-thirds of them were working in groups (though this was no longer the case in 1995). They did not act as gatekeepers, the average age was low and many were female. Vocational training and continuing medical education were well established. Few general practitioners held external appointments. All forms of collaboration were slightly below average.

In most areas of activity, both curative and preventive, the general practitioners reported levels well below the European average. The one exception concerned the management of chronic diseases which linked with a higher than average involvement in screening for hypertension. Homeopathic medicine was widely applied.

General practitioners had a much higher than average number of consultations and increased time was allocated to them which together made a heavy workload. Telephone consultations and hospital visits were infrequent. Three-quarters of the doctors were involved in out-of-hours work. Patients were not usually seen by appointment; diagnostic and computer equipment were much less available than average. The general practitioners expressed considerable dissatisfaction with their job especially because of the poor remuneration and burden of administration.

Denmark

The density of general practitioners was about average for Europe. They acted as gatekeepers and mostly worked in solo practice. The average age was high and the proportion of females low. Vocational training was well established. Working hours, commitment to continuing medical education and involvement in outside jobs were all about average. Collaboration within primary care and with specialists was relatively poor.

General practitioners had a strong task profile in all the measured areas. Homeopathic medicines were rarely prescribed. They had a strong role in family planning and in all areas of preventive care, especially cervical cancer screening. Patients were usually seen by appointment. Diagnostic equipment was more readily available than the European average; the majority of general practitioners had computers but less than half used them for maintaining patient records. Job satisfaction was mixed.

The surgery consultation workload was a little below the European average, though telephone consultations were more frequent. Few home visits were made and general practitioners rarely visited patients in hospital. One-third of general practitioners had no out-of-hours commitments.

Estonia

General practitioners were not gatekeepers; they were mostly salaried and worked in groups. The majority were female and few had completed vocational training but above average hours were committed to continuing education. The workload was low and additional appointments infrequent. There was reasonable collaboration with the other primary care workers and with medical specialists.

The task profile was limited in most areas, though most provided antenatal care and screening for hypertension was above average. There were very few consultations in surgery premises. General practitioners did not visit their patients in hospital and involvement in out-of-hours services was low but the number of home visits was slightly above average. Few general practitioners used computers and there was widespread dissatisfaction with the job especially with its remuneration.

Finland

General practitioner density was above average. Mostly they worked in groups and were salaried; they were not gatekeepers. A small majority of general practitioners were female and the average age was low. Vocational training was not well established. Working hours were less than average and a moderate proportion had external appointments. Collaboration at all levels was particularly strong.

As doctors of first contact, the Finnish general practitioners were slightly above the European average. They were particularly strong in the application of medical techniques. They were above average in their involvement in antenatal care and in cervical cytology. They did not commonly screen for hypertension. Homeopathic medicine was virtually non-existent.

General practitioner workload was low. Appointment systems were used; patients generally waited two days or more for appointments. Home visits were very infrequent. Hospital visits were made by the majority and most were involved in out-of-hours services. Computers and diagnostic equipment were more plentiful than in any other country. Though job satisfaction was generally high, many were interested in obtaining non-medical work.

France

General practitioners in France did not act as gatekeepers; they worked independently often in small groups. Average age was below the European average, few were women and few were vocationally trained. Working hours were long, yet a large proportion held outside appointments. Collaboration with other professionals in primary and secondary care was generally about average, with the exception of poor collaboration with social workers.

General practitioners were well established as doctors of first contact. In curative tasks and in the management of chronic diseases, they were above average. The application of medical technical procedures was around the average. A small number engaged in homeopathy. Action was above average in most spheres of preventive care, especially antenatal care, child surveillance and immunization. They were also active in screening for cervical cancer and for hypertension.

Measured by the numbers of surgery contacts, workload was very low though time allocated to each appointment was well above average. Home visiting rates were quite high and half the general practitioners reported visiting patients in hospital. Telephone consultations were infrequent but most general practitioners were involved in out-of-hours work. Few general practitioners had the assistance of ancillary staff, and diagnostic equipment was less than average. Half of them had computers but few used them for maintaining medical records. French general practitioners disliked administrative tasks but generally, job satisfaction was about average.

Germany

The density of general practitioners was low and they did not act as gatekeepers. They worked independently, about two-thirds of them in solo practice. Few were female and the average age was higher than in most other countries. Many were vocationally trained. Working hours were particularly long. The country was at about the European average for the level of additional appointments held by general practitioners. Collaboration with

other medical professions in primary and secondary care was high but contact with social workers was poor.

The role of general practitioners as first-contact doctors was about average with the exception of gynaecological problems. They were particularly strong on psychosocial problems. In the use of technical procedures they were average but they were strong in the management of chronic diseases, in case-finding for hypertension and raised blood cholesterol and in their use of homeopathy. They were not much involved in antenatal or intrapartum care nor with preventive care for women. Involvement in childhood surveillance and immunization were above average.

Workload was particularly high with the highest number of patient contacts, a large number of visits and frequent telephone contacts. Many general practitioners visited patients in hospital and about two-thirds of them were involved in out-of-hours services. A majority consulted by appointment, and delays in the appointment procedure were about the European average. Diagnostic equipment and computers were more available here than in most other countries. Job satisfaction was below average, with general practitioners unhappy about administrative tasks and with their remuneration.

Greece

Mostly, general practitioners were employed by the state or one of the sickness funds, and worked in groups, though a minority worked in solo practice. They did not have a gatekeeper function. They were at about the European average in respect of their age and in the proportion of females. Working hours were low though much time was committed to continuing medical education. Collaboration with professional colleagues was above average.

They were not closely involved as doctors of first contact with paediatric, gynaecological, maternity and psychosocial problems. Involvement in medical emergencies, chronic disease management and technical procedures were average for Europe. Greek general practitioners were not involved in homeopathy. In general, involvement in preventive services was low, though case-finding for raised blood cholesterol and involvement in child surveillance and immunization programmes were reasonably well established.

General practitioners worked mainly in surgeries and made very few home visits; some undertook hospital visiting and a majority were involved in out-of-hours work. Telephone consultations were infrequent. Workload was low though the duration of individual consultations was generous. Appointment systems were uncommon and few general practitioners were assisted by ancillary staff. Diagnostic equipment and the use of computers were low. The level of job satisfaction reported was about average.

Hungary

There was a moderate density of general practitioners. They did not have a gatekeeper role. One-third were female but at 51 years, the average age was the highest reported. Most were not vocationally trained; working hours were very low and the number holding outside appointments was above the European average. Generally speaking, collaboration with other health care workers was well developed.

As first-contact doctors, general practitioners in Hungary were above the European average, particularly for acute emergencies and psychosocial problems but they were below average for paediatric, maternity and gynaecological problems. Involvement in chronic disease management was about average. Minor surgical procedures were infrequent and only a small minority were involved with homeopathy.

General practitioners were heavily involved in screening for hypertension. Family planning was routine but screening for cervical cancer and the surveillance of children including immunization were not commonly undertaken by them.

Workload was very high, both for surgery contacts and home visits. A third of doctors reported hospital visiting and three-quarters were involved in out-of-hours work. Telephone consultations were infrequent. Appointment systems were rare and diagnostic equipment limited but half reported using a computer with many of them using it to maintain patient records. Job satisfaction was low though not as low as in many of the other eastern European countries.

Iceland

There were relatively more general practitioners here than in many other European countries. They had a gatekeeper role and worked in groups; most

were salaried. Average age was low and the proportion of female doctors also low. Many had completed a vocational training programme. Working hours were above average and most doctors held additional appointments. Working contacts with other primary health care workers (excluding social workers), were well established. General practitioners had an above average role in the first contact with health problems especially those of children. They were strong in the application of medical techniques. Homeopathic medicine was rarely used.

General practitioners were particularly involved in antenatal care and many also in intrapartum care. Amongst the preventive services, child surveillance and immunization and family planning were routine tasks. Excepting for cervical cytology, case-finding routines were performed by relatively few general practitioners. The workload was low with very few patient contacts either in the surgery or at home. Telephone consultations were common place. Hospital visiting was about average in Europe and involvement by general practitioners in out-of-hours work was high. Most consultations were arranged by appointment and delays of more than one day in the appointment procedure were rare. A wide range of diagnostic equipment was available and most doctors had computers; two-thirds of them used computers for maintaining medical records. Job satisfaction was high.

Ireland

The density of general practitioners was a little above the European average. They were gatekeepers to secondary care. Just over half were in solo practice. The average age, proportions vocationally trained and of females were about average. Working hours and commitments to other appointments were above average. Collaboration with other professionals was poor.

General practitioners were the first point of contact for most conditions and their role in the management of chronic diseases was also well developed. They made above-average use of technical procedures and were not involved in homeopathy. Their activities in the sphere of preventive care were well above average.

Consultations were not commonly arranged by appointment. Workload levels in surgery contacts, home visits and telephone consultations were average. Most doctors had out-of-hours responsibilities but hospital visiting was below average. Diagnostic equipment was average but computer utilization was low. Job satisfaction was well above average, though administrative tasks caused some discontent.

Israel

General practitioner density in Israel was about average. The general practitioners were gatekeepers to secondary care, they were employed by sickness funds and generally worked in groups. Average age was higher than in Europe and other countries and there were more females. Vocational training was somewhat lower than in western Europe but above-average hours were committed to continuing medical education. The time committed to general practice was shorter than average but many general practitioners held additional appointments. The level of collaboration with other medical professionals in both primary and secondary care was high.

The general practitioners held a strong position as doctor of first contact and an average position in chronic disease management but a low position in the application of medical techniques and the use of homeopathy. Their roles in maternity and preventive care were generally above average though they were less strong in child surveillance and immunization and low in their involvement in cervical cytology. They were particularly active for raised blood cholesterol screening.

Workload was above average and the duration of consultation was low. Telephone consultations were slightly above average, home visiting was low and the majority of general practitioners visited patients in hospitals. General practitioners were not generally involved in out-of-hours work. Patients were usually seen by appointment and delays in making appointments were average. Diagnostic equipment was below average but computer utilization was about average though few general practitioners used computers for maintaining records. Job satisfaction was reasonable though there was dissatisfaction with the level of remuneration.

Italy

The density of general practitioners was particularly high in Italy; they worked independently, mainly in solo practices, and had a gatekeeper role. There were few female doctors and the number of vocationally trained general practitioners was par-

ticularly low, though established general practitioners spent an average time on continuing medical education. Working hours were short and many general practitioners had additional appointments. Collaboration with specialists was above average but was poor with other primary care workers. General practitioners were relatively strong in their position as doctor of first contact especially for problems of women and children. They had an average position in chronic disease management, the use of technical procedures was very low and homeopathy not popular. In preventive care they were particularly strong on maternity care and family planning. They were also more active than most other European doctors in screening for raised blood cholesterol and cervical cancer.

Workload generally was below average, with reduced surgery consultations, which tended to be of long duration. Telephone consultations and home visiting rates were above average but the general practitioners were not particularly involved in out-of-hours services. Patients were not generally seen by appointment and most practices had no ancillary help. Diagnostic equipment and computer utilization were low. Job satisfaction was poor, though effort and reward were considered commensurate.

Latvia

Most general practitioners worked in groups and were employed in a national health system by the state. They were not gatekeepers to secondary care. Three-quarters were female and the average age was less than that in Europe generally. Working hours were very short but time spent on continuing medical education was average. Few doctors had additional appointments. Collaboration was generally good except with social workers.

The general practitioner's role as doctor of first contact and in the application of medical techniques were poorly developed though they were more active in homeopathy than in most European countries. Half the general practitioners were involved in maternity care and case-finding for hypertension and for cervical cancer was strong. Childhood surveillance and immunization and family planning were low.

The average number of consultations was particularly low; appointment systems were not common. Home visiting rates were average for Europe; hospital visiting and telephone consultations were infrequent. Half the general practitioners were involved in out-of-hours services. Diagnostic equipment was at the average level and there were few computers. General practitioners were mostly positive about their job but there was considerable dissatisfaction with the remuneration.

Lithuania

Most general practitioners were female and were state employed. A third worked in solo practice. They were not gatekeepers. Few were vocationally trained but the time spent on continuing medical education was average. Working hours were short and several had outside appointments. Collaboration was generally good, particularly with nurses though not so with social workers.

The task profile was very limited, in particular as doctor of first contact and in the use of clinical procedures. The use of homeopathic medicine was widespread. Child surveillance, immunization and family planning were not usually undertaken and only one-third of doctors were active in antenatal care. Screening for hypertension was well established and for raised blood cholesterol, average.

All measures of workload were low and few doctors were involved in out-of-hours services. Hospital visits were rarely made. Appointment systems were uncommon. Diagnostic equipment was comparatively plentiful but this country reported the lowest use of computers. There was considerable dissatisfaction about the hours and conditions of service but in spite of that, few doctors were inclined to quit medicine.

Luxembourg

The density of general practitioners was average for Europe. They did not have a gatekeeper role and most worked independently in solo practices; few were women and the average age was below the average for Europe. The proportion vocationally trained was also below average. Hours were long and few general practitioners had additional appointments. Collaboration with specialists and with social workers was well developed. The contacts between general practitioners were restricted.

The role as doctor of first contact was below the European average, particularly for gynaecology. They were average for involvement in chronic disease management and in the application of medical techniques. Involvement in homeopathy was rare. Involvement in maternity care and in screening

activities was low, with the exception of hypertension. Child surveillance, immunization and family planning were important general practitioner activities. Workload was about average and appointment systems infrequent. The majority of general practitioners had no ancillary help. Home visiting rates, telephone contact and hospital visiting were above average. Most general practitioners were involved in out-of-hours services. Diagnostic equipment was average and half the general practitioners had computers, though they were not usually used for maintaining patient records. General practitioners were satisfied with their remuneration though less satisfied with other aspects of their work.

Netherlands

The density of general practitioners was low. They acted as gatekeepers; they were self-employed, commonly working in solo practice. The average age was 45 years; the proportion of females was less than and the proportion who were vocationally trained higher than the respective European averages. They worked long hours and few held additional appointments. Collaboration with other general practitioners was good but with specialists less so.

General practitioners had a strong role as doctor of first contact and made above-average use of technical procedures. They reported less than average involvement in chronic disease management and homeopathy. Their roles in maternity care, family planning and screening for cervical cancer were well established. In other screening activities and in childhood surveillance and immunization they were below average.

Surgery contacts, mostly by appointment, were relatively short but the numbers were relatively high. Home visits, telephone consultations and patient hospital visits were more than average. Almost all provided out-of-hours services. Surgeries were well equipped and computers were used by the majority, frequently for the purpose of maintaining patient records. Job satisfaction was generally high.

Norway

The number of general practitioners for the population was higher than average and they acted as gatekeepers to secondary care. A small majority were self-employed and worked with colleagues in shared premises. The average age was 42 years and the proportion of females was 26%. Vocational training was well established and an average time was spent on continuing medical education. The working week was less than in most countries and many general practitioners had additional appointments. Collaboration with other professionals was less than average.

As doctors of first contact, in the spheres of curative medicine and chronic disease management, Norwegian general practitioners were above average. Homeopathic medicine was not popular. In most spheres of preventive medicine, including maternity and family planning, general practitioners were active. They were well involved in screening for cervical cancer but less so in other screening activities.

Surgery consultations were usually arranged by appointment, booking intervals generous but the numbers were less than in most other countries. Telephone contacts were frequent and home visiting and involvement in out-of-hours services were less than average. Surgeries were well equipped and a large proportion of doctors used computers, many of them to maintain patient records. Job satisfaction was high.

Poland

Most general practitioners worked in solo practice and were employed by the state. Many were women and few were vocationally trained though the time spent on continuing medical education was above average. General practitioners did not have a gatekeeper role. The working week was short and many had additional appointments. Collaboration with other professionals in health care was generally above average.

As doctor of first contact, the general practitioner's role was well below average but involvement in acute problems and chronic disease management was somewhat higher. Technical procedures were infrequent and there was little involvement in homeopathy. They had a mixed role in preventive care, very little with regard to family planning and maternity care, and little with cervical cytology but well above average in screening for hypertension.

The number of consultations in a surgery was about average though the time given to them was much longer than in most countries. Appointment systems were uncommon. Other workload measures were below average and few were involved in out-of-hours services. Diagnostic and computer equipment were well below average. There was considerable dissatisfaction with remuneration.

Portugal

General practitioners were quite plentiful. They were younger than in most countries and about half were female. Vocational training was well established. General practitioners mainly worked in groups as salaried employees and had a gatekeeper role. The working week was short and many had additional jobs. The level of cooperation was high.

They had a relatively strong position as doctor of first contact, not quite so strong in chronic disease management and in dealing with acute emergencies. The use of medical techniques was low and homeopathy was not practised. Most general practitioners were involved in antenatal care and they had a strong position with regard to all measurements of preventive care, except blood cholesterol. They had greater involvement in health education than any other national group.

Generally speaking, the workload was lower than in most countries, with particularly few home visits, though hospital visiting was commonplace. They had a low involvement in out-of-hours services. Most consultations were arranged by appointment. Diagnostic equipment was very limited but computer use was average. Among the countries of western Europe, Portuguese general practitioners reported the greatest dissatisfaction with their remuneration. Administrative tasks also caused dissatisfaction.

Romania

General practitioners in Romania were relatively young, and many were female. They did not have a gatekeeper role and few had any recognizable vocational training. Considerable time was given to continuing medical education. Though the working hours were extremely short, comparatively few had additional appointments. Collaboration with other primary care workers including social workers was good.

The place of general practitioners as doctors of first contact, in acute emergencies, in chronic disease management and in the use of technical procedures was uniformly low though there was greater than average involvement in homeopathic medicine. General practitioners were particularly active in maternity care including intrapartum care and in providing health education; they reported average activity in child surveillance and immunization but involvement in case-finding routines and screening procedures was below average.

The average number of consultations was low and these were not arranged by appointment. Home visiting, telephone contacts and out-of-hours involvement were below the European average though half the general practitioners reported visiting patients in hospital. Diagnostic and computer facilities were very limited. There was widespread dissatisfaction with remuneration though this was not substantially different from other countries of eastern Europe. Substantial numbers intended to quit medicine.

Slovenia

General practitioners in Slovenia worked in groups and had a gatekeeper role. The majority were young and female. An average number were vocationally trained and time given to continuing medical education was well above average. Very few had outside appointments. Levels of collaboration with other health workers were lower than average.

The role of the general practitioner in caring for children and women with maternity or gynaecological problems was very restricted. With this proviso, they had strong roles as doctor of first contact. In chronic disease management and in the use of medical technical procedures their roles were less than average. Homeopathy was rarely practised. Screening for hypertension and raised blood cholesterol were about the average European levels but other preventive activities were low.

The general practitioners did not have appointment systems. Surgery contacts were at a comparatively high level. Telephone contacts were average and hospital visiting and home visiting rates were low but involvement in out-of-hours services was relatively high. Diagnostic equipment was good and half of them used a computer though only few for keeping medical records. They were reasonably satisfied with their job except with its remuneration.

Spain

General practitioner density was higher than the European average. General practitioners had a gatekeeper role, and they were employed by the national health service. The average age was low, one-third were female, few were vocationally trained but commitment to continuing medical education was high. The working week was short and the level of external appointments about average. Collaboration with social workers was good, but with specialists and nurses it was very poor.

In urban Spain, primary care for children is provided by specialist paediatricians. Apart from paediatric problems, the role of general practitioners as first-contact doctor was above average, though for chronic disease management and in the use of medical and technical procedures they were below average.

Involvement in homeopathy was low. Half the general practitioners were involved in antenatal care. Screening for hypertension and for raised blood cholesterol levels were well above average. Involvement in other areas of preventive care were below the European average.

Most of the measurements of general practitioner workload place Spanish doctors below the European average. Half of them used appointment systems; diagnostic and computer equipment were below average. Administrative tasks were criticized but apart from this, job satisfaction was above average.

Sweden

General practitioner density was particularly low. Most general practitioners were employed in the national health care system and worked in groups. They were of above average age and relatively more were female compared with other European countries. A high proportion were vocationally trained but commitment to continuing medical education was less. The duration of the working week and the proportion of general practitioners with additional jobs were around the European average. Collaboration with nurses was good, though with specialists and social workers it was poor.

Swedish general practitioners reported an average position as doctor of first contact. A wide range of medical technical procedures were used; homeopathy was not practised. They were strongly involved in child surveillance and immunization, below average in antenatal care and low for preventive procedures generally.

Most patients saw the general practitioner by appointment, the time allocation was generous but the number of consultations undertaken by the general practitioner was considerably lower than the European average. Few home visits and few hospital visits were made but involvement in out-of-hours services was usual. Diagnostic equipment was plentiful and computer use high, though not for the maintenance of medical records. General practitioners were fairly positive about their role but were not happy about their income.

Switzerland

General practitioner density was low and independent solo practice the rule. General practitioners were older, nearly all male and more frequently vocationally trained than in most European countries. They had long working weeks and involvement in additional posts was about the European average. Collaboration was very good with all related professionals except for social workers. As doctor of first contact they had an average position but they were strong in the management of chronic diseases and in the use of medical techniques. A minority practised homeopathy. More than three-quarters of them were involved in antenatal care and they were strong on preventive care generally.

Patients were seen by appointment, the number of consultations undertaken was above average and the interval between appointment request and consultation was often two or more days. Few home visits were made though involvement in out-of-hours services was high. They were well provided with diagnostic and computer equipment but they did not use computers for the maintenance of patient records. In general, job satisfaction was high.

Turkey

General practitioners were not gatekeepers; they were employed by the state and in general worked in groups. Vocational training was not established; many of the general practitioners were in a preparatory phase of specialization and spent many hours on continuing medical education likely to be directed towards their chosen specialty. The working week was long but few held additional appointments. Collaboration with colleagues was poor.

General practitioners reported a low position in almost all measurements of curative activity. Well over a quarter practised homeopathy. Half were involved in antenatal and a third in intrapartum care. They were above the European average for involvement in family planning, child surveillance and immunization. Their role in screening was very low.

Surgery numbers were large but few doctors made home visits. Appointment systems were infrequent. Diagnostic and computer equipment were low. There was much dissatisfaction with a strong inclination to change profession.

United Kingdom

Density of general practitioners in the United Kingdom was relatively low. They had a strong gatekeeper role and usually worked in groups. Vocational training was strong. The working week was longer than the European average, though many of them had additional jobs. Time commitment to continuing medical education was below the European average. Collaboration was generally good though not so with social workers.

British general practitioners had a strong role as doctor of first contact, made above-average use of technical procedures and were reported with a high involvement in disease management. Homeopathy was not popular. Their roles in maternity and preventive care were generally high, with particularly strong roles in family planning, child surveillance and immunization.

Surgery contacts were mostly arranged by appointment and were more than the European average. Home visiting was about the European average and involvement in out-of-hours services high. The average time given to surgery consultations was low. Telephone consultations were infrequent. Diagnostic equipment was at an average level and computers were well established with many general practitioners using them to maintain patient records. Job satisfaction, notably with remuneration and administration, was below the European average.

Part III

New Developments

Chapter 18 Current Trends and Future Challenges

Almost all health care systems in Europe are undergoing reform. In the eastern countries this is obviously related to profound changes in their societies as a whole, whereas in the western countries changes are driven mainly by external and economic motives. Although general practice is generally considered to be cost-effective, it has not escaped the reform programmes.

In this chapter we will try to identify a number of features common to all countries which are influencing change in health care, especially in primary care and general practice. Each will be considered in turn, both in its relation to the development of existing reforms and with regard to its future impact on health care and general practice. In the final section of the chapter we will deal with strategic aspects relating to implementation of changes in health care.

Ageing populations

The demographic structure in most countries is changing, with anticipated sharp increases in the proportions of elderly people, relative reductions among young people and increased average age by the first quarter of the next century.[118] The consequences of this demographic trend are widespread. Health care has to reckon with an increasing demand; old age brings more chronic conditions and other health problems.[113] It is hoped that improved education, better hygiene and better health standards generally will act as a counterbalance to the increased demand an ageing population creates. Nevertheless, more residential accommodation and nursing homes will be needed and increased community-based medical and nursing care. The reduced proportion of younger people may result in reductions in recruitment to the caring professions and lead to a greater dependence on informal carers. The traditional family support is being eroded by social change creating increases in the numbers of people living alone or at a distance from relatives. General practitioners may expect an increased and more diverse workload. There will need to be compensatory reductions in the average list size and/or more delegation to other professional and paramedical staff. These factors will encourage the development of group practice or multidisciplinary teams and prompt changes in the composition of vocational training programmes, particularly to cope with the increasing complexity of delivering comprehensive care in the community. Failure on the part of general practitioners to meet these demands could lead to a movement into the community of alternative care providers such as hospital-based teams.

Social trends

In addition to the expected demographic changes, Europe is witnessing greater social changes which affect many of our established ways of doing things. Increased personal freedom, greater emphasis on the rights of the individual, increased mobility, the declining importance of the family unit, and more marriages breaking up all have an impact on community-based social networks and have indirect effects on the provision of health care. The relationship between individuals and authority has changed in recent years and in health care this has affected the role of the general practitioner, who is no longer seen as a paternalistic adviser but more as a provider responding to the demands of consumers. There is a growing assertiveness among patients (consumers of health care), who require increased information about health-related matters, a greater personal involvement in their management and, not infrequently, a further opinion. Medicine is seen to be a service akin to banking or retailing. Freedom of choice of doctor is an essential part of this process and increased choice is a common feature of health care reforms in all the countries of eastern Europe. The long waiting lists for non-acute treatments in parts of Scandinavia

have resulted in the introduction of personal doctor systems in Finland, Norway and some Swedish counties.[119]

Advances in technology

Technical progress in medicine has increased the scope of primary care. A higher standard of care can be achieved at home and many patients prefer to receive care at home if at all possible.[113] Hospital stays following surgery have been reduced. Both these trends result in greater numbers of people with serious illnesses being treated at home, with the necessary concomitant requirement for increased human resources and in particular, greater resources in "unsociable hours". Because we are here concerned particularly with potentially serious illnesses, these resources could not be supplied by informal carers even if they were willing and available.

Professional attitudes

Social and cultural changes do not only influence the demand side. General practitioners are acting more defensively; they see increased investigation and acquiescence to patient demand for investigation and prescriptions as a safer option. In the United Kingdom, the introduction of the patient's charter, the publicity given to complaints procedures and the less authoritarian attitudes of doctors have all subtly affected the doctor/patient relationship.

General practitioners also see themselves as people with rights; in particular, the right to "free time" is an important current issue in the United Kingdom. Added to this, increased street crime, increased demand for services out-of-hours especially for non-emergency care, and increased numbers of female doctors combine to provide a challenge to the concept of a 24-hour service. In the United Kingdom there is currently a major debate about the contractual 24-hour-daily responsibility of general practitioners. Various efforts have been made to ameliorate the problem. Emergency general practitioner deputizing services are well developed in the United Kingdom and there are a number of experiments underway involving emergency treatment centres as an alternative to making home visits.[120] In Denmark the emergency out-of-hours service is administered separately and good progress has been made with the development of a telephone advice service, the establishment of emergency treatment centres, and a home visit service. Essential to its success, however, is the fact that it is for the general practitioner to decide which of the three options is appropriate.[121] The service is carried out by established general practitioners and it involves them in an average of one evening a fortnight and one night a month. The solution has proved acceptable to general practitioners and to patients and at the same time it has retained for the national health administration a system in which practising general practitioners retain responsibility for its implementation.

Economic constraints

Health care reforms in western Europe have been driven by the need to halt the rise in health care costs. The maximum potential lies in increased cost-effectiveness, providing that access and quality of service are not compromised. Governments tend to look towards market forces and deregulation as a way of achieving their objectives, a strategy which encourages competition amongst health care providers.[122] In the United Kingdom, the introduction of a market-type economy in health care with the establishment of fundholding practices has been a primary instrument in achieving these objectives. General practitioners now have responsibility for purchasing selective services on behalf of their patients[123,124] and as a result have become the logical managers of primary care teams. They have strengthened their position with regard to their relationship with hospital specialists but have become increasingly accountable to the Family Health Service Authorities (FHSAs) in budgetary matters. Some of the financial arrangements within the general practitioner contract have increased their workload and made their remuneration more performance-related. However, since the total remuneration has not increased, this has effectively meant a redistribution of a similar-sized fund and resulted in some being winners and others losers. It has caused dissatisfaction in some doctors who challenge the scientific validity of some of the preventive care activities which attract premium payments.

The balance between the general practitioner role in preventive and curative care is increasingly shifting towards prevention. On the one hand this is seen as socially desirable but in many areas of care it is also cost-effective. The general practitioner contract in the United Kingdom has placed considerable emphasis on prevention and it is likely that this trend will be seen in other countries. However, it is essential that preventive policies should be grounded in evidence-based medicine and programmes of preventive care should be scientifically evaluated before they are introduced on a wide scale.

Postgraduate education

Vocational training and continuing medical education must accept the challenge resulting from changes in health care. Hitherto, research in primary care, involving both morbidity and health care delivery, has been internally driven, predominantly by the general practitioners themselves. It has often included the identification of cost-effective care. Some countries have a long tradition of high-quality research undertaken by general practitioners; in others, the development is relatively recent. However, there is a new driving force behind primary care research in all countries. It comes from the need for financial accountability and quality assurance. The financiers of health care or the administrative political institutions representing patient interest want to see cost-effective, high quality care.

The starting point for these objectives is high-quality vocational training. In most countries of western Europe, accreditation following a vocational training programme is a condition for entry into general practice. The need for accreditation after a specific training programme effectively defines a specialty. Whilst recognition of general practice as a special branch of medicine exists in most countries, in some, Switzerland for example, there is an anomalous position where a specialist training programme in general practice is established but entry into general practice does not depend on accreditation.[125] The place of examinations in the accreditation process is not yet clear, though historically in medicine, formal examination has always been fundamental to any licensing (accreditation) process. Accreditation by formal examination in all countries would have considerable consequences[126] not least for issues relating to the international interchange of labour within the European Union.

Programmes for continuing medical education are equally important for the maintenance of high standards. The emphasis here is likely to be on ensuring that performance reaches target standards. In the Netherlands, 45 guideline protocols have been introduced into general practice[127] and in general these have been well received. Guidelines, however, must evolve out of good operational research and that is not readily available in all countries.

The decline of communism

Health care reforms in the former communist countries of eastern Europe are more radical than those in the west. The objectives of reform are similar in all countries and have been described above but they are hampered by scarce resources. Under these conditions they are much more threatening both to patients and to doctors than reforms in affluent western societies.[128] Uncontrolled expansion of doctors working in primary care has attracted an oversupply of poor doctors, a situation which weak governments have been unable to influence. The absence of control contrasts sharply with the situation in earlier years and undermines reform processes which are badly needed for the improvement of equitable and high-quality health care.

The established primary health care systems in most of these countries lack integration which is now seen as essential for a modern cost-effective health care system.[129,130,131] However, it is doubtful whether the concept of the general practitioner providing care for patients of all age groups will replace a three-part service for children, women (gynaecology and obstetrics) and other adult problems. An integrated system calls for adequately trained doctors: these are not currently available and would take a long time to train. A doctor treating all problems is not credible to a society so used to a strong specialist tradition and the notion of a general practitioner as a gatekeeper to specialist services seems to negate the freedom earned from political change.

Thus there has to be a new infrastructure with primary care gaining its rightful place in the universities and medical schools, and training programmes resourced and developed for the purpose.

Legislation, the remuneration system for general practice, and capital provision for primary care centres with appropriate equipment are all prerequisite to the emergence of a cohesive primary care service such as is usual in western Europe. The restoration of the economies of the countries of eastern Europe will assist the process. Most countries of western Europe have travelled along this road and therefore their assistance as partners in development could be one way of limiting the birth pains of the process.

Implementing changes: the importance of a strategy

Fundholding and the new contract for British general practitioners have been introduced without pilot studies and in the face of strong opposition from general practitioners. This is in contrast to the introduction of the personal doctor system in Norway which started in 1993 with experiments in four towns. Many elements of the so-called Dekker plans, which aimed at reforming the health care system in the Netherlands, were not implemented because of a lack of consensus, but numerous changes occurred in anticipation of their acceptance. These examples have shown that mere desire for change, even where the direction is known, is insufficient: implementing change can be difficult and a strategy should be devised first. There are two main forces for change, those internal to the health care system or institution and those external to it. Groenewegen[132] distinguished three types of institutional change which can be summarized as: those consequent on social trends, those which reflect change in attitudes and those arising from government policy decisions. Any strategy to implement change can affect all three areas and not all favourably. Desirable changes in health care may be thwarted by premature and untested action.[132] The way in which fundholding was launched in the United Kingdom would be unacceptable in the Netherlands. Strategies which work in centralized systems such as the British National Health Service are not necessarily acceptable in countries where the government's power in health care is more limited.

Some strategies for change may be based on an evolutionary approach with small steps taken in a given direction, whereas in other situations a revolutionary approach may be necessary. Deep dissatisfaction amongst the public and the medical profession alike may prompt the need for revolutionary and drastic action even though a more tentative approach with limited pilot studies would be more sensible in most circumstances. Radical action without prior experimentation can have disastrous results.

Other factors militate against the implementation of change: in particular, the lack of a strong and stable government. A weak and insecure government is not able to carry through any long-term programme of health care reform. In the United States, the President recently engaged in a programme of health care reforms which most British general practitioners would see as highly desirable but because of the President's relative weakness in relation to Congress, legislation for the programme of reform could not be enacted. In Sweden, rapid change of government has resulted in an erratic programme of health care reform.[133] Large-scale reforms require strong and efficient administrations having the power to risk confrontation with powerful patient or professional groups.[130]

A further inhibiting factor is a low level of development in scientific medicine. If a government wishes to introduce health care reform it must persuade both the electorate and the professional people concerned that the reform is soundly based. In the absence of scientific evidence to justify its reform programme, it is subject to attack by the profession. Professional opposition to government policy is difficult for governments to resist, except in those circumstances where the opposition seems to be motivated entirely by the financial interest of the profession itself.

For all these reasons, therefore, a stepwise approach to health care reform is to be preferred. Where the need for change is soundly based and the strategy to implement change is defined and tested one step at a time, there is a continuing opportunity to refine the reform process in accordance with the findings of the previous step. By this means it is more likely that both the public and the profession will be persuaded of the desirability of a particular change.

A decentralized approach to change is an alternative strategy. This would work by testing out ideas as and when they occured. For example, the development of out-of-hours services in Denmark was led by general practitioners in Copenhagen who faced an increased workload outside of nor-

mal working hours. The arrangements established to deal with the situation in Copenhagen were introduced piecemeal in that area; they were found to be effective and subsequently have been used elsewhere. Decisions regarding the need for change, the development of an acceptable method of change and a strategy to implement it were all taken at a local level and the scheme might not have been considered acceptable by the profession itself if it had been experimentally introduced on a national basis. In the countries of eastern Europe, there is a particular opportunity to experiment with different types of health care in that general practitioners all require training and the training programme itself can be the subject of experimentation.

Conclusion

In this chapter we have considered developments relevant to the future of general practice in Europe. Change is part of the refining process and should be considered desirable as much as inevitable. The forces for change do themselves change with time and currently cost control and quality assurance are most important in western Europe, while in eastern Europe, the expression of patient choice and the need to establish a basic cohesive primary care service for the people are uppermost. Whatever the driving forces, implementation of change requires a strategy. The most appropriate strategy has to be decided in the light of the particular circumstances in each country. The stability of the government and the national resources available are key factors on the institutional side; adequate training of primary care professionals and securing their good will are essential for implementation; and a sense of fairness in the application of change to society in general matters to the people. These three elements must all be considered when establishing policies for change.

The general trend in health care is to favour primary care in general practice. Evolution of general practice in countries such as the Netherlands, Denmark and the United Kingdom has not taken place without opposition, often from doctors themselves. It is nevertheless essential that a well organized profession and well trained professionals are encouraged. Their position has to be supported by protective regulation. A health care system based on primary care is more effective where a doctor (or practice) cares for a defined list of patients and controls access to secondary care. Such a model clearly may not be appropriate in perpetuity, but given the pressures on and organization of European society, this seems most appropriate as the turn of the millennium approaches.

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Annex 1

EUR/ICP/DLVR 040101

FRAMEWORK FOR PROFESSIONAL AND ADMINISTRATIVE DEVELOPMENT OF GENERAL PRACTICE/ FAMILY MEDICINE IN EUROPE

World Health Organization
Regional Office for Europe

TARGET 28

PRIMARY HEALTH CARE

By the year 2000, primary health care in all Member States should meet the basic health needs of the population by providing a wide range of health-promotive, curative, rehabilitative and supportive services and by actively supporting self-help activities of individuals, families and groups.

ABSTRACT

This document presents the specific characteristics of general practice as a specialty and the conditions for its development. It provides information for professionals and decision-makers at all levels of the health care system, on the basis of which the most appropriate model can be selected.

Keywords

FAMILY PRACTICE – trends
PRIMARY HEALTH CARE – trends
HEALTH CARE REFORM
EUROPE

About the document

In recent years, many countries in Europe have embarked on reforms of their health systems, either as part of broad political changes or as specific policies to improve their health services. Reform of primary health care has been a feature of this movement in several countries, often involving the reorganization of existing systems of general practice or their introduction where none existed. The WHO Regional Office for Europe, convinced of the potential contribution of general practice to health for all, through the delivery of a wide range of integrated health care functions including health promotion, disease prevention, curative, rehabilitative and supportive care, issued in August 1995 a discussion document entitled *A charter for general practice/family medicine in Europe – working draft.*

That document was issued at the end of a long preparatory process during which the Regional Office had convened a number of international meetings on subjects such as the role of the general practitioner in the country-wide integrated noncommunicable disease intervention (CINDI) programme (Heidelberg, 1–13 April 1991); the contribution of family doctors/general practitioners to health for all (Perugia, Italy, 22–25 May 1991); needs assessment in local areas and its consequences for health care provision (Jerusalem, 27–30 October 1991); the development of general practice in the countries of central and eastern Europe (Benesov, Czechoslovakia, 22–25 April 1992); the role of general practice settings in the prevention and management of the harm done by alcohol use (Vienna, 19–22 October 1992) and reforms in family medicine or general practice in countries of central and eastern Europe (Sinaia, Romania, 25–28 October 1993), as well as the first meeting of an expert network on family practice development strategies (Ljubljana, 26–28 January 1995).

A consultation on the formulation of a charter for general practice in Europe, held in Utrecht on 20–21 March 1992, explored the practical issues involved in supporting and enhancing the development of general practice in connection with the provision of primary health care. Finally, the Working Group on the Formulation of a Charter for General Practice in Europe met in Utrecht, the Netherlands, on 9–11 June 1994 with the purpose of formulating a first version of the charter.

The discussion document was sent to a large number of international and national associations and professional organizations of physicians and of general practitioners in Europe, asking them for their comments, views and proposals for improving the document. Several responses were received, in the majority expressing support for the text but on some occasions voicing criticism of the proposed draft. During this period, the document was also discussed in several meetings convened by the Regional Office and by associations and professional organizations of physicians and of general practitioners, as well as by bodies representing nurses. The purpose of this informal consultative process was to identify the essential features that are applicable everywhere and the proposals for specific improvements where they are feasible. The feedback from this long consultation process was discussed during a meeting to revise the draft charter (Copenhagen, 6–7 February 1998). The participants in this meeting were representatives of four WHO collaborating centres for primary health care and of the international associations and organizations of physicians and of general practitioners which had contributed to the debate, as well as a number of experts.

Two issues arose during the consultation period. The first concerned the title of the document. When the original title of *Charter for general practice/family medicine in Europe* was proposed, it was envisaged to hold a conference of Member States of the European Region of WHO to ratify the document, which is the procedure normally followed by WHO for the adoption of a charter. During this period, the plans for a special conference were superseded by the decision to hold the WHO Conference on European Health Care Reforms (Ljubljana, 17–19 June 1996), where a general debate on health care reform took place. In consequence, the title of the document has been changed to *Framework for professional and administrative development of general practice/family medicine in Europe,* in order to emphasize that the document is addressed to medical professionals and to decision-makers at all levels of the health

care system. The second issue related to the need to clarify that the document addresses only matters related to general practice, and does not address matters related to the role and contribution of other medical specialties and health professions in primary health care.

During the same period, the Regional Office had also given support to the European Survey of the Task Profiles of General Practitioners, which yielded a wealth of information on the subject of what general practitioners do in selected European countries and how general practice is organized.

Debt to past generalists

It would not have been possible to draw up this framework for professional and administrative development of general practice/family medicine in Europe without the devotion and work of many unknown medical generalists in all countries who have developed the technical, ethical and cultural basis of health care in Europe. This is part of our essential European heritage and a cornerstone of future developments in this area.

Their work and experience, which are now beginning to yield their full technical, scientific and educational potential, are to be seen as helping to bridge the gap between human rights and needs, on the one hand, and the technical application of science in the field of health, on the other.

Purpose of the document

The need to orient health care systems towards primary health care has been reaffirmed on several occasions. While the organization and functions of primary health care differ from one country to another, because of historical developments and different social, economic and cultural circumstances, the services provided by general practitioners constitute an essential element of primary health care. Irrespective of whether they work in single practices or in partnership with other general practitioners, on their own or as part of a team of health professionals, and as the main provider of first contact care or as one of several specialists to which the population has direct access, their role in providing integrated health promotion, disease prevention, curative, rehabilitative and supportive care is recognized in many countries.

Without ignoring the contribution of other medical specialties and other health professions, it is widely accepted that general practice has the potential to offer:

- accessible and acceptable services for patients;
- equitable distribution of health care resources;
- integrated and coordinated delivery of comprehensive curative, rehabilitative, palliative and preventive services and health promotion;
- rational use of secondary care technology and drugs;
- cost-effectiveness.

General practice can thus contribute to an effective and efficient primary health care service of high quality, which should positively affect the workload and quality of specialized and hospital care.

The purpose of this document is to explain and promote the essential role of general practice as a specialty and of general practitioners as specialists in contributing to improve the health of individuals and groups. In this document, given the differences in the way these terms are used and interpreted in different countries, the terms "general practitioner" and "family physician" refer to the medical practitioner who has completed specific postgraduate training, analogous to that of other medical specialties, in the discipline of general practice or family medicine. Correspondingly, the terms "general practice" and "family medicine" and the terms "general practitioner" and "family physician" are used as being equivalent.

The document has been developed with an appreciation of the varied nature of the systems currently operated and the problems faced by different European countries. It is designed to apply equally to those countries that are at an early stage in the implementation of education and training programmes to provide a first generation of family physicians, and those with established systems of general practice that could be strengthened. It recognizes that general practice can be elaborated and organized in a variety of ways, depending on the country's circumstances, resources and traditions. It therefore provides information for a framework for development, on the basis of which the most appropriate model can be selected.

The document is addressed to all parties involved in health care: decision-makers at different levels, those responsible for resource allocation, planners and managers, academic institutions, various organizations of family physicians, health professionals, and patients and their representatives. The successful development of general practice requires not simply the willingness but the wholehearted commitment of all these persons and bodies. Such commitment must be long term and combined with a willingness to respond flexibly and positively to problems as they arise. Legislation, regulations, recommendations and guidelines should be developed. Financing, insurance schemes and payment systems that support the development of general practice may have to be introduced. Programmes for research, quality development, vocational training and continuing medical education have to be developed or adapted; and family physicians may have to be trained or re-trained.

Characteristics of general practice

General practice can thrive in different health care systems. Despite differences in the ways these are planned, organized and managed, certain characteristics pertain to general practice in all countries. Although some of these characteristics are also applicable to other medical specialties, they are considered of particular relevance to general practice. They are described below.

1. General

General practice addresses the unselected health problems of the whole population; it does not exclude certain categories of the population because of age, gender, social class, race or religion, or any category of complaint or health-related problem. It must be easily accessible with a minimum of delay; access to it is not limited by geographical, cultural, administrative or financial barriers.

2. Continuous

General practice is primarily person-centred rather than disease-centred. It is based on a long-standing personal relationship between the patient and the doctor, covering individuals' health care longitudinally over substantial periods of their life and not being limited to one particular episode of an illness.

3. Comprehensive

General practice provides integrated health promotion, disease prevention, curative, rehabilitative and supportive care to individuals from the physical, psychological, and social perspectives. It deals with the interface between illness and disease and integrates the humanistic and ethical aspects of the doctor-patient relationship with clinical decision-making.

4. Coordinated

General practice can deal with many of the health problems presented by individuals at their first contact with their family physician, but whenever necessary, the family physician should ensure appropriate and timely referral of the patient to specialist services or to another health professional. On these occasions, family physicians should inform patients about available services and how best to use them and should be the coordinators of the advice and support that the patients receive. They should act as care managers in relation to other health and social care providers, advising their patients on health matters.

5. Collaborative

Family physicians should be prepared to work with other medical, health and social care providers, delegating to them the care of their patients whenever appropriate, with due regard to the competence of other disciplines. They should contribute to and actively participate in a well functioning multidisciplinary team and must be prepared to exercise leadership of the team.

6. Family-oriented

General practice addresses the health problems of individuals in the context of their family circumstances, their social and cultural network and the circumstances in which they live and work.

7. Community-oriented

The patient's problems should be seen in the context of his/her life in the local community. The family physician should be aware of the health needs of the population living in this community and should collaborate with other professionals and agencies from other sectors and with self-help groups to initiate positive changes in local health problems.

Conditions for the development of general practice

The conditions required for general practitioners to provide high-quality services can be specified at a number of levels. Some are related to the structure of the health care system, others to its organization at the local level. Some may be easier to realize and at an earlier stage than others. The aspects that are specific to general practice are considered below, under the following headings: structural conditions, organizational improvement and professional development.

I. Structural conditions

1. Discrete population

The provision of personal, comprehensive and continuous care is encouraged by a continuing relationship between the family physician and the patient, based on mutual trust and agreement between the patient and the doctor. Such a relationship and continuity of care over time are facilitated when family physicians look after a well-defined group of people, for example those registered in a

personal or family list system. Having a specific family physician does not contradict the basic right of patients to choose their doctor, or the right to change from one doctor to another.

2. Serving the general population

Family physicians must be trained to deal with the health problems of all population groups, including children, men, women and the elderly, without distinction. Providing integrated care to the population is enhanced when services are not fragmented among different specialties and agencies that deliver care to certain categories of patient or of the population.

3. Working environment

General practice is based in the community, close to patients, with easy access by them. When large populations are served and there is an increase in the number of health care providers, extra precautions should be taken to avoid reducing accessibility and threatening the personal character of the provision of care. Administrators, health authorities and doctors should find a balance between the need for efficiency and the requirements of family practice.

4. Referral system

The coordinating role of family physicians is best carried out when their training provides them with the knowledge and skills required to manage the majority of the unselected cases that present to them and to refer appropriate cases to other health care providers, either within primary health care or to secondary specialized and hospital-based services. Cost-effective use of secondary care services is best achieved when only those cases that actually warrant these services are referred to them. Successful implementation of a referral system requires its acceptance by patients, which can be achieved through education and by fostering their trust in the family physician. It also requires good cooperation, exchange of information and reciprocity between family physicians and other medical specialists and health professionals: family physicians must make appropriate referrals, and information must be fed back to them from specialists; patients must also be similarly referred back.

5. Remuneration

The payment system should be well balanced, preferably combining a salary or other form of fixed payment, a capitation fee, and fee-for-service. Its aim should be to stimulate provision of the full range of services within the domain of general practice and to promote high quality primary health care by offering different incentives. The payment system may help to ensure the delivery of health promotive, preventive, curative and palliative services, as well as other aspects of practice such as team-based activities, general availability, operating an information system, carrying out teaching tasks when appropriate, and maintaining the premises and equipment. If market elements are introduced, standards of quality should be safeguarded.

II. Organizational improvement

6. Keeping patient records

Systematically keeping detailed, problem-oriented and complete records of all encounters is important to maintain continuity over time, to identify episodes of illness, to create a patient history, and to coordinate care where several providers of care are involved. The records should also include other information relevant to patients' care, for example on matters relating to their living and working conditions and their lifestyles. Systematic preventive procedures and assessment of the health needs of the population are impossible without a sound record system that enables patient groups at risk to be identified. Finally, records are an essential requirement for quality development, audit of care, peer review etc.

As in any type of health care service, patient records may contain highly confidential information, and the confidentiality of the information must be preserved in accordance with existing legislation. Patients also have the right to access their own records, and information may only exceptionally be withheld from them when it reasonably appears that it would cause them serious harm without any expectation of obvious positive effects.

7. Teamwork

Coordination in health care requires general practitioners to have a knowledge of the training of other health professionals and an understanding of what and how they can contribute to the work of other health care providers. Furthermore, cooperation among all health care providers involved in diagnosis, treatment and care, as well as with social care professionals, is a patient's right. Teamwork is by no means restricted to providers who work in shared premises. Those who work from separate offices and premises should have incentives to meet regularly and develop common aims and shared objectives and to evaluate the attainment of these objectives together. Teamwork makes it easier to pool the skills and expertise of a number of health and social care professionals and enhances their respect for each other's role.

8. Practice organization

Family physicians need adequate premises, equipment and ancillary staff. These should respect the privacy of patients, provide opportunities for diagnosis and treatment and facilitate accessibility. Family physicians may work alone, in groups or in health centres, but whatever the structure, the practice organization should be flexible, which among other things means providing direct help for emergency cases, an appointment system for patients with less urgent problems and home care, whenever appropriate. Supporting services, such as X-ray and laboratory facilities, must be accessible to the family physician. With respect to 24-hour cover, family physicians should be involved in the planning and management of out-of-hours services for the population and contribute to finding solutions that are feasible and acceptable to all parties involved.

III. Professional development

9. Education

All health professionals and medical specialists working in primary health care must receive undergraduate, postgraduate and continuing education in the concepts and specific content of primary health care. The appropriate education of general practitioners is thus a crucial element in providing the integrated, comprehensive services that are referred to in this document. Education for general practice can usefully be considered under three headings: undergraduate training, postgraduate vocational training, and continuing medical education.

(a) A first requirement is an adequate **undergraduate basic medical training**. General practice should already be an integrated part of undergraduate programmes. All medical students should be exposed to general practice, so that they acquire the knowledge that is specific to this discipline and gain the requisite understanding of the need for cooperation among all sectors of the health care system.

(b) **Postgraduate vocational training** must be a requirement to become a family physician. This vocational training should be equivalent to that of other main clinical specialties and should be primary-health-care-oriented and based, to a considerable extent, in general practice. Practices, possibly affiliated to academic departments, should have a prominent role in teaching. The trainee must be offered sufficient opportunity to acquire broader skills, for instance in communicating with patients, counselling and practice management. Drawing up a core content of general practice is required for developing a proper vocational training programme.

(c) For updating skills and maintaining and improving the quality of care, **continuing medical education** (CME) and continuing professional development are prerequisites. CME programmes must be general-practice-oriented and based on research, in particular in primary health care. The prime responsibility for CME rests with the medical practitioners themselves, who will need to use different modalities to achieve and maintain their competence. Distance learning techniques may be of great benefit to facilitate access to training by doctors.

10. Quality development

General practice should be open to evaluation. Quality assessment and development are essential, irrespective of the employment status of family physicians. Continuing medical education can be an important instrument in quality assurance. Systems of clinical audit organized by doctors themselves and carried out in peer groups are effective. Agreed professional guidelines, as they are currently being developed in some countries, are important tools for

professional development and should be adapted to national and local circumstances.

11. Academic departments of general practice

Given the specific characteristics of general practice as a specialty, its recognition as an academic discipline is essential to the acceptance of general practice as a full partner in the provision of health care. Efforts must be made to establish fully funded academic departments and professors of general practice where they do not yet exist. These departments, with sufficient resources of all kinds, must be headed by practising family physicians or persons with a solid background in general practice and appropriate academic credibility, and supported by their peers. They should be continuously involved in clinical general practice and should have close links with other disciplines.

12. Research

An academic discipline cannot be created in a vacuum. It needs a scientific basis to create its own body of knowledge. Academic departments of general practice should concentrate not only on training and education but also on research. Vocational training programmes should make future family physicians research-minded. There should be opportunities for trainees to carry out research in the vocational training programme. General practice research should be sufficiently funded and closely related to the health problems that family physicians care for and to the clinical activities that they carry out in their daily work.

13. Professional organization

From the conditions described above, the profession of general practice clearly needs an effective organization to identify professional needs and promote professional development at national and international levels and to support local initiatives. The two functions, political and academic, are usually organized separately, although a single organization combining both functions is possible. Family physicians must be represented at the highest levels in all the relevant medical decision-making bodies.

Strategies for the development of general practice

The starting point

There are huge differences between the countries in WHO's European Region with regard to their ability to meet the conditions outlined in the previous sections of this document. Some countries can rely on a history of decades of improving the position of general practice, while others have just started. Especially for the latter, some indication is useful of how and where to start implementing the recommendations contained in this document. Some of the conditions are easier to implement than others.

One important stage in the process is to gain the broad support and cooperation of the health professions, administrators and health authorities. This will prepare the ground, through information and education, for wide acceptance by the population of the special role of general practice. General practitioners themselves and their organizations should play a significant role in doing this.

Opportunities from within the profession

Meeting some of the professional conditions may be considered a suitable starting point for developing general practice. Irrespective of the specific structure of a health care system, one important first step is to establish an association for improving the position of family physicians and a college or institute for promoting the content and the quality of their professional activities. The college can act as a pressure group to exert influence on universities, and both organizations can be focal points for those devoted to improving their profession. There are clear links between setting up a professional organization and engaging in research, quality development and postgraduate education: for instance, proposals on the content of an undergraduate and postgraduate curriculum can be put forward by these organizations.

The process of introducing or strengthening general practice is also facilitated through contacts with countries where it has a long-standing tradition. International collaboration for the development of general practice, while respecting local culture and traditions, contributes to progress by enabling people to learn from the experience of others.

The role of decision-makers

Without support from outside the profession, it may be difficult to develop general practice. In order to meet various conditions (such as the provision of integrated, well coordinated services), the active support of policy- and decision-makers, politicians and the general public is needed. Policy- and decision-makers should be sensitive to valid claims of cost-effectiveness; politicians and the general public to those of equitable, accessible and comprehensive care.

The implementation of general practice requires appropriate supportive legislation and regulations such as an appropriate payment system. The current attitude of the population in various countries, whereby quality of care is associated with highly specialized services, will only be changed by the demonstration of quality in general practice.

It seems more feasible not to start with a large-scale operation. The training of family physicians takes time. Furthermore, carrying out a pilot project prior to full implementation of a programme will provide the opportunity to correct mistakes without long-term consequences.

This document is also available on the WHO/Europe website, http://www.who.dk. Additional copies can be requested from:
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Annex 2

European Survey of the Task Profiles of General Practitioners

SUMMARY OF QUESTIONS

(English version; no precoded answers)

1. PRACTICE AND PERSONAL INFORMATION

1.1 In what year were you born?

1.2 Are you a man or a woman?

1.3 Are you self-employed or in salaried employment?
(If more than one paid position specify for both main position and additional position)

1.4 How many hours do you normally spend working in this (these) position(s) per week?
(estimated averages for regular services and emergency and on-call duty)

1.5 Please estimate the average number of hours per month spent on keeping up-to-date
(time for reading professional journals, attending postgraduate courses, scientific work etc.)

1.6 What is the total number of inhabitants of the city, town or village in which your (main) practice is situated?

1.7 Your (main) practice location can be characterised as:
(urban/innercity, urban/town, suburban/outskirts, mixed urban-rural, rural)

1.8 Have you completed vocational training in a recognized programme to become a specialist in family medicine or general practitioner in addition to your basic medical training?

1.9 When did you start working as a doctor and when as a GP (not trainee)?

1.10 What is the distance by road from your (main) practice building to the nearest general practitioner (not in your partnership, health centre etc.), **the nearest consultant outpatient clinic and the nearest general or university hospital** (not psychiatric, convalescent etc.)?

1.11 Do you work alone or in a shared accommodation with one or more other general practitioners and/or medical specialists?

1.12 What is approximately the size of your practice population?
(This may be the number on your formal patient list. If you do not have a formal list please estimate the number of people who normally rely on you for primary medical care. If your practice population is a mix of both, please fill in both lines. If in a partnership or group, estimate the number that should be allocated to you.)

1.13 Please estimate the average number of face-to-face contacts with patients, in the office or surgery, and during home and hospital visits.

1.14 What is the average number of telephone calls per day involving consultations by or advice to patients?

1.15 To what extent do you work with an appointment scheme? ('Appointment' meaning a consultation that has been arranged in advance, e.g. by telephone.)

1.16 What is the average time allocated per patient in your appointment system? (The actual time spent with patients may be longer or shorter)

1.17 How long does a non-acute patient normally have to wait for the consultation after having made the appointment?

1.18 Please tick to what extent your practice population deviates from the average national level with respect to the following categories:
(children under 6, elderly people/over 70 years, socially deprived people, immigrants)

1.19 Are you (alone or together with some colleagues) assisted by staff working as listed below?
(receptionist/medical secretary/general assistant, practice nurse, any assistant for laboratory work)

1.20 How often do you have face-to-face meetings/discussions with the following professionals:
(other GPs/primary care doctor(s), ambulato-

ry medical specialist(s), hospital medical specialist(s), pharmacist(s), primary care/home care nurse(s), practice nurse(s), social worker(s))

1.21 **Who is responsible for emergency service during your off-duty hours?**

1.22 **Please tick the equipment being used on site in your practice by yourself or your staff:**
(laboratory: haemoglobinometer, any blood glucose test set, any cholesterol meter, blood cell counter;
imaging: ophtalmoscope, proctoscope, otoscope, gastroscope, sigmoidoscope, X-ray, ultrasound for abdomen/fetus, microscope;
functions: audiometer, bicycle ergometer, eye tonometer, peakflow meter, spirograph, electrocardiograph, blood pressure meter;
other: urine catheter, coagulometer, set for minor surgery, suture set, defibrillator, disposable syringes)

1.23 **Do you have direct access to laboratory and X-ray facilities** (not in your practice) **with quick report of results** (within 48 hours)?

1.24 **Are you routinely keeping medical records of patients?**

1.25 **If a computer is at your disposal, for which purposes is it being used in your practice?**
(administration/billing, appointments, recording drug prescriptions, keeping patients records, research/audit, other purposes)

2. APPLICATION OF MEDICAL TECHNIQUES

To what extent are the following activities carried out in your practice population by you (or your staff) **or by a medical specialist?** ('Practice population' meaning people normally applying to you for primary medical care)
(Answers on a four-point scale: (almost) always, usually, occasionally, seldom/never)

2.1 **Wedge resection of ingrowing toenail**

2.2 **Removal of sebaceous cyst from the hairy scalp**

2.3 **Wound suturing**

2.4 **Excision of warts**

2.5 **Insertion of IUD**

2.6 **Removal of rusty spot from cornea**

2.7 **Fundoscopy**

2.8 **Joint injection**

2.9 **Maxillary (sinus) puncture**

2.10 **Myringotomy of eardrum (paracentesis)**

2.11 **Applying a plaster cast**

2.12 **Strapping an ankle**

2.13 **Cryotherapy (warts)**

2.14 **Setting up an intravenous infusion**

3. FIRST CONTACT WITH HEALTH PROBLEMS

To what extent will patients in your practice population (people who normally apply to you for primary medical care) **have you as the doctor of first contact for the following health problems?** (This is only about the first contact, not about a possible referral for further diagnosis or treatment. Exclude purely administrative contacts.)
(Answers on a four-point scale: (almost) always, usually, occasionally, seldom/never)

3.1 **Child with a rash**

3.2 **Child with severe cough**

3.3 **Child aged 7 with enuresis**

3.4 **Child aged 8 with hearing problem**

3.5 **Woman aged 18 asking for oral contraception**

3.6 **Woman aged 20 for confirmation of pregnancy**

3.7 **Woman aged 35 with irregular menstruation**

3.8 **Man aged 24 with stomach pain**

3.9 **Man aged 45 with chest pain**

3.10 **Man aged 50 who burnt his hand**

3.11 **Man aged 50 with acute toothache**

3.12 **Woman aged 50 with a lump in her breast**

3.13 **Woman aged 60 with deteriorating vision**

3.14 **Woman aged 60 with polyuria**

3.15 **Woman aged 60 with acute symptoms of paralysis/paresis**

3.16 **Man aged 70 with joint pain**

3.17 **Woman aged 75 with moderate memory problems**

3.18 **Man aged 35 with sprained ankle**

3.19 **Man aged 29 with lower back pain**

3.20 **Man aged 28 with a first convulsion**

3.21 **Anxious man aged 45**

3.22 **Physically abused child**

3.23 **Couple with relationship problems**

3.24 **Man with suicidal inclinations**

3.25 **Woman aged 50 with psychosocial problems related to her work**

3.26 **Man aged 32 with sexual problems**

3.27 **Man aged 52 with alcohol addiction problems**

4. PREVENTIVE MEDICINE AND OTHER PROCEDURES

4.1 **When do you, or your staff, measure blood pressure?**
(in connection with relevant clinical conditions, on request, routinely in surgery contacts with adults – regardless of the reason for visit, in adults when invited for this purpose)

4.2 **When do you, or your staff, measure blood cholesterol level?** (more than one answer possible)
(in connection with relevant clinical conditions, on request, routinely in surgery contacts with adults – regardless of the reason for visit, in adults when invited for this purpose)

4.3 **When do you, or your staff, carry out cervical smears for cancer screening?** (more than one answer possible)
(in connection with relevant clinical conditions, on request, routinely in surgery contacts in at risk females, in women when invited for this purpose)

4.4 **When is manual examination for breast cancer screening performed by you or your staff?** (more than one answer possible)
(in connection with relevant clinical conditions, on request, routinely in surgery contacts in at risk females, in women when invited for this purpose)

4.5 **To what extent are you involved in health education as regards smoking, eating and drinking habits?**
(only in connection with regular patient contacts, in special group sessions or programmes)

4.6 **Are you involved in the following activities?** (intrapartum care, routine antenatal care, immunization programme for children, paediatric surveillance of children under 4, family planning/contraception, homoeopathic medicine)

5. DISEASE MANAGEMENT

To what extent are you involved in the treatment and follow-up of patients in your practice population with the following diagnosis? ('practice population' meaning people who normally apply to you for primary medical care)

(Answers on a four-point scale: (almost) always, usually, occasionally, seldom/never)

5.1 **Hyperthyroidism**

5.2 **Chronic bronchitis**

5.3 **Hordeolum (stye)**

5.4 **Peptic ulcer**

5.5 **Herniated disc lesion**

5.6 **Acute cerebrovascular accident**

5.7 **Congestive heart failure**

5.8 **Pneumonia**

5.9 **Peritonsillar abscess**

5.10 **Ulcerative colitis**

5.11 **Salpingitis**

5.12 **Concussion of brain**

5.13 **Parkinson's disease**

5.14 **Uncomplicated diabetes type II**

5.15 **Rheumatoid arthritis**

5.16 **Depression**

5.17 **Myocardial infarction**

6. JOB SATISFACTION

To what extent do you agree with the following expressions regarding your job satisfaction?
(Answers on a five-point scale: agree strongly, agree more or less, neutral, disagree more or less, disagree strongly).

6.1 **I feel that some parts of my work do not really make sense.**

6.2 **My work still interests me as much as it ever did.**

6.3 **My work is overloaded with unnecessary administrative detail.**

6.4 **Assuming that pay and conditions were similar I would just as soon do non-medical work.**

6.5 **I find real enjoyment in my work.**

6.6 **In my work there is a good correspondence between effort and reward.**

6.7 **My work involves a great deal of wasted effort on my part.**

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