

# Primary Health Care in an International Context

John Fry  
and  
John Horder

The Nuffield Provincial Hospitals Trust

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## PREFACE

This study and report was initiated in response to a question posed by Sir Maurice Shock, Chairman of Trustees—'how does British general practice compare with primary health care in other westernised countries?' It coincided with an already planned series of visits by one of us (John Fry) to a number of countries and John Horder was invited to undertake others.

Between the two of us we have almost a century of work as British GPs and involvement in international affairs. Whilst we received generous support on our visits, with background information and discussions, restrictions of time were inevitable.

Our presentation, therefore, is a collection of personal profiles of primary care in twelve countries. The commentaries and conclusions are our own and are intended to stimulate efforts to learn from others, in order to improve health care in general, and primary care in particular, internationally.

Very sadly this Preface must now include a postscript. John Fry died before it was possible for him to witness the publication of this book. He had, however, completed his own revision and read all but the final proofs.

## ACKNOWLEDGEMENTS

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# 1

## *Current Issues in Health Care*

The provision of health care for the people is a major sector in every modern society. It accounts for a large part of national budgets and expenditure. Everywhere there are the common problems of meeting and controlling rising costs and attempts to ensure good outcomes and benefits for all the monies spent.

Within every system of health care there has to be a first level of professional care that serves as a keystone for the other levels. It is our belief that good primary care is a basis for a sound economic health system and that better primary care leads to better general health.

It is with this hypothesis in mind that this study was undertaken to observe, record and analyse various national systems of primary care and to learn from each of them.

Before embarking on detailed descriptions, it is useful to examine some of the fundamental underlying issues and dilemmas in provision of health care for the people.

### ***The common dilemma***

All countries face the common dilemma of an *insoluble equation* in providing health care.

WANTS > NEEDS > RESOURCES

'wants' will always be greater than  
'needs' which will always exceed available  
'resources'

### ***Wants***

*Wants* cover a wide range of public and professional expectations and rights. For the public, now better educated and

informed through the media, high expectations of a cure for every problem and a 'pill for every ill' are unreal when absolute cures are available for only a minority of diseases and when relief, comfort and prevention are relatively more important. Allied to these expectations are 'rights'. Because everyone pays for health in one way or another, consumers tend to demand the latest, the quickest and the best treatments for their monies.

Professionals also have expectations and wants related to 'clinical freedom', to have and to use the latest technologies and therapies irrespective of cost or proven value.

### ***Needs***

*Needs* are attempts by professionals, planners, providers and politicians to set ground rules on what is necessary and appropriate. They endeavour to distinguish between basic essential health needs which should be universally available and medical luxuries which have lower priorities and perhaps require some co-payments.

### ***Resources***

It is impossible for any system to acquire sufficient resources to meet every health need and medical want. No system can have the manpower in physicians, nurses and other health care professionals; the specialist, primary, community and preventive facilities; and the technologies for investigations, treatment and care—all these to provide instant and total services for everyone with any and every need and want.

### ***Costs***

Even with the strictest controls the costs of health care are tending to rise everywhere, as measured by percentages of gross domestic/national products (GDP/GNP) and even more by the per capita costs for services.

At present the range is from the highest expenditure in USA with annual GDP of 12% in 1990, but in 1993 over 14% for health care, through most developed countries around 8–9% and a few around 6–7%.

TABLE 1 HEALTH EXPENDITURE (GDP%) 1980–1990

Total health expenditure as percentage of gross/domestic product (GDP%) 1980–1990 and compound growth rate			
	1980	1990	compound growth rate 1980–1990 (%)
Canada	7.4	9.3	+ 2.3
Denmark	6.8	6.3	– 0.8
France	7.6	8.8	+ 1.6
Germany	8.4	8.1	– 0.4
Japan	6.4	6.5	+ 0.1
Netherlands	8.0	8.2	+ 0.2
Spain	5.6	6.6	+ 1.7
Sweden	9.4	8.6	– 0.9
UK	5.8	6.2	+ 0.7
US	9.2	12.1	+ 2.5
Hong Kong	NA	4.5	NA
Singapore	NA	3.0	NA
OECD average	7.0	7.6	+ 0.8

(from: Shieber GJ, Poullier JP and Greenwald LM, OECD Data, *Health Care Financing Review*, Summer 1992, 13, 1–71)  
(NA: not available)

The *reasons* for rising costs are many—

- ageing populations living longer and suffering from the inevitable disorders of ageing, this aggravated by falling birthrates and low fertility rates, consequently with fewer carers and loss of extended family support.
- medical advances in technologies and therapies which are expensive and which can save lives, but which can also lead to more prolonged longterm care and costs.
- increasing administrative and managerial bureaucracies with more modern business—data machinery and with manpower requiring extra capital and employment costs.

- more highly trained nursing and professional staff with higher wages.
- unmet expectations and failures of care leading to litigation and costs.
- expenditure on security to prevent increasing criminal acts in certain districts.

### ***Responses***

To meet these problems various reactions and responses are taking place simultaneously.

*Rationing*, with decisions on priorities and choices, is inevitable. Better *information* on cost-benefits and quality outcomes is being demanded. Various *checks, controls and directives* are being introduced together with *incentives and rewards* for economies combined with excellence.

All countries are taking measures to try to control, and if possible reduce, costs. Budgetary controls and competitive marketing appear most popular.

### ***Basic realities***

Faced with these issues and dilemmas, it is appropriate to reflect on some key basic realities—

- *What is health?*

The World Health Organisation definition of *health* as 'a state of complete physical, mental and social wellbeing and not merely an absence of disease' is Utopian and unrealistic since at any time few people are so 'healthy'. Within the spectrum of health and disease there are minor ailments, chronic disorders and life threatening diseases. The limitations of modern medicine must also be acknowledged. Since we are all mortal, the objectives must be towards preventable death and improvement in quality of life.

- *What is health care?*

Accepting that appropriate health care for those who need it should now be a human right, it is important to have guidelines on who should do what best for which condition? It is, nevertheless, justifiable to ask how much care is feasible, useful, effective and who is to pay for what?

- *Responsibilities*

Everyone has responsibilities for health maintenance, disease prevention and management—individuals, families, professionals, providers and politicians. Clarification of such responsibilities is important and ‘social contracts’ would be helpful.

- *National variations with similar outcomes*

Comparisons of differences in costs reveal differences in resources of manpower, facilities, technologies and their utilisation, as well as differences in methods of payment, incentives and incomes of professionals—and yet in spite of differences, the outcomes as measured by available health indices are similar.

### ***Basic questions***

We found it helpful to consider some questions in examining health care in particular situations—

- is it really necessary?
- is it appropriate and effective?
- is it being given in the most efficient and economic manner?
- can some, or all, of it be left to individual or family responsibilities?

### ***Levels of Care—the place of primary care***

In every system there are four recognisable levels of care which are related to populations served and to the administration, and which can be used in comparisons.

- *Self care* within a family unit.
- *Primary* (professional) care (GP) responsible for a locality (neighbourhood) of 2000 per doctor. May be provided by groups and teams
- *Secondary*—general specialist care, based in a district hospital serving 200,000–500,000 people
- *Tertiary*—subspecialist units at regional (1–5 million) or national levels

Each has its own roles, features and functions.



The *roles* of a primary care physician—

- friend and guide as well as physician
- coordinator of local medical services
- gate-keeper (or gate-opener) and protector of specialist services
- manager/businessman
- member of health team
- educator, researcher, auditor
- community responsibilities (prevention/education)

#### REFERENCES

- SHIEBER G J, POULLIER J P and GREENWALD L M, OECD Data, *Health Care Financing Review*, Summer 1992, 1–71.
- STARFIELD B, Primary Care. New York, Oxford University Press, 1992.

## 2

# The Project

*Primary care is the level of first professional contact to which a person or family turn when in need of help and advice.*

It exists in various forms in every system. Our purposes were to discover how differing forms of primary care fit into different systems, how well they perform the tasks undertaken and what lessons can be learnt.

### **Methods**

We used ourselves (JF and JPH) as two recording instruments. We visited, observed, reported and discussed our findings.

The *selection* of countries was ad hoc, including those to which one of us (JF) had been invited for various professional/academic reasons, plus others selected because of their particular health systems and primary care services.

A *checklist* was prepared and followed to provide comparable information and to serve as an aide memoire.

- |  |
|--|
| <ul style="list-style-type: none"><li>• The Nation</li><li>• System</li><li>• Structure</li><li>• Services</li><li>• Processes</li><li>• Outcomes</li><li>• Lessons learnt</li></ul> |
|--|

### THE NATION

National features influence the form and type of health system and the place of primary care within it. These had had to be seen in the context of the country and its people.

It was important, therefore, to note the history of the nation; its wealth and economic status; its values, attitudes and religious influences; its geography and transportation; the structure and power of various political and professional groupings; and selected data on demography, economics and social characteristics.



## HEALTH CARE SYSTEM

National health systems evolve influenced by the features noted and also by attempts to provide and pay for the many services. There are 3 main types—

- *insurance-based* schemes—private or public, with varieties of services and coverage.
- *national health systems* which are comprehensive and cover whole populations—financed and administered predominantly by governments.
- *multi-funded schemes* include a mix of private insurance, personal expenditure and some government finance (either direct or by reimbursement).

All systems endeavour to provide efficient, effective, economic and equitable services for their people, but with variable degrees of success. Faced with insoluble equations and escalating costs, most systems have been introducing stricter business and management methods, cutting budgets and reducing some services in order to try and control these costs.

## STRUCTURE

As noted in chapter 1, within every health system there are 4 definable levels of care—

- |   |
|---|
| <ul style="list-style-type: none"><li>• self care</li><li>• primary professional care (social as well as medical)</li><li>• general specialist care (secondary)</li><li>• subspecialist care (tertiary)</li></ul> |
|---|

We were concerned not only with the place and significance of primary care, but also with its relationship to these other levels.

## SERVICES

The primary care services provided for the people range widely, but involve certain important common features. These raise questions to which we sought answers—

- *access and availability*—how easy? What difficulties and barriers exist?

- what range of *clinical, preventive and social services* is provided within primary care?
- how much *longterm and continuous care* and by whom?
- extent of *personal, family and community commitments*?
- *responsibilities* of all involved in the processes of care?
- *relations* between primary generalist and secondary specialist services—how close and with what communication?
- care for *chronic sick and disabled, physical and mentally ill* at all ages—who provides and to what extent?
- influences of *incentives, rewards and payments of professionals*—what are they and with what results?

### PROCESSES

Processes involve ways in which care is actually provided by primary care professionals. We used the following checklist:—

- *Responsibilities for patients*  
contracts  
registration  
legal issues  
24-hour cover?
- *First contacts*  
— what proportions are ‘new contacts’ and how many are follow up care?
- *Longterm continuity of care*  
— how well known are the patients being seen?  
— what knowledge of family members and social background exists?
- *Community base*  
(approximately 1 GP to 2000 persons)  
— what responsibilities are accepted for care of a defined local community for health promotion, disease prevention and special attention to at-risk groups?

- *Realities*
  - recognition of potential and limitations for cure, care, relief, comfort and prevention and particular roles of primary care.
- *Data collection—records and applications*
  - manual records—how detailed?
  - computerisation—to what extent and for whose benefits?
  - applications of these for improvements in care?
  - do personal records follow patients?
- *Planned policies and protocols for care*
  - checks on quality, efficiency, effectiveness and economies?
  - shared care (with specialists)?
  - collaboration with other services?
  - innovations?
- *Relations between primary and secondary services*
  - direct access to specialists by patients?
  - referral system—does it exist?
  - gate-keeping roles—how effective?
  - communications and reports—between professionals?
  - competition for patients with specialists and other professionals?
  - mutual professional respect and ethics?
- *Professional roles for primary physicians (types)*
  - generalist?
  - specialoid? (a primary care physician restricting work to a special field)
  - specialist?
- *Hospital work*
  - hospital privileges and responsibilities for primary physicians?
  - direct access for primary physicians to other hospital resources such as investigations?

- *Health team*
  - does it exist and who is in it?
  - shared/delegated care with defined responsibilities?
  - direct access for patients to all members?
  - relationships between team members?
  - enthusiastic leadership—who leads and how?
  - assessments/audits of its outcomes?
- *Work*
  - details of morbidity content and classification—from practice data
  - volume of work (consultation, home visits, hospital etc)?
  - mean length of consultations?
  - time spent in consultations over a week?
  - place of work—consultations, visits, phone, etc?
  - incentives and rewards for special skills?
- *Therapeutics*
  - prescribing—volume, content, costs?
  - non-prescribing—extent?
  - psychotherapy—how much and what type?
  - personal interactions and relations between patient and physician?
  - physiotherapy—what and how much?
- *Entry into primary care for young physicians*
  - how popular is primary care?
  - shortages/surpluses—how many physicians?
  - specific difficulties of entry?
- *Education, training and continuing medical education*
  - undergraduate—place of primary care?
  - vocational/residency training—who is responsible?

- *Complementary/alternative medicine*
  - popularity and extent?
  - access?
  - value—controls—checks?
- *Health education, promotion, disease prevention?*
- *Satisfactions, complaints, litigation by public?*
- *What measures of quality and how relevant?*
- *Administration*
  - national, local and in-practice
  - administrative costs
- *Management/in-practice*
  - politics and power groups—strength of primary care?
  - business, efficiency and profits?
  - billings and forms—how many?
  - data processing—extent and costs?
- *Organisation of primary care units*
  - solo and partnerships
  - groups—GP/multi-specialty
  - premises
  - equipment/facilities
  - independent contractors
- *Manpower*
  - how many health workers?
  - how many physicians?
  - how many primary physicians?
  - how many students and new medical graduates?
  - who decides on appropriate numbers and how?
  - what proportions of males and females?
  - unemployment levels of physicians?
  - how many non-physician members of primary team?

- *Incomes*

- of primary physicians and methods of payment?
- compared with specialists?

## OUTCOMES

(were difficult to interpret but included the following)

- *macro*—health indices
- *micro*—audits/studies
- *costs*—(% GDP and % for services)
- *value for money*—who to decide?
- *public* satisfactions and complaints?

## LESSONS

- strengths and weaknesses of the system
- general comments and observations

*Procedure*

The *checklist* was used as the basis for recording. A *report* on each country was produced after each visit.

*Publications and reports* from national ministries of health and other bodies were used to complement factual information relevant to primary care.

Considerable difficulties were experienced in correlating and comparing the data when different national criteria and definitions were used. (*note*: it would be helpful to have agreements on common international definitions and on similar methods of recording, analysis and reporting by all countries). A particular problem was to estimate the numbers of primary physicians. In some systems—UK, Netherlands and Denmark—it was easy because of registration of patients, but it was difficult where there was free access and choice of any physician (specialist, specialoid and generalist) at the first contact level. We had to make estimates.

### 3

## General Findings—Observations

### Health Systems

#### *Similar problems—different systems—similar outcomes*

It was remarkable that in all countries visited the *clinical and social problems* dealt with by the primary health care workers (GP etc) were similar. The common conditions encountered were a mix of minor ailments, serious diseases and chronic disorders and social issues and care of the dying.

Generally they were also managed in similar ways clinically and socially.

The *health systems* differed. Administrative structures depended on sources of funding, levels of managerial and executive decentralisation and particularly on the ways in which physicians were paid, with what incentives and rewards.

Yet, paradoxically, in spite of these quite major differences, the crude *outcomes* in terms of health indices were similar. Life expectancies differed by less than 5 years between highest and lowest; infant mortality rates were low and falling; main causes of death were becoming similar and comparable, with some exceptions for some specific diseases such as some cancers, heart disease and stroke.

As noted, there are great differences in national expenditure on health care (as quoted by OECD and other sources—but it is important to know whether *all* health costs are included, such as social-welfare as well as medical services). Table 1 (overleaf) shows the ranges between 12 countries.

The *reasons* for these large differences appear to be—

- administrative expenses: 20% US, 10% Canada, 5% UK
- payments to physicians (table 2) for taxable incomes
- use of high technology services for diagnosis and treatment (table 3) in US, Canada and UK
- medical and student manpower rates (table 5). The

TABLE 1 ANNUAL COSTS OF HEALTH CARE (GDP% and PER CAPITA) (1990)

	GDPs % Public	Private	% of Total	Total	\$	£
US	5.2	7.3	58	12.5	2185	1457
Sweden	7.8	0.2	3	8.0	1967	1311
Netherlands	6.0	2.2	27	8.2	1260	840
Germany	6.0	2.3	28	8.3	1595	1063
Japan	5.0	1.8	26	6.8	1292	861
Singapore (e)	0.75	2.25	75	3.0	380	245
Hong Kong (e)	1.0	3.5	78	4.5	519	335
Canada	6.9	2.3	25	9.2	1623	1082
Denmark	5.2	1.2	19	6.4	1334	889
Spain	5.3	1.5	22	6.8	698	465
France	6.7	2.4	26	9.1	1569	1046
UK	5.1	1.0	16	6.1	873	582

(e = estimate)

Reference: OHE Compendium of Health Statistics (8th Edition 1992).  
(Fig 2.6 page 10)

differences are remarkable and suggest a lack of reliable estimates of future needs

- differences in demography (ageing populations) and public demands and expectations fostered by media.

### *Demography*

In all these countries proportions of over 65s have been increasing and, with falling birth and fertility rates, those of under 15s decreasing. Life expectancies are similar and infant mortality rates low (table 4).



TABLE 2 PRIMARY PHYSICIANS: ESTIMATED ANNUAL INCOMES (taxable)

	\$	£
US	100,000	64,516
Sweden	90,000	60,000
Netherlands	100,000	64,516
Germany	127,500	82,258
Japan	150,000	100,000
Singapore	150,000	100,000
Hong Kong	200,000	133,333
Canada	90,000	60,000
Denmark	77,000	49,678
Spain	60,000	40,000
France	80,000	53,333
UK	77,000	49,678

(Sources: Private discussions with physicians)

TABLE 3 USE OF HIGH TECHNOLOGY

	High Technology Units per 1 million		
	US	Canada	UK
Open heart surgery	3.5	1.3	1.5
Cardiac Catheterisation	8.2	1.5	2.0
Organ transplants	1.3	1.0	1.1
Radiation surgery	4.0	0.5	1.0
Lithotripsy	1.0	0.1	0.3
M.R.I.	3.6	0.4	0.8

(Ref: US General Accounting Office, Canadian Health Insurance: lessons for US, Washington/GAO/HRD 1990-91 (1991)

UK—personal communication from Department of Health (1992)

TABLE 4 DEMOGRAPHICS

Country	Population %		Birth Rate per 1000	Fertility Rate per Women	IMR per 1000 births	Life Expectancy (years)	
	under 15	over 65				M	F
US	21.4	12.6	14.1	1.9	9.9	73	80
Sweden	17.3	18.1	12.6	1.9	5.7	75	81
Netherlands	18.3	12.7	12.9	1.6	7.1	74	81
Germany	16.0	14.9	10.9	1.5	7.5	73	79
Japan	18.4	11.7	11.5	1.7	6.0	76	82
Singapore	23.3	5.6	16.3	1.8	6.7	72	77
Hong Kong	20.7	8.8	12.3	1.4	6.9	75	80
Canada	20.9	11.4	12.9	1.7	7.3	74	81
Denmark	17.0	15.4	11.0	1.5	8.8	73	79
Spain	20.1	13.1	12.8	1.7	9.9	74	80
France	20.1	13.8	13.4	1.8	7.5	73	81
UK	19.0	15.4	13.7	1.8	7.4	73	79

(Source: *The Economist, Pocket World in Figures (1993)*)  
 Reproduced by permission of Hamish Hamilton Ltd.

TABLE 5 HEALTH MANPOWER

Country	Population per Physician	% Women Physician	Population per Primary Physicians	Population per Annual Medical Graduates	Population per Nurses	Work force employed in health sector %
US	440	18	1365	15,600	140	6.3
Sweden	330	28	2430	15,600	106	8.9
Netherlands	400	30 (e)	2300	15,000	270	7.1
Germany	354	27	1067	4,571	208	5.5
Japan	610	10 (e)	1600	14,750	165	NA
Singapore	750	20 (e)	2365	18,000	200	NA
Hong Kong	1160	25 (e)	2320	20,000	280	NA
Canada	491	20	1152	15,360	99	5.2
Denmark	375	25	1534	11,400	120	NA
Spain	296	20 (e)	975	4,875	267	NA
France	333	27	1120	16,000	144	6.8
UK	575	26	1742	15,000	192	4.7

own observations  
*European Health Services Handbook*, Ed: Leadbetter, N,  
 London: Institute of Health Services Management 1992  
 Medicine in Europe Tessa Richards (Ed.), *BMJ*, London, 1992.  
 (NA = not available)

### ***Entrants into medicine and primary care***

Differences in entry conditions into medical schools—

- liberal (few restraints) Spain, Germany, with over-supply of physicians and consequent unemployment
- controls (by numbers of places)—US, UK, and others
- radical exclusions at examinations—France

The popularity of medicine has gone down in all countries (i.e. fewer applicants per place), but places in medical schools are all filled.

The popularity of primary care with new medical graduates has declined in US, Sweden and Japan. There are also difficulties in entering training programmes in Netherlands. In Japan there is no organised training for primary care. However, by 1990 in the U.K. general practice was the first career choice for one half of senior medical students compared with one quarter in 1965.

### ***Welfare and Social Services***

All countries provide some services for elderly, disabled and mentally sick persons in their communities, but their extent, quality and organisation vary. We noted that the best services were in Netherlands and Scandinavia.

### ***Power influences***

The types of systems and the services provided depend on balances of power between 4 groups—

- *People*—the strength of democracy, decentralisation and local pressures, all power groups organised within the society and strong enough to complain effectively.
- *Politicians*—once they are elected and in power, political priorities and promises change and health care and services have to take their place amidst other social and national needs. In US political lobbying has created a huge and costly industry promoting the interests of clients and the separate interests of the medical profession, health insurance, hospitals and pharmaceutical companies.
- *Profession*—everywhere there are struggles for power within professional groups. In most countries specialists

and their organisations appear more powerful than those representing primary physicians (not so in UK).

- *Providers*—in systems where government does not directly run the health system there are middle-men providers such as private for-profit insurance companies (US) or non-profit sick funds (Netherlands, Germany, etc). They can exert considerable influence on services provided. Under this heading hospitals, pharmaceutical and medical technological industries are also included.

### ***Quality and value for money***

Faced with the insoluble equation of insufficient and finite funds and resources to meet infinite growing demands, all systems are endeavouring to achieve efficient, effective and economic methods to provide care as equitably as possible.

Similar methods are evident—

- better data and information through modern data-collecting technologies in order to take better decisions
- audits and other techniques to discover useful and useless procedures
- more competition through internal markets e.g. in US, Sweden, Netherlands and UK
- everywhere some proportion of cost is being passed on to consumers through co-payments and supplementary insurance. Some services (dental, cosmetic, infertility) are being excluded altogether.

It is not possible to predict whether these measures will succeed in reducing GDP% or per capita costs (table 1).

## PRIMARY CARE

### ***Place and status***

We categorised (subjectively) three levels of 'status' for primary care—

- *high* in Denmark, Netherlands, UK and Canada
- *moderate* in Sweden, Hong Kong, Singapore, France and Germany
- *low* in US and Japan

The *factors* influencing these ratings—

- traditions and history
- professional political power
- public wants and expectations

Views are changing among planners and politicians in the belief that better primary care may reduce costs through gate-keeping and attempts to control unproven and unnecessary medication, investigations and some therapeutic procedures.

### *Access—availability*

It is only in a system where the primary care worker (GP or other) has a social/legal contract and obligation to provide 24-hour care and cover that there can be full access/availability and where gate-keeping is feasible.

This only occurs where patients are *registered* with independent contractors as in Netherlands, Denmark, UK or where the doctors/workers are *salaried* and work from centres/clinics as a complete service as in Sweden, or HMOs (US) where patients are directed through primary physicians prior to access to specialists.

In other systems where the GPs are free agents working on a fee-for-service basis their comprehensive commitment is largely *moral and ethical*. Thus, in *US* only those patients covered by HMOs and similar private insurance schemes have assured access to care by physicians. Those not covered must either pay their own fees, attend a public hospital (charity) service and hope to be seen or they may be covered by government schemes (Medicare for elderly and Medicaid for official poor), but even then some physicians refuse to accept these patients.

The extent of *out-of-hours cover*, i.e. night, holidays, weekends, also depends on contractual, ethical and moral arrangements.

In UK, Denmark, Netherlands and Sweden, definite arrangements exist and physicians, or the health service, make arrangements for cover by rotas, deputising services.

In other countries it depends on the local customs or views of individual doctors—they may cover their own patients or share cover, or they may expect their patients to take themselves elsewhere e.g. to local hospital emergency services.

### *Free choice*

Everywhere '*free choice*' seems to be enshrined in the system. It is more theoretical than real. It seems to imply complete free choice of *available* doctors and services—but availability varies from place to place and area to area, depending on physician numbers and their willingness to provide care.

Free choice is also restricted by the *arrangements* with providers, i.e. insurance companies who may specify selected physicians (HMO or PPO in US).

Where local *health centres or clinics* are the primary care units, as in Sweden, Spain, Hong Kong, Singapore, or community health clinics as in US, then the choice is only between those working in these units.

The other free choice under discussion is free choice of *type of first contact health worker*. Thus, the choice may be between a physician and non-physician and, if physician, it could be between a specialist or generalist.

The possibilities of *direct access* by free choice to various types of physician are great, namely

- generalist (GP/family physician)
- specialoid (general internist, general paediatrician)
- sub-specialist
- alternative medicine physician
- hospital emergency department

This choice of direct access exists in many systems and in fact *restrictions of direct access* only occur in few—Denmark, Netherlands, Sweden and UK—in fact only in those systems where access to a primary physician is

guaranteed as part of a contract. Such restrictions for care cannot exist without free access to a primary physician.

Attempts to reduce direct access to specialists are made in some systems by reducing specialists' fees, or offering extra fees to consulting specialists.

### ***Gate-keeping (or gate-opening)***

This is under active discussion in US where it is being promoted as a role for primary physicians, to restrict direct access to specialists and so reduce expenditure, using primary physicians as 'filters'.

However, it cannot succeed except in such controlled organisations as HMOs and unless there is some contractual access to a primary physician.

### ***Personal-family care***

The importance of personal and family care on a continuous and comprehensive basis does not appear to be a high priority in most systems.

The 'family doctor' caring for the whole family over many generations now exists mostly in fiction—except in UK, Netherlands, Denmark and possibly Canada.

It is a matter for debate as to whether its benefits are subjective or objective.

### ***What sort of primary physician?***

As already noted under 'free choice', the patient in most systems has direct access to any physician. Three types may exist.

*Generalists* are general practitioners and family physicians who provide general care for families for all age groups and for all conditions at the primary care level.

*Specialoids* are first contact and direct access physicians who have had specialty training and who restrict their work to an age group (general paediatricians) or field of disease (general internists, general obstetrician-gynaecologists, general psychiatrists, etc.) Such specialoids exist in Germany, France, Japan (clinic doctors), Spain and Sweden.

In US, *sub-specialists* are the largest group of physicians (60%), with generalists (40%)—(family physicians 10% of all physicians, general internists 20% and general paediatricians 10%).

### ***Hospital privileges***

By tradition 90% of primary care physicians in US have hospital privileges i.e. they can admit and treat patients in hospitals. Those hospitals tend to be small private for-profit hospitals without residents and the primary physician is responsible for all care—sometimes bringing in specialists for specific situations.

In Japan primary physicians can have their own ‘clinics’ (up to 20 beds) where they treat their own patients. In Hong Kong and Singapore GPs can take private patients for treatment into private hospitals.

### ***Obstetrics and Surgery***

Particularly in US and Netherlands family physicians are actively engaged in *obstetrics*—the reasons appear to be a mixture of traditional expectations and financial incentives.

In US only one-quarter of family physicians deliver babies (numbers becoming less because of high insurance premiums against litigation). There are very few midwives. It appears that the medical profession has kept them out of obstetrics!

In Netherlands one-third of deliveries take place at home and general practitioners compete actively with independent community midwives for home deliveries (midwives carry out more than one half of all home deliveries without any collaboration with the patient’s own general practitioner).

*Surgery* is carried out by GPs in remote parts of Canada and US and by some in cities also.

Further discussion is appropriate on pros and cons of GP obstetrics and surgery.



***Processes, methods, techniques***

Most primary care physicians work in relative isolation and develop their own ways and methods. Since they deal with different grades and types of diseases from those seen by specialists, and have a different role, the methods of specialists may not be wholly appropriate.

In all countries therapeutic methods are similar for major diseases, but national customs tend to develop for the treatment of chronic and minor disorders—it seems that physicians in different countries have local personal potions that are almost as variable as are local culinary specialties (Payer 1989).

To improve care and reduce costs, studies to distinguish useful from useless remedies are urgently needed.

***Influences on procedures***

As well as professional clinical influences there are others involved in deciding primary physicians' work.

- types of remuneration, incentives and rewards
- competition for patients
- selling themselves and their practice
- public expectations and wants in relation to prescribing, placebos and physical therapies, e.g. popularity of injections and physical therapies such as ultrasound etc. in Japan
- encouraging frequent consultations in fee-for-service systems (e.g. by giving medication for 3–4 days as in Hong Kong)
- where fees-for-services tend to be low, consultation rates are high (Japan, Hong Kong, Singapore)
- health checkups and other unproven procedures (US, Germany, France)

- capitation fee systems tend to have lower consultation rates per person
- insurance companies, HMOs and others impose conditions

### ***Incomes of primary care physicians***

Physicians earn many times greater incomes than average workers—tenfold in Hong Kong and Singapore, to less than threefold in UK and France.

Although it is impossible to obtain truly reliable data (for obvious reasons), table 2 shows approximate income per GP.

### ***Entry into primary care***

The popularity of primary care in some systems has declined—in the US, Sweden, Japan—in others it maintains high levels among young doctors (UK, Netherlands, Denmark).

The proportion of women physicians in primary care at present (table 5) is 15–30%, but this is likely to increase, as in many medical schools one half of all students are women.

Entrants seeking a career in primary care may experience difficulties—

- insufficient numbers of training vacancies (Netherlands, Spain)
- buying goodwill (Denmark)
- setting up private practice (expenses)
- high student debts to pay off (USA) (up to \$100,000 (£64,516) on graduating)
- finding partnerships or other vacancies

### ***Work in practice***

Table 6 shows comparable work rates for primary physicians in selected countries for weekly consultations and hours and percentages of populations hospitalised per year.

TABLE 6 PRIMARY CARE PHYSICIANS' WEEKLY CONSULTATIONS and HOURS and HOSPITALISATION RATES

Country	Consultations (Face-to-Face)	Consultation length <sup>(1)</sup>	Hours Worked in direct patient care (excluding on call) (estimated)	Annual Hospitalisation (% population) admissions
USA	135	14.0 <sup>(3)</sup> 18.0 <sup>(4)</sup>	48	14%
Sweden	100	20.0	42	18%
Netherlands	150	7.5	45	11%
Germany	220	—	55	22%
Japan	325	—	57	14%
Singapore	250	—	50	15% (e)
Hong Kong	375	—	55	15% (e)
Canada	140 (e)	11-13.5	45	14%
Denmark	100	—	32	21%
Spain	150	—	30	9%
France	82	13.7	25	22%
Yugoslavia	—	5.0	—	—
Switzerland	—	12.5	—	—
UK	133	8.6 <sup>(2)</sup>	42	13%

- Sources: (1) See references.  
 (2) From Doctors' and Dentists' Review Body. Time intervals between 1966-1993 indicate a small but steady increase in time given to consultation rising from 5.7 to 8.6 minutes. (1994)  
 (3) Family Physicians.  
 (4) Internists.  
 (e = estimated).

#### OUTCOMES OF PRIMARY CARE

It is difficult to measure quality and outcomes, but Barbara Starfield (1992) has reported on allocating 'primary care' and 'satisfaction-expense' scores for countries:—

- *primary care index* was on ratings for first contact care, longitudinality (continuity), comprehensiveness, coordination, family centredness and community orientation
- *satisfaction-expense index* on replies of people to the question 'was the health system in need of minor improvements or re-building altogether?' and relating these to per capita costs

Table 7 shows the scores for the countries included from this study. Her pioneering work shows that international comparisons are possible, but that more detailed assessments of outcomes are necessary to include clinical health and social indicators.

TABLE 7 OUTCOME SCORES FOR PRIMARY CARE

Country	Primary Care score	Satisfaction—Expense index
Canada	1.2	7.6
Denmark	1.5	—
Finland	1.5	—
Germany	0.5	2.9
Netherlands	1.5	9.0
Sweden	1.2	4.3
US	0.2	0.2
UK	1.7	2.1

Source: (*Starfield, 1992*) by permission of Oxford University Press

#### REFERENCES

- Economist (The), Pocket World in Figures 1993*, London: *The Economist*, 1992.
- European Health Services Handbook*, LEADBETTER (Ed.) London: Institute Health Services Management, 1992, pp. 41–135.
- Medicine in Europe*, TESSA RICHARDS (Ed), *BMJ*, London 1992, Table 1, p. 42.
- OFFICE OF HEALTH ECONOMICS COMPENDIUM OF HEALTH STATISTICS, 1992 (8th Edition), OHG, London.
- PAYER L, *Medicine and Culture*, London: Victor Gollancz, 1989.

- ROYAL COLLEGE OF PRACTITIONERS, *Occasional Paper 56, The European Study of Referrals from Primary to Secondary Care*, London: RCGP 1992, Tables 6.2 and 6.8.
- SHIEBER G J, POUILLIER J P and GREENWALD L M, OECD Data, *Health Care Financing Review*, Summer 1992, 1–71. (as chapter 1)
- STARFIELD B, *Primary Care Concepts, Evaluation and Policy*, OUP, Ch15, Table 15.9, New York, 1992.
- UNITED STATES ACCOUNTING OFFICE, *Canadian Health Insurance: lessons for US*, Washington: GAO/HRD 1990/1. 1990.

REFERENCES TO TABLE 6  
(Consultation Length)

- DONALD A G. Oasis or beachhead? *J R Coll Gen Pract* 1985; 35: 558–61.
- EJLERTSSON G. Utilisation of health services in a defined Swedish population. *Family Practice* 1986; 3: 9–13.
- CYPRESS B K. Patterns of ambulatory care in general and family practice. 1983; National ambulatory care survey. Data from national health survey. Series no. 13 no. 73 Hyattsville.
- MADDEN T S, TURNER I R, ECKENFELS E J. *The health almanach* p.227 New York: Raven Press, 1982.
- ALMY T P. The role of the primary physician in the health-care 'industry' *New Engl. J. Med* 1981; 304: 225–28.
- C.R.E.D.O.C. Rendement de l'activité libérale des medecins généralistes. Paris: centre de recherches pour l'étude et l'observation des conditions de la vie, 1977.
- PORTER A M W, PORTER J M T. Anglo-French contrasts in medical practice. *Brit Med J* 1980; 280: 1109–12.
- ABERLIN T, MESSERLI M R. Number, duration and content of the consultation in Swiss practice of physicians. *Sozial und Praventivmedizin* 1981; 26: 88–93.
- HOSIA P. Utilisation of primary care services Copenhagen: World Health Organisation, 1985 (typescript).
- EIMERL T S, PEARSON R J C. Working time in general practice: how general practitioners use their time. *Br Med J* 1968; 2: 1549–54.
- MORRELL D C. Expressions of morbidity in general practice *Br Med J* 1971; 2: 454–8.
- MCDONALD A, MCLEAN I G. Study of the work of general practitioners. *Practitioner* 1971; 207: 608.
- BUCHAN I C, RICHARDSON L M. Time study of consultations in general practice Edinburgh: Scottish Home and Health Department 1973. (Scottish Health Service Statistics no 27).
- FLOYD C B, LIVESAY A. Self observation in general practice—the bleep method. *J R Coll Gen Pract* 1975; 25: 425.

## 4

# Country Profiles

In this chapter are '*personal profiles*' of the countries observed. They relate to the check list employed and to the more general issues raised. They are 'personal' because they represent the interpretations and views of the observers, plus a distillation of official and other publications.

The same form is used for each country to allow comparisons.

## USA

### THE NATION

A relatively young nation of barely 200 years, in an apparently constant state of social and political flux, stress and introspection about the 'American people', 'democracy', 'freedom of choice', 'competition', 'free enterprise' and 'self responsibilities'.

In reality the American people form a changing conglomerate mass of ethnic populations. At present the white section makes up 75% of the population, blacks 12% and Hispanics, Asians and others 13%. The proportion of the latter group is rising because of legal and illegal immigration and could be over one-fifth within two decades.

With over 20% of the population under the age of 15, it is still a young society, but with long life expectancy the proportion of elderly over 65s (at present almost 13%) is rising. Also, birth (14.1 per 1000) and fertility rates (1.9 per woman) are falling.

It is the world's No 1 nation for wealth, modern technologies, high living standards and democracy, where all the people 'are born equal'. There are, nevertheless, great divisions between rich and poor, between haves and have-nots. Social pathologies are rife—crime, violence, drugs, AIDS, unemployment and real poverty. Family values and ties are emphasised and old roots are valued, but single parent families predominate among blacks. Religious attachments are encouraged and regular attendance at church and other religious establishments is usual.

Added to these social features is a finely balanced political and constitutional system that together profoundly influences health care. Responsibilities are shared unequally between politicians, providers, professionals and the people, influenced by sociological philosophers, priests and other pressure groups.

In observing USA it is important to note that it is, in fact, a large continent with 50 states that are in many ways distinct and almost independent. This applies to health care and to each state's responsibilities for caring for the underprivileged.

### SYSTEM

It cannot be surprising that in such a vibrant young society no single system of health-care has emerged. There is a 'no-system-system' and, paradoxically, also a 'multi-mini-maxi mix' of loosely interwoven systems.

- *private insurance* through employment or self-insurance is dominant, leading to over 1500 insurance companies competing to provide wide-ranging health schemes at varying premiums. There are many different limits, exclusions, deductibles and co-payments.
- *government schemes*, such as Medicaid (for 'official poor'), Medicare (for elderly), Veterans' organisations, and others account for over 40% of the total health budget.
- *personal out-of-pocket* expenditure and co-payments are expected to supplement insurance.
- however, about 17% of the population are *not covered, or unable to pay* for health care, and probably another 10% to 20% are *undercovered*. They have to rely on public general hospitals, community health centres and charitable bodies for help.

All this adds up to the most expensive health system in the world. The GDP% for health care in 1993 is over 14% and is estimated to rise higher by the end of the century, unless drastic measures are taken.

In 1993 the total health care budget was likely to be over \$900 billion (£600 billion), or \$3600 (£2,400) per capita. Of

this one-sixth, or \$150 billion (£100 billion) is taken up by the 17% uninsured as 'bad debts' or 'unable to pay'. Debts fell most heavily on large hospitals which attempted a 'Robin Hood' exercise by increasing fees for those who could meet their bills.

Among the reasons for these high costs is administration, (accounting for over 20% of the budget, compared to Canada 10%, UK 5%), public expectations of the latest, best, quickest medical technologies, high costs of all medical procedures, high physician incomes and difficulties in attempts to control costs and to reduce the volume and intensity of medical procedures.

### STRUCTURE

With emphasis on free-choice in access to health care there is blurring between primary and secondary professional levels of care, and between generalists and specialists.

In theory American people have direct access to any physician at the first contact care level; however, local circumstances such as availability and rules of the insurance schemes may influence choice.

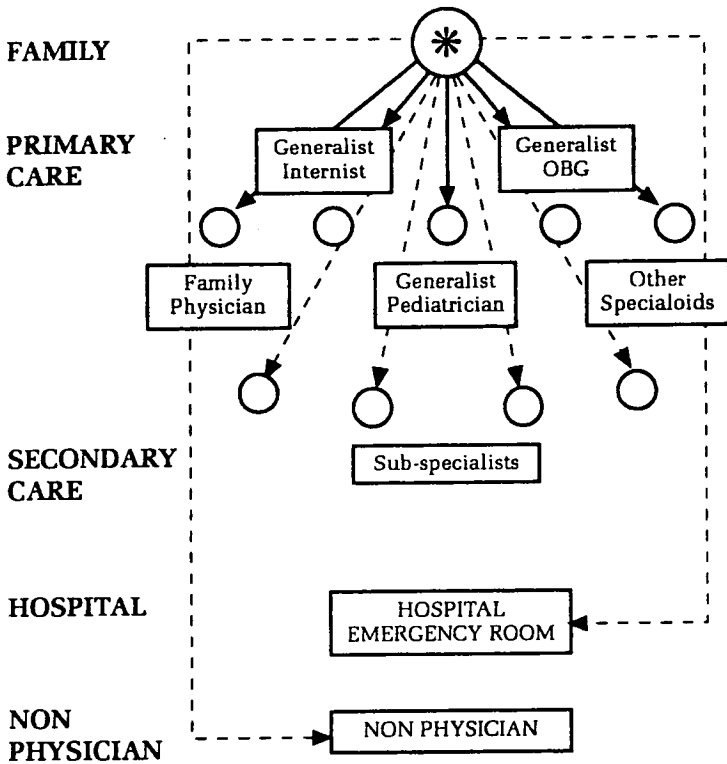
The *flow diagram* illustrates the possibilities. The first contact professional level may offer a plethora of choice—

- *generalist* family physician
- *specialoid* general internist
- *specialoid* general paediatrician
- *specialoids* such as gynaecologists, rheumatologists and psychiatrists
- *sub-specialists* of all types
- *hospital* accident and emergency and other services
- *non-physicians* such as nurse practitioners, osteopaths, chiropractors.

There are problems of manpower related to primary care in USA. Primary care has become unpopular with young medical graduates.

- only 10% are entering family practice





- only 20% are entering general internal medicine, but not all of these will go on to practise primary care
- only 10% are entering general paediatrics.

Only one-third of all US physicians are now in 'primary care', compared with around one half in many other national systems.

Reasons are—

- low status of primary care
- lower incomes than sub-specialists
- less demanding professional challenges
- low academic status of university departments and of the American Board of Family Physicians

However, the situation is not as bleak as it appears for in spite of apparent 'shortage' of primary physicians: the rate of 1:1364 of population is lower (for physicians) than in UK—so is there a real shortage or surplus, or perhaps inappropriate utilisation? 'Family physicians' make up only 12.9% of practising physicians, 'general internists' 13.9% and 'general paediatricians' 6.7%—total of 33.5%. Of all primary physicians, family physicians are 38.5%, general internists 41.6% and general paediatricians 19.9%.

The issues raised for the future must be about which physicians should be responsible for primary care—a single type, a loose group, or anyone? The Council for Graduate Medical Education (1992) in its report states that there is a surplus of physicians in the USA but a deficiency of 'primary physicians'. It recommends that the proportion of primary physicians should increase to 50% of all practising physicians: this would mean one primary physician to 914 of population, a remarkably low ratio.

Clearly more thoughts and exercises are required.

'Managed care' as controlled, directed and checked through Health Maintenance Organisations (HMO), is likely to affect future Preferred Provider Organisations (PPO) and Independent Practice Associations (IPA) services with more emphasis on 'gate-keeping' and more balanced physician incomes—but these schemes at present cover only 20% of the population.

*Practice organisation*—many family physicians still work 'solo'.

	%
Solo	37
Partnerships of 2	13
Family practice groups	33
Part of multi-specialist groups	17
	100

(Source: AAFP, 1993)

*Relations* between generalists and sub-specialists are variable and often highly competitive. Communications between them are often poor or non-existent.

## SERVICES

For patients services depend on insurance and other schemes. If a person is fully insured, and particularly if enrolled in an HMO, primary care is *available, accessible and affordable*. The same is true if a family is able to meet its own bills.

Services are satisfactory and *appreciated* by those who receive them, but there are considerable fears of rising costs and proportionate increases in co-payments.

Care aims to be *comprehensive*, but *continuity* over years is more difficult to achieve because of rarity of care by a single personal family physician. For those who are able to choose, there is wide range of *choice* because in populated areas there is a surplus of physicians.

*Management and administration* Because of the many competitive insurance schemes used by patients, the business of practice requires extensive and detailed billing, use of data processing and employment of extra skilled staff.

*Community responsibilities* It is exceptional for primary care to be involved in planned activities in community orientated care (COPC): exceptions are some community health centres in poor inner city areas and in small single rural practice units. Populations are not 'registered' so at-risk groups cannot be readily defined and planned care for specific conditions is difficult.

*Prevention* is not a planned part of primary care, apart from checkups and PAP smears. Immunisation rates for children are variable in social groups and there is no comprehensive single programme. There is little collaboration between community services and independent primary physicians.

## PROCESSES

Primary physicians are free to practise as they wish within ethical rules and customs. However, those involved in HMOs, Preferred Provider Organisations and Independent Practice Associations are influenced by directives on budgets and audits.

Processes include consultations, *hospital privileges* and investigations.

*Clinical content* in US primary care depends on degree of 'specialoidisation'. Within family practice the content is

similar as for generalists elsewhere; with general internists there is more bias toward adult chronic and subacute disorders; and with general paediatricians prevention, surveillance, common childhood disorders and maternal anxieties are the main content. (AAFP 1993)

Volume of work (per week)	
Office consultation	108
Hospital and nursing home visits	24
Home visits	2

Time (hours) (per week)	
Direct patient services	48.4
Other services	7.8
	56.2

*Length of office consultations*  
Mean 12–13 minutes (for UK and Western European Countries the range is 8–13 minutes)

*Out of hours cover*  
Usually by shared rotas

<i>Office procedures and investigations</i>	
Medication prescribed	in 70% of consultations
BP checked	in 39% of consultations
Blood tests	in 20% of consultations
Other tests (including ECG)	in 22% of consultations

(AAFP 1993)

*Hospital privileges* have always been a part of US primary care. 90% of physicians have privileges, usually in small private for-profit local hospitals without medical residents.

Work involves obstetrics, surgery (minor and assisting at major procedures) and medical problems and emergency and chronic care.

*Obstetrics:* there are few nurse-midwives—almost all deliveries are in hospital by primary physicians or obstetrician/gynaecologists.

Many primary physicians are opting out of obstetrics because of the high cost of malpractice insurance premiums and demands on time. Less than 1 in 4 now undertake full obstetric care for their patients, but in rural areas most of it is still carried out by physicians, including assisted deliveries and caesarean sections.

*Shared care* with sub-specialists is ad hoc without any planned protocols.

<i>Incomes</i> (annual) (before tax)		
Family physicians	\$100,000	(£64,516)
Sub-specialists	\$200,000	(£129,032)
Mean for all physicians	\$150,000	(£96,774)

(Medical Malpractice fees for family physicians average \$10,000 (£6,450) per year)

### OUTCOMES

- Health indices are similar, or somewhat worse than other countries. (Note: those for black and hispanic ethnics are worse than for whites).
- High costs—GDP% and per capita. (see Table 1, Chapter 3)
- Maldistribution of generalists and sub-specialists.
- High malpractice premiums.
- Public dissatisfactions and fears of rising costs.
- High proportion of population uncovered or undercovered for health care.
- Many primary physicians refuse to provide care for Medicaid patients because of lower fees.

COUNTRY PROFILES  
DEMOGRAPHY

<i>Population</i>	250 million (increasing by 1% per year (27 per sq km)
under 15: 21.4% over 65: 12.6%	
<i>Life expectancy (years)</i>	M 73 F 80
<i>Birthrate</i>	14.1 per 1000
<i>Fertility rate</i>	1.9 per woman
<i>Legal abortions</i>	35 per 100 live births (1988) (1.6 million per year)
<i>Infant mortality rate</i>	9.9 per 1000
<i>Caesarean section rate</i>	25%
<i>Unmarried mothers</i>	25%
<i>Marriages</i>	9.7 per 1000
<i>Divorces</i>	4.8 per 1000
<i>GDP per capita (annual)</i>	\$21,700 (£14,000)

COSTS

<i>Health Care Expenses (Annual) (1993)</i>	
GDP%	14% (and rising)
Per capita cost	\$3600 (and rising) (£2,400)
(Total cost of health care \$900 billion)	(and rising) (£600 billion)

WORKFORCE

<i>Medical Manpower</i>	
<i>Total active physicians</i>	547,310.0
per 10,000	21.9
1 physician per population	457.0
<i>Primary care</i>	
<i>Total</i>	183,294.0
Family physicians	70,480.0
General internists	76,295.0
General pediatricians	36,519.0
1 per population	1,364.0

(1990) Council of Graduate Medical Education

Doctors graduating in other countries (International Medical Graduates) (highest proportions are in primary care)	21%
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Nurses (registered) 1 per population)	1.8 M 140.0
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NEW MEDICAL GRADUATES

<i>Annual Medical Graduates</i> (in US) 1 per population	16,500 15,150
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<i>Young Doctors' Career Choices</i>	
Family Medicine	10%
General Internal Medicine	20%
General Paediatrics	10%

WOMEN DOCTORS

<i>Women Doctors</i> (%)	(104,000)
All physicians	18%
Family Medicine	10%
Internal Medicine	18%
Paediatrics	8%
OBG	5%

WORKLOAD

<i>Annual Hospitalisation rate</i> (population %)	14%
<i>Work per week</i>	
Consultations—office	108
Hospital/nursing home visits	24
Home visits	2
	<u>134</u>
<i>Hours per week</i>	
Patient care	48.4
Other	7.8
	<u>56.2</u>

<i>Consultation time</i>	12-13 minutes per consultation
<i>Status of consultation</i>	
New patients	15%
Old patients	85%
<i>Obstetrics (family physicians)</i>	only 28% do obstetrics

(AAFP 1993)

## PRACTICE ORGANISATION

<i>Family practice organisation</i>	
Solo	37%
Partnerships of 2	13%
Family practice group (3 + )	33%
Multispecialty groups	17%
	<u>100%</u>

## STRENGTHS

Wealth—national and personal

Energy and desire for change

High standards of technology, research, education

Health indices—fair, but no better than UK

HMOs

Managed care

Multispecialty groups

Hospital privileges

High incomes of doctors

Freedom of choice (this is a matter for debate)

No shortage of physicians

No apparent shortage of 'primary physicians'

No evidence of high consultation rates

## WEAKNESSES

No single coherent system

Commercialisation-industrialisation of medicine based on market—business philosophies



High cost of care and escalating

Freedom but inequality

No clear level of primary care

Specialoids (another issue for debate)

No real primary care teamwork

No contracts or plans for community responsibilities

No cover for 17% of the population and undercover  
for 10%–20%

Uncertain extent of family care and continuity of 'personal  
care'

Administrative costs +

Undergraduate education related to primary care is poor

Lack of interest among young doctors in primary care

Solo practice + (for debate)

Poor collaboration between professionals

'Self referral' to doctor-owned facilities  
(hospitals, CT, MRI etc)

### GENERAL OBSERVATIONS

A situation crying out for major changes—requiring urgent review of basics in all fields and sadly lacking any strong leadership for organised primary care.

### REFERENCES

- GRAHAM R and SWEENEY R. *American Academy of Family Physicians, Facts About Family Practice 1993*, Kansas City, 1992. Tables 9, 14, 15, 16, 51–4 and page 146.
- Council Graduate Medical Education, (COGME), *Third Report*, October 1992, US Dept. of Health and Human Resources, Washington: PHS.
- UNITED STATES ACCOUNTING OFFICE, *Canadian Health Insurance: Lessons for US*, Washington: GAO/HRD 1990/1, 1991 (as chapter 3)

**CANADA**

## THE NATION

Canada is a lucky country—for many reasons, although Canadians may not wholly agree!

It is large, with enormously rich natural resources, yet not overcrowded in population.

It has an even richer neighbour to whom go 75% of its exports and with whom it has good relations.

It is rich in GDP per capita (\$20,500 or £13,670).

It has had high priorities for health promotion, welfare and medical services.

Its historical roots are in the British and French cultures, parliamentary democracy and politics for over 300 years (but only 125 years of independence), with considerable immigration from Europe and Asia—all this on the base of a very old, but small, native population.

One part of its British inheritance has been to continue with British type health systems in which the 'GP' is still dominant.

Yet it shares with the rest of the world manifold social problems—economic recession, unemployment, pockets of poverty, crime, other social deviations and also, special to itself, issues of internal nationalism and separationism. It has a very high national debt which is requiring economies all round.

Canada has a youngish population with 1–5 under 15 and just over 1–10 over 65, but beginning to age.

- *People* appear satisfied with their health system.
- *Politicians* are well pleased with what they have achieved overall and with effective decentralisation, but concerned to reduce the high % of GDP for health.
- *Providers*, however, are ever more concerned with rising costs within restricted budgets.
- *Professionals* have been satisfied with their internal relationships between various levels, but are concerned over budgetary restrictions and fee controls.

## SYSTEM

Canada has evolved a national health system, Medicare, with universal comprehensive coverage, but no extra co-payments

(in fact profits from health care are prohibited by law). It is based on general taxation and health insurance.

The system is a good mix between creative policy-making by the central government and decentralisation of executive activities to the ten provinces. Government funding covers 40% of costs and provinces cover the other 60%, both out of taxation.

The non-profit administration is economic and effective and costs less than 10% of the budget. (20% in US and 5% in UK)

*Provinces* are responsible for hospital budgets, negotiations over doctors' fees, controlling the extent of new high technology, maintaining standards (in collaboration with the medical profession) and educational levels.

There is *free choice* of physicians, but with a recommended *referral system* to specialists, with GP as gate-keeper, advocate and coordinator.

Physicians are paid by fee-for-service, but the size of fees and services has been controlled (unlike US—fees for procedures are low in Canada and coverage is universal).

TABLE 1 COSTS OF HEALTH CARE

	Canada	US	UK
GDP% (1989)	8.9	11.6	6.0
Per capita	\$1570 (£1013)	\$2196 (£1417)	\$750 (£484)
Public funds	74%	43%	85%
Administrative costs	less than 10%	20%	5%
Annual GP income (1989)	\$85,000 (£54,839)	\$90,000 (£58,065)	\$75,000 (£48,387)

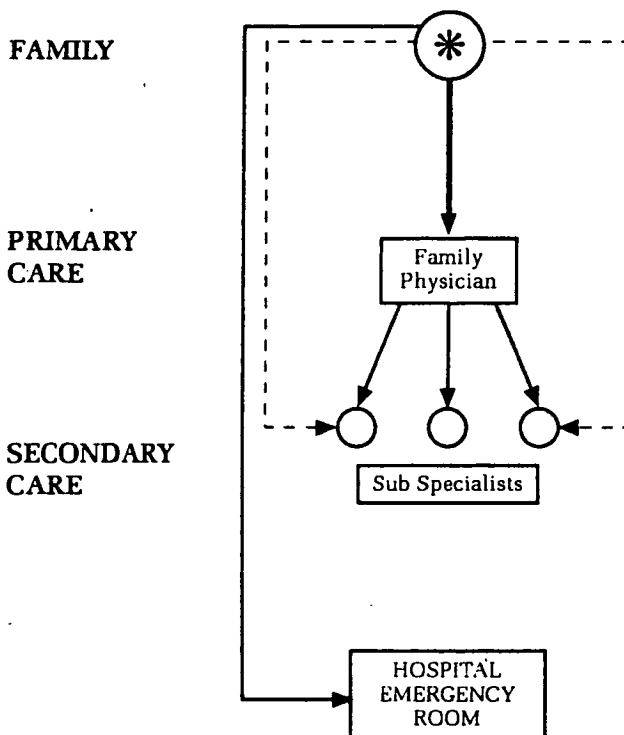
## STRUCTURE

There is a strong tradition of general family practice with a strong national *College* that has promoted status, standards and services. It has achieved mandatory training and assessment and is envied by its sister Colleges over its continuing research into its own practices. It is a voluntary body, but almost half of GPs are members or fellows.

Family medicine is accepted as a *specialty*.

There are fine academic departments at each of 16 medical schools.

First contact care is largely through the GP—there is no registration, but most Canadians have their 'own family doctor'. There is a referral system to specialists but patients can have direct access. Public health services exist separately.



### *Physicians*

There are approximately equal numbers of recognised specialists (23,000) and GPs (23,000). 18% of GPs are women and rising (almost 50% of medical students are women and 40% of GP trainees). Most GPs work in sole practice, but group practice is increasing slowly.

(1 physician: 576 population)

(1 GP: 1152 population)

***Annual Medical graduates***

- 16 medical schools—1725 students  
(1 graduate: 15,360 of population)
- 37% go into GP training
- 63% go into specialist training

***College of Family Physicians of Canada***

11,500 members (—43% of GPs)

2 year training

## SERVICES

*Patients:* with a long tradition of good general care there is available free access, with emphasis on personal and family care (but with specialist care for children). Access also to other specialoids and specialists, but with attempts at gate-keeping. Controlled fees for services with no co-payments.

*Out of hours cover* is uneven and unorganised in cities.

*Management:* most GPs work in small partnerships or larger groups.

Billing for services requires computers and staff. HMO type services are appearing.

*Organised community care* is *not* part of family practice, but is left to public health services, with variable collaboration.

*Professional status of general practice* is high, with popularity among students and young doctors. Good programme of training with assessments. Pay, income and conditions good.

*Services:* tendency for specialisation within general practice e.g. child care, sports medicine and other doctor-interests.

## PROCESSES

Free choice of available GPs.

Emphasis on generalist practice, but with some tendency to specialoids.

'Community health groups' (public services in socially deprived areas) were unsuccessful in 1970s, but HMOs are being tried for business reasons.

High emphasis on independence of GPs. Good facilities in own premises with small staffs.

*Hospital privileges* exist in rural areas, but are declining in cities (uneconomic and time consuming).

Stated principles of 'total and coordinated care, with GP as advocate' for patients.

GPs still said to deliver about one half of pregnancies and to do 20% of all Caesarean sections. Each physician doing obstetrics delivers 32 babies per year.

### OUTCOMES

- Overall satisfaction high.
- Costs (GDP%) in upper range, but controlled.
- GPs tend to work '9 to 5' and use deputising services in cities for out of hours cover.
- Growth of specialoids.
- Possibly too much 'freedom to choose' for GPs who can decide on services—fewer home visits, opting out of terminal care at home, using out of hours cover.
- Inequality between rural/urban resources with more physicians in urban areas.

### DEMOGRAPHY

<i>Population</i>	26.5 million
under 15—20.9%	
over 65—11.4%	
<i>Life expectancy</i>	M 74 F 81
Birthrate	12.9 per 1000
Fertility rate	1.7 per woman
Infant mortality rate	7.3 per 1000
Caesarean section	20%
Unmarried mothers	15%
Marriages	7.2 per 1000
Divorces	3.1 per 1000
Household/persons	2.8
GDP/capita	\$20,500 (£13,223)
<i>Causes of death %</i>	
Heart	35%
Strokes	10%
Cancer	24%

COSTS  
COSTS

47

<i>Health care costs</i>	
GDP%	8.9%
Per capita	\$1570 (£1013)

WORKFORCE

<i>Total senior physician</i>	46,000
per 10,000	17.4
1 per population	576
women	20%
<i>Primary care Physicians</i>	23,000
1 per population	1.152
<i>New medicine graduates—annual</i>	1.725
1 per population	15.360
(half are women)	

WORKLOAD

<i>Work: Primary Physicians</i>	
Consultations per week	140
Hours worked per week	45

STRENGTHS

Relatively wealthy (GDP), but with large national debt

Low population density

National health insurance

Strong general practice—traditional College—departments in universities—initial and continuing postgraduate training

Standards high—controlled by profession

Incomes good

GP as gate-keeper (to an extent)

No doctor or GP shortages

Good health indices

Control of high technologies

## COUNTRY PROFILES

## WEAKNESSES

High costs of health care

Increasing social problems

Direct access to specialists although discouraged

Waiting lists

GP hospital work—obstetrics and surgery

GPs tend to work 9 to 5

GPs independent with too little accountability

Considerable income differentials between GPs  
and specialists

## GENERAL OBSERVATIONS

A satisfactory national health insurance system which is expensive now and beginning to face a cold economic climate with attempts to reduce costs, fees, manpower and services all round.

## FRANCE

## THE NATION

A democratic republic with elected President. Active leader of EC. Liberal traditions which influence the independent medical profession and health system. Strong medico-political representation that is often in conflict with the government, but not always unanimous.

After two World Wars on its soil and occupation in the second one, France has re-emerged and has been successful economically and technologically with high standards of living and income. However, recent world recession has led to attempts to reduce expenditure on health and social services.

Demographically, like other European countries, it is an ageing society with 1 in 5 under 15 and almost 1 in 6 over 65. Population (56M) has increased slowly, largely because of immigration rather than naturally—it has low birth and fertility rates.

- *Politicians* through the ministry are seeking to control costs, but with difficulty. Despite the use of other



methods, an extra welfare tax of 1.1% had to be added in 1990 to cover the cost of the service.

- *Providers* (through insurance funds) are facing fixed budgets.
- *People* appear to be satisfied with system and services but not keen to pay more.
- *Profession* is well satisfied with past income and conditions and with the competitive-liberal system, but preparing to do battle over attempts to cut fees and resources.

### SYSTEM

Compulsory universal health and social insurance system, funded through employers' and employees' contributions (scales subject to negotiation) plus schemes for self-employed and certain occupational groups, such as agricultural workers.

- main insurance fund covers 80% of population
- 16 smaller funds for particular groups.

System is a *public and private mix*—with a strong private component involving co-payments by patients.

*Insurance funds* are non-profit agents which pay for services by hospitals and physicians. These funds pay for 75% of health expenditure. 25% comes out-of-pockets as co-payments by patients.

Because of this high proportion of co-payments there is a system of *supplementary (private) insurance*, on a mutual friendly society basis. *Mutuelles* are non-profit and pay for the extras. Private (for profit) insurance accounts for a very small proportion of extra cover.

The *medical profession* is highly independent and politically organised. One of the key principles is 'liberal practice' whereby physicians insist on free access to care, free choice of doctor by the patient, freedom of prescription by the doctor and freedom by the doctor to practise where he or she chooses.

The *French health system* is expensive at GDP 8.7% and \$1750 (£1167) per capita (annual).

'Although agreement was reached about general medicine

becoming the pivot of our health care system, this remains to be translated into action.' French Minister of Health and Social Protection, 1990.

Universities are resistant to accepting general practice as a discipline for undergraduates.

### STRUCTURE

3 main levels of administration—

- Ministry of Health
- Regional
- Departmental

These levels apply mostly to the organisation of hospital and public health services and also to the work of insurance funds.

*Hospitals* Two thirds of hospital beds are in large public general hospitals—funded by annual cash limited budgets provided by insurance funds. Doctors are salaried (chiefs allowed some private practice).

One third of beds are in small private hospitals owned by commercial organisations or by doctors.

*Doctors* In 1990 there were 168,000 doctors in France—297 per 100,000 population—1 per 333 population. Of these 25% were women.

From 1980–90 the number of doctors increased by 38% and in 1990 there were stated to be '1000 unemployed doctors'.

Two thirds of all doctors are 'independent' (112,000) and one third (56,000) are salaried and working in hospitals, public health, research, etc. (the number of the former is increasing).

In the past it was difficult to control entrance into medical schools, because all who achieved satisfactory grades in the baccalaureate were allowed in. Now a numerous clausus operates and the number of new medical graduates has been progressively reduced to 3,500 per year (1 per 16,000 population).

There are traditional GPs (48,000 out of 168,000 doctors), specialoids providing care for ambulatory patients and specialists who have hospital privileges. There is free

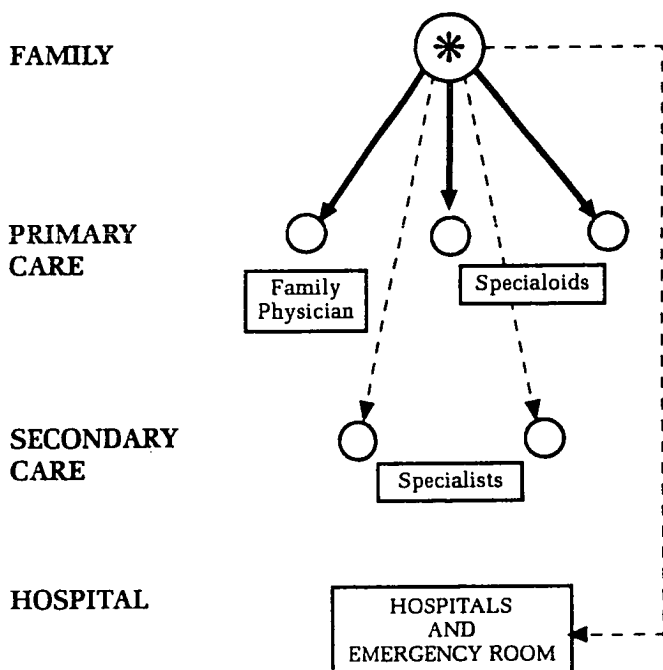
choice and access by patients to any or all of these—hence competition between them.

It is uncertain how many specialoids are working in primary care because of mixed roles.

Because of the freedom of doctors to set up practice where they choose, the distribution of GPs in different regions is not even.

The flow of care at first-contact level (diagram) shows that it may be provided by—

- GP
- specialoid
- specialist
- hospital emergency department



In 1984, of 1000 consultations with all types of doctor, 725 were with GP, 275 with specialist (110 of the 275 by direct access, 118 initiated by specialist, only 33 initiated by GP. (Credoc 1984).

Specialists do not always require letters of referral. Limited passage of information doctor to doctor. Notes do not move with the patient.

### SERVICES

*Patients:* have free choice and direct access to any physician—specialist, specialoid or GP—fees are reimbursed by insurance funds.

There is competition between doctors for patients. Patients are free to shop around and obtain second or third opinions. However, most can name a GP who they see from time to time.

Patients pay the doctor direct and receive 75% reimbursement, the other 25% being covered by Mutuelles of persons who are so insured.

Patients also pay for drugs. There is a scale of reimbursement (hospital costs are paid by insurance funds, but some hospitals also charge patients some co-payments).

*Management* The French system is complex and expensive, with high administrative costs. Attempts have been made to reduce and control scales of fees, but with limited success.

*Organised community care:* no input from GPs. Home nursing is provided by independent nurses who work for independent nursing associations and charge fees.

*Profession:* provides sound care, but with little coordination and with obvious high levels of physicians per population.

*Services:* no delays in obtaining hospital/specialist care. Standards of care are good, with general satisfaction.

### PROCESSES

Primary first contact care is shared competitively between GPs, specialoids and specialists and it is not possible to present a clear and comprehensive picture. It appears that less than one half of primary care (first contact) by doctors is provided by GPs and over half by specialoids and specialists.

#### ***For GPs: some facts***

1 GP to 750 persons or 150 per 100,000

[This is one of highest rates anywhere]

[UK: 1 GP per 1750 population]

*Weekly consultations 82 or 17 per day* (This is lower than anywhere else in Europe)

*Home visits* Of these 82 consultations, 18 were home visits or quarter of all contacts or 4 per day (This is a very high rate, with only Belgium higher)

*Referral rates to specialists* are low at 2.5% of consultations, suggesting reluctance to 'lose patients'. (RCGP 1992)

### ***Practice***

80% of GPs work solo with a part-time receptionist/secretary. Their payment is by item of service.

Premises and equipment are good

Relationships with patients are good, provided that the GP accepts being frequently bypassed

There are no practice lists and no routine transfer of case records if a patient moves

Teamwork minimal

GP income—increasingly dissatisfied with intense competition from fellow GPs, specialoids and specialists

There is no national academic leadership for general practice  
University Departments of Primary Care are few and general practice is minimally included in the training of medical students

### OUTCOMES

- Complex system
- High costs (8.7% GDP)
- GPs exist but compete with specialists and specialoids
- High rate of GPs per population (almost three times as many as in UK)
- Low consultation rates for GPs.

### DEMOGRAPHY

<i>Population</i>	56M (102 per sq km)
under 15—20.1%	
over 65—13.8%	
<i>Life expectancy</i>	M 73 F 81

COUNTRY PROFILES  
DEMOGRAPHY—*continued*

Birth rate	13.4 per 1000
Fertility rate	1.8 per woman
Infant Mortality Rate	7.5 per 1000 births
Low birth weight	5%
Caesarian section	10%
Unmarried mothers	25%
Marriages	4.9 per 1000
Divorces	1.9 per 1000
Households/persons	2.7
GDP per capita	\$19,480 (£12,568)

COSTS

<i>Health care costs</i>	
GDP%	8.7
per capita	\$1750 (£1129)

WORKFORCE

<i>Medical Manpower</i>	
<i>Total physicians</i>	168,000
per 10,000	2997
1 per	333
<i>Primary Physicians</i>	
GPs	75,000
1 per	750
women	14%
<i>New Medical Graduates (annual)</i>	3500
1 per population	16,000

WORKLOAD

GPs' weekly consultations	82
average consultation length	13.7 months

STRENGTHS

National health insurance cover for all  
Reimbursement of fees (75%)  
Solo GPs offer a very personal service

Free access and availability, for consultations or hospital admissions with few delays

'Liberal' and 'independent' medical profession—sets own fees and rules

Extensive national system for continuing education of doctors

Control of student numbers now

### WEAKNESSES

Bureaucratic and expensive to administer

Too many doctors with risk of unnecessary interventions

Costs +

Over-free profession

Direct access to any doctor, with reduplication or limited passage of information

Shopping around + by patients

Co-payments necessary—Mutuelles for supplementary insurance

No teamwork

No community responsibilities

No gate-keeper function for GPs

Low workload limits GPs' clinical experience

Bias against general practice through selection process of training top examination students for specialist training

Differential payments for same medical procedures, with GPs losing out

Minimal part for general practice in undergraduate education and minimal national programme for initial postgraduate training

### GENERAL OBSERVATIONS

Old type system with solo GPs in private practice paid by patients who receive 75% reimbursements.

High rates of medical manpower. Low consultation rates in general practice, with high proportions of home visiting.

An expensive system (GDP%) and old type general practice in a highly independent and politicised profession unprepared to yield to changes to reduce costs, increase efficiency, and reduce medical manpower.

Although agreement was reached in the States General in 1987 that general medicine must become the pivot of the care system, this remains to be translated into action.

#### REFERENCES AND SOURCES

- CHAMBAUD L, in *European Health Services Handbook*; Ed. LEADBEATER N, London: Institute of Health Services Management, 1992.
- KLEINMAN N and SANDIER S, Report of OECD Symposium, *Health Services Utilisation and Physicians Income Trends*, 1990.
- MCCARTHY M and REES S, *Health Systems and Public Health Medicine in the European Community*. London: Faculty of Public Health Medicine and Royal College of Physicians, 1992. p. 20
- ROYAL COLLEGE OF GENERAL PRACTITIONERS, *Occasional Paper 56, The European Study of Referrals from Primary to Secondary Care*, London: RCGP 1992 (as chapter 3).
- Sofres, L'enquete*, No. 11, Paris. 1991.

## GERMANY

### THE NATION

Historically Germany has had many divisions and reunifications, the most recent the coming together of West and East Germany.

An old country with traditions of hard work, efficient organisation, technological achievement and social conscience.

In this century partially destroyed and reborn after two world wars it is now a democracy, but with evident pockets of disharmony and political stresses.

Great successes in commerce, finance and engineering and now considerable wealth and world power with high standards of living and GDP% per capita (one of the world's highest).

Now one of the leaders of the European Community and its richest member, controlling financial policies.



Currently many dissatisfactions among the people—high taxation to pay for re-unification and antagonism towards refugees and guest workers. Increase in crime and violence.

An ageing society, 15% over 65, 16% under 15, with very low birth and fertility rates—hence the need for guest workers.

- *Politicians* are much concerned over costs of the health system.
- *Providers* i.e. government and sick funds are at present making a stern bid to control budgets.
- *Professionals* were until recently generally satisfied with pay and conditions—have strong political representation.
- *People* do not appear to complain, but satisfaction rates are variable. There are no strong organised patient lobbies to match those of specialists. Complaints relate to long waiting times to be seen, too much prescribing and insufficient personal care.

### SYSTEM

Germany was the first country to introduce social insurance in the middle of 19th century and this has continued since. There is now a universal social and health insurance system, with 93% of population under a government scheme and 7% under private insurance (12% of wages). Coverage and administrative arrangements in the 1980s made a virtually complete range of medical services accessible to almost every resident, including 'guest workers'.

Sick Funds (7 major health insurance funds and 1300 local sickness funds) are non-profit administrative agencies. They receive funds mainly from insurance contributions, with a small addition from government taxes. They negotiate levels of fees with representatives of medical associations and transfer responsibilities for payment and allocation to the medical associations who pay the doctors.

Health insurance contributions and levels are controlled by the federal government and are rising.

There is considerable executive decentralisation to Landers (provinces).

The general policy is to encourage competition and market forces to work effectively. Although the federal government has attempted to introduce controls, such as reducing numbers of medical students, these were rejected by the courts.

There is free choice and free access to any physician—generalist or specialist. People know and expect their ‘rights’ and are encouraged to receive their entitlements.

The social security system is concerned with care of the aged and disabled, but with more emphasis on attempts at cure and pain relief than provision of overall care.

### STRUCTURE

The ‘house doctor’ (Hausarzt) has been the traditional first contact physician for generations—house calls are not unusual.

Within the free choice system the flow of care may be to—

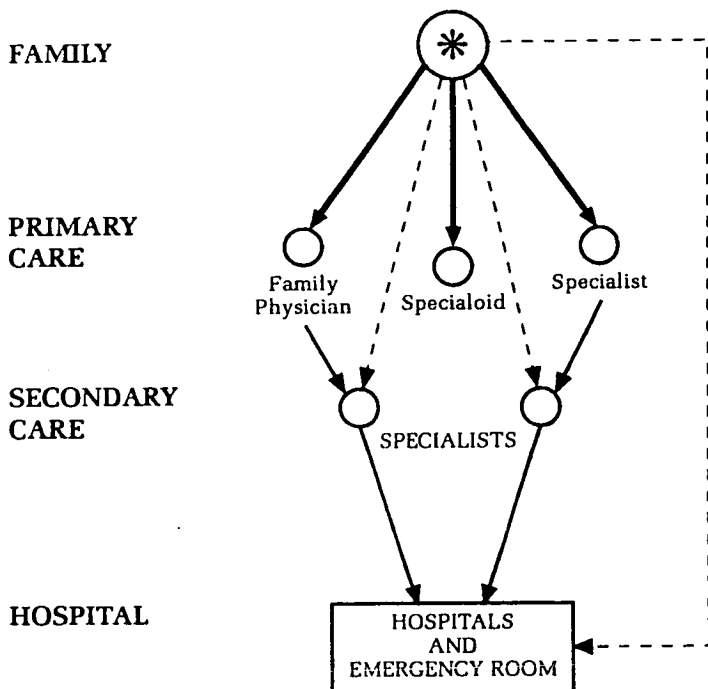
- Hausarzt 40%
- Specialoids } 60%
- Specialists }
- Alternative medical and physical therapies are very popular
- Hospital emergency services.

Physicians are paid by fees for services and there is considerable competition for patients at the first contact level, not only between Hausarzts but also between them and specialists and specialoids. Fees are set and paid by the medical association.

Because of this competition and direct access, communications and relations between generalists and specialists are poor and distant. There is much ‘shopping around’ with high overall annual consultation rates and high use of medication and placebo therapies.

There are no hospital out-patient departments. Specialists work from their own rooms and not all of these have hospital privileges. Specialoids deal only with ambulatory cases.

Most Hausarzts work solo with a nurse—secretary—receptionist.



'Group practice' is growing but this is largely by business arrangements to share cost.

General practice is first career choice for only 15% of senior medical students.

- *Medical Manpower* 219,000
- *GPs* 1 per 2,135
- *All primary doctors* 1 per 846.

### SERVICES

*Patients:* have good access and free choice to any physician and use such access and choice widely. Some co-payments exist in addition to reimbursed fees. Continuing personal and family care by a single doctor is difficult with so much choice and access.

*Management:* much time is spent in filling forms and in billing to claim fees.

*Profession:* too many medical students and too many doctors. (The highest number of medical students in the European Community except Italy.) Entry into practice is not easy. Standards are high.

*Services:* high costs, high prescribing, high consultation rates, with much shopping around and waste.

*Hospitals:* 54% are public, state or municipal; 42% are charitable and non-profit, church or Red Cross; and 4% are private for-profit. Hospital doctors are paid salaries on per diem rates. They only care for in-patients. Very few of those who are office-based have hospital privileges.

*Ambulatory care:* one half of all doctors are office-based and 60% of these are specialists.

*Remuneration:* the majority of ambulatory care doctors belong to one of 18 insurance doctors' associations. These negotiate with sick funds on levels of fees. Pay is based on item of service (4000 possible items).

*Community services:* distinct from primary care. Home nursing and social services are provided by 4000 voluntary associations and paid by sickness funds.

There is a severe shortage of nurses.

## PROCESSES

German GPs have the highest *consultation rates* in Europe. (RCGP 1992)

- *Per week* 220 of which 35 are home visits
- *Per day* 37 office consultations  
 $\frac{7}{44}$  home visits.

*Annual income* (gross) \$127,500 (£82,258) with expenses at 50%

Taxable income per GP

£50,000–£100,000)

(\$90,000–\$180,000)

*Referral rates to specialists* average of 5% of consultations.

## OUTCOMES

- Good health indices
- High costs GDP% 8.3

- High consultation rates—10-12 per person per year
- High doctor incomes
- General satisfaction among doctors, less among patients
- 10,000 or 5% of all doctors unemployed in 1989
- High medication costs (£90 per head (\$135))

## DEMOGRAPHY

<i>Population</i> (West & East)	78.7 million (221 per sq Km)	
under 15—16.0%		
over 65—14.9%		
	West	previously
	Germany	East
Life expectancy	M 73	Germany
	F 79	71.2
		77.8
Birthrate	10.9 per 1000	
Fertility rate	1.5 per woman	
Infant Mortality rate	7.0	
Low birth weight	5%	
Caesarean section	12%	
Unmarried mothers	16%	
Marriages	6.4 per 1000	
Divorces	2.1 per 1000	
Households/persons	2.4	
GDP% per capita	\$22,730 (£14,665)	
<i>Causes of death</i>		
Circulation	50% (strokes and heart)	
Cancer	25%	

## COSTS

<i>Health care costs</i>	
GDP%	8.3
Per capita	\$1863 (£1202)
% Ambulatory	16%
% Medicines	17%
% Hospital	34%

## COUNTRY PROFILES

<i>Medication costs/capita (annual)</i>	£	\$
Germany	90	140
France	90	140
UK	50	78
USA	80	124
Denmark	55	85
Holland	45	70
Spain	45	70
Japan	180	280

## WORKFORCE

<i>Medical Manpower (West and East Germany)</i>	
<i>Total physicians:</i>	219,000
per 10,000	— 27·8
1 per population	— 396
<i>All Primary Physicians:</i>	93,000
GPs (hausarzts)	39,000
1 per	2135
<i>Specialoids and specialists</i> (providing primary care)	54,000
<i>New medical graduates (40% women)</i>	17,500
1 per population	4570
<i>GPs' Annual consultations</i>	10–12 per person
per week	220
per day	44

Source: Bearley 1992, McCarthy and Rees 1992, Klitzsch 1992, Tuffs 1992.

There has been 150% growth in the medical profession in the last thirty years, but little increase in the number of general practitioners.

## STRENGTHS

Natural wealth +

Universal health insurance

Good access and cover

Doctors paid through their medical organisations with  
bureaucracy

No hospital OPD (specialists have own private rooms)

High income for doctors hitherto

Good health indices

Recent success in controlling costs and services

#### WEAKNESSES

High costs of health care

GPs exist, but compete with specialoids and specialists at  
primary care level

Competition and poor relations between GPs and specialists

Too many doctors and medical students (with  
medical unemployment)

Direct access to specialists

Shopping around +

High rate of consultation and medication

Much questionable prescribing

Solo GPs—groups for sharing of expenses only

Little team work with professions other than doctors

Hausarzt has no community responsibilities

Preventive approaches and quality control measures are not  
strong features

Records are well kept but do not move from doctor to doctor

No practice list of patients

#### GENERAL OBSERVATIONS

Powerful independent sector of primary care achieving high incomes from high rates of consultations based on fees. Serious competition for patients with specialists, with little referral and communication. Probably excessive care with no apparent benefits, but in an economically successful nation this was tolerable. Reluctance to modify traditional

patterns of medical practice has made it difficult to control steadily mounting costs, but stern measures are at present succeeding.

The German health system and medical education have been dominated by specialists. It is disease and cure orientated, with high technological developments and high drug consumption. Prevention and quality control measures have had low priorities (Van den Bussche 1990). It has been driven by market forces with competition for patients and much shopping around.

#### REFERENCES

- BREARLEY S, in *Medicine in Europe*, Ed. RICHARDS T, London: *BMJ*, 1992.
- KLITZSCH W, in *European Health Services Handbook*, Ed. LEADBETTER N, London: Institute of Health Services Management, 1992.
- OFFICE OF HEALTH ECONOMICS, *Compendium of Health Statistics*, London: OHE, 1992 (8th edition).
- ROYAL COLLEGE OF GENERAL PRACTITIONERS, *Occasional Paper 56, The European Study of Referrals from Primary to Secondary Care*, London: RCGP 1992 (chapter 3).
- TUFFS A, Germany: 'Bleak mid-winter for students?' *Lancet*, 1992, **340**, 1534.
- VAN DEN BUSSCHE, *History and future of physician manpower development in Federal Republic of Germany*, *Health Policy* (Elsevier), 1990, **15**, 215–231.

## SWEDEN

### THE NATION

Sweden is a country with a long history of links and wars with its Scandinavian neighbours. It managed to keep out of the two World Wars and established a comfortable, stable and wealthy society with high standards of living and culture, supported by an extensive health system since the 1930s, paid for out of high taxation.

The situation has been changing over the past few years. Sweden has been hit by the world recession. Changes of government and policies are leading to reduction in welfare benefits and taxes, and it is striving to become part of the European Community.

It has a liberal monarchy with a strong democratic parliamentary system and considerable decentralisation to countries and municipalities.



Demographically it is a large country with a relatively small population which is fairly static. It is an ageing society with one of the highest proportion of over 65s (18%) and low birth and fertility rates. Low marriage rates, but high divorce rates. Family ties have been loosened, crime and social problems have increased and cohabitation is prevalent. Ethnic changes are occurring from its relatively liberal refugee policies.

This highly technological society has put its medical priorities into technology and specialist services—building beautiful, big hospitals in 1950s, and 1960s with neglect of support for primary care services, relying largely on 'district doctors' and nurses.

Community services and care are good and based on fine buildings and facilities and adequate numbers of non-medical personnel.

*Public* expectations from health services are high; *politicians* are concerned with high costs; *providers* are seeking to contain budgets; and the health *professions* are endeavouring to promote more primary care, but finding it difficult.

## SYSTEM

The wide ranging Welfare State was introduced in the 1930s. There is compulsory national health insurance since 1955 with employer-employee contributions (85%) and the government adding 15%. There are co-payments for consultations and pharmaceuticals. 90% of health costs come out of public funds and a small contribution from local government taxes.

The *cost* of health care has been GDP 9.3%, but is now reduced to GDP 8.8%.

There is *free choice and access to all medical facilities*, but attempts are being made to 'gate-keep' through a primary referral system. In reality freedom of choice exists only in the larger urban areas where there is a surplus of physicians.

Organisation, administration, planning and funding of health services is decentralised to counties and municipalities. The health system employs over half a million people (out of 8.5 million).

A report by the Federation of Swedish County Councils

(1991) lists reasons for public dissatisfaction—health care is too authoritative and ignores rights; unequal distribution, poor value for money and costs rising too fast.

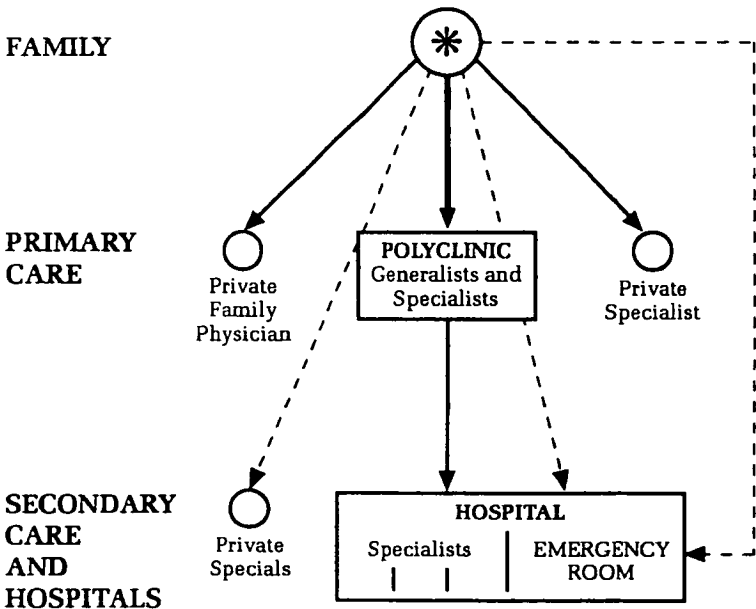
### STRUCTURE

As noted, the post World War II period was marked by a large national hospital building programme with less attention to primary care—creating fine buildings for specialists.

Now attempts are being made to recreate primary care, also with beautiful big community health centres. However, there are few trained and experienced primary physicians to work in them—because medical education has been inappropriate.

Primary care in Sweden has traditionally been provided by district doctors who are employed by local communities to combine public health with GP care. Shortages have led to nurses taking on many primary care roles in health centres and in homes.

A *typical health centre* has nurses, physiotherapists,



occupational therapists, psychologists, counsellors, social workers and supportive staff, but few physicians.

Primary physicians in these centres are salaried. There is no personal registration of patients. In large cities private primary care (GP) is growing.

Choice of—

- community health centre with access to physicians or co-workers
- hospital specialist
- hospital emergency department
- private physicians.

(*note*: private practice both in specialties and primary care is growing in large towns, with supplementary private insurance as part of employment perks.)

### SERVICES

*Patients*: Freely available and accessible (more difficult in rural areas) and affordable (some copayment). Choice of care is limited within the health centre, but can be direct to physician, nurse or other health workers. Attempts at personal care and continuity, but this tends to be fragmented. But care is comprehensive, with excellent facilities and equipment (possibly over-supplied).

*Management*: Centres owned by local communities and adequately provided with staff. Computerisation widescale.

*Community*: good organisation for community care and services. Well planned preventive programmes, defined at-risk groups; team work between physicians and others. (frequent 'conferences'). Plentiful ancillary staff. Some health centres have attached beds for nursing home care of elderly (long-stay), rehabilitation and for psychogeriatric cases. Health centres are also used for day-care of the disabled, and the mentally ill, and for carrying out school checks and health education.

*Profession*: low entry into primary care, but improving; low status; relatively low salaries but increasing; low interest in medical schools.

## PROCESSES

Standards of care are high, but tend to be provided by a 'team' with loose connections rather than on a one-to-one basis by a personal physician.

Arrangements for access and appointments are good. Clinical and computer records are sound.

*Consultations* can be supplemented by a wide availability of in-house investigations with good equipment: 15–30 minutes average. Up to 20 per day (average).

*Home visits* by physicians are rare, but home nurses do many.

*Out of hours cover* by rota of physicians.

*Referrals* to specialists are easy with good communications but variable waits.

*Work load and rates* appear low—100 consultations per week and 42 hours work per physician.

## OUTCOMES

- Health indices—good
- Costs are high
- Public satisfaction—uncertain.

## DEMOGRAPHY

<i>Population</i> under 15—17.3% over 65—18.1%	8.5 million
<i>Life expectancy</i>	M 75 F 81
Birthrate	12.6 per 1000
Fertility rate	1.9 per woman
Legal abortions (27 per 100 births)	36 per 10,000
Low birth weight	4%
Infant mortality rate	5.7 per 1000 births
Caesarean section	10%
Unmarried mothers	49%
Marriages	5.2
Divorces	2.2
Households/persons	2.3

GDP/capita	\$23,680 (£15,277)
<i>Causes of death</i>	
Heart	33%
Strokes	10%
Cancer	15%

COSTS

<i>Health Care Costs</i>	
GDP%	8.9
Per capita	\$2300 (£1484)

WORKFORCE

<i>Medical Manpower</i>	
<i>Total physicians</i>	26,000
per 10,000	28
1 physician	330
women	20%
<i>Primary care physicians</i>	
1 per	3,500
	2,430
<i>Primary care units</i>	
1 per	867
	10,000

WORKLOAD

<i>Annual consultations per person</i>	
GP	1.2
Nurse	5.0
Specialist	1.2
Other	<u>1.0</u>
Total	<u>8.4</u>

<i>Consultations (primary physician)</i>	
per week	100
hours	42

STRENGTHS

- Wealth + (but getting less)
- Social and welfare services good (high taxes)
- High technologies

## COUNTRY PROFILES

Good hospital—specialist services

Excellent facilities

National health and welfare insurance

Good access to care

Team work and community services good

Primary care also responsible for public nursing homes  
and rehab units

High standards

Nurses and paramedics +

Good health indices

## WEAKNESSES

High Costs +

Ageing society

Low marriage—high divorce

GP neglected—attempts to reintroduce

Little interest in primary care among young doctors

Poor training and academic organisation for GP

No recognition of GP as speciality

Direct access to specialists

Poor coordination within teams

Low work rates

Doctors + (few GPs)

## GENERAL OBSERVATIONS

Primary care in Sweden has been neglected. Attempts to resuscitate it have been made from above down by bureaucratisation—building new centres and employing physicians at high salaries without adequate experience and training. If it is to take its proper place, there has to be a reprocessing from below up—from medical schools up. It has also to make its roles and advantages clear to the people who have not had good primary care for generations.

## REFERENCES

Crossroads: future options for Swedish Health Care.  
Federation of Swedish County Councils, 1991.

**DENMARK**

## THE NATION

A small nation (5 million) with a long history of on/off relations with its Scandinavian and Nordic neighbours.

A popular liberal monarchy (Queen Margarethe since 1972) with parliamentary democracy. Affluent society, high standards of living and costs. Recent considerable immigration of ethnic groups (refugees). Farming, industry and commerce are main occupations. Recession is creating unemployment and social stresses.

Low birth and fertility rates and longer life expectancy leading to an ageing society (over 65 now at 15%). Family orientated society but high divorce rates. High rates of smoking in almost one half of women between 25 and 50 and about 40% in men.

- *Politicians*—considering how to reduce costs of welfare state.
- *Public*—is well satisfied with the health services.
- *Providers*—non-profit sick funds are concerned with meeting budgets.
- *Professionals*—well established general practice, but political strength is with academic specialists.

## SYSTEM

National health and social insurance system financed through taxation (which is generally high).

Co-payments exist for some services and 20% of people are covered by extra private insurance policies.

*Ministry of health*—policy making and now, with a new government, pledged to reduce costs and some services.

*National Board of Health*—is the executive body.

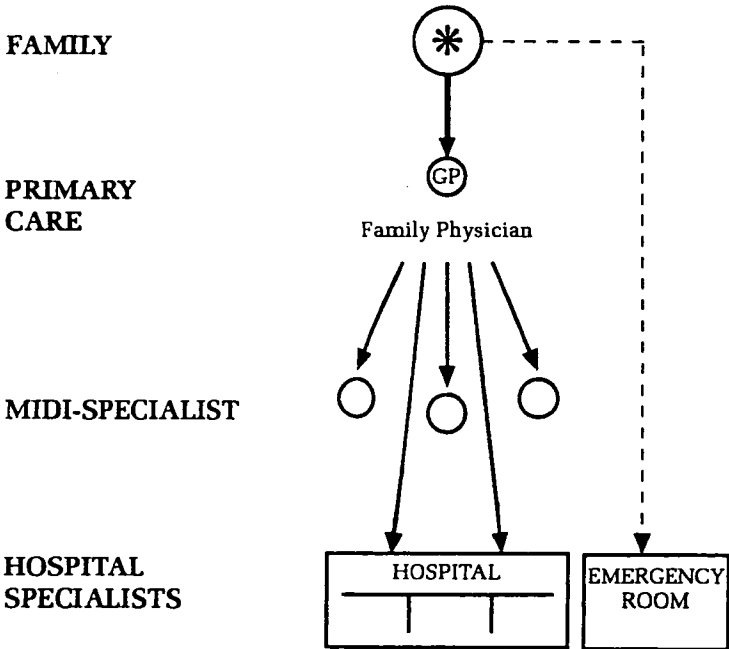
*Decentralisation* of health administration to counties (districts) and smaller municipalities.

*Counties* administer hospitals and primary care. Smaller *municipalities* administer nursing homes, home nurses and health visitors, prevention, maternal and child welfare and social services.

Poor relation and team work between social and GP services.

*Hospital specialists* are in full-time salaried employment, but heads of departments are allowed some private practice. Few *private hospitals* (non-profit).

'*Midi-specialists*' (ambulatory) exist in addition to hospital specialists. They are well trained but do *not* have hospital facilities. They work as specialists for ambulatory patients for diagnosis and treatment (i.e. day surgery, endoscopies, consultations, and other investigations such as angiography). They work independently from their own premises and receive fees-for-services, for patients referred by GPs. Excellent personal relations with GPs—much better than with hospital specialists.





Referral is through GPs—there is no direct access by patients.

*GPs*—patients register with GP of choice, who receives capitation fees plus fees-for-each-service.

Costs (GDP%) have been reduced from 7% (1985) to 5.8% (1991). 85% out of public funds and 15% private.

### STRUCTURE

- GPs are independent contractors
- GP registration with GP as gate-keeper for referrals to hospital or midi specialists.
- half work solo
- half in 2 and 3 doctor partnerships
- work from own or rented premises of good quality
- Nurse assistants, but no real primary care teams
- possible for patient to have access to private specialists but rare—patients have to pay *full costs*.

Entry into general practice involves 'buying good will' approximately £70,000 plus £30,000 (\$105,000 plus \$45,000) for premises. This is difficult for young doctors who do not become independent until aged 40. GP income is gross annual £80,000 (\$124,000) and £49,678 (\$77,000) after tax.

*Departments of General Practice* in medical schools are flourishing and the College is active and influential.

GP postgraduate, vocational training is unstructured and self organised.

### SERVICES

*Patients:* Patients register with GP of choice and receive personal family care (no specialoids) that is comprehensive and continuous. Good easy available access.

*Management:* employ nurse practitioners (no reimbursements). Billing involves fees for service plus capitation.

*Community:* good and effective public health services but in general community responsibilities such as seeking out 'at risks' are not part of general practice. As in other health systems the relations between, and collaboration with, community and public health services are remote, with GPs

concentrating on personal and clinical care, leaving community care to public health and community services.

*Profession:* General practice has a good image and a good academic reputation in research and education.

*Services:* by GPs are generalist with important gate-keeping roles. Public satisfaction is high, but there are anxieties over delays with referrals and (cold) surgery.

### PROCESSES

Good standards of general practice in traditional ways.

Few *home visits*. *Content* is similar to other countries. *Computerisation* for billing and prescribing is growing.

*Out of hours cover*—well organised system with voluntary (paid) GPs in rotas who man local answering service and arrange visits.

- *Consultations* 20–25 per day
- *Telephone Consultations* 10–20 per day
- *Home visits* 1–2 per day
- No special GP *clinics*
- No *hospital* privileges.

### OUTCOMES

- Good health indices
- Hospital waits increasing for OP and admissions
- General satisfaction but stresses over delays
- Low costs—under 6% GDP.

### DEMOGRAPHY

<i>Population</i> under 15—17.0% over 65—15.4%	5.14 million (119 per Sq. Km)
<i>Life expectancy</i>	M 73 F 79
Birthrate	11.0 per 1000
Fertility rate	1.5 per woman
Infant mortality rate	8.8 per 1000
Low birth weight	6%
Caesarean section	10%
Unmarried mothers	40%
Abortion	35 per 100 births

## DEMOGRAPHY

75

Marriages	6.0
Divorces	2.9
Household/persons	2.4
GDP/capita	\$22,090 (£14,252)
<i>Causes of death</i>	%
Heart	35
Strokes	10
Cancer	30

## COSTS

<i>Health Care Costs</i>	
GDP%	5.8%
Per capita	\$1281 (£827)

## WORKFORCE

<i>Medical Manpower</i>	
<i>Total physicians</i>	14,000
per 10,000	3617
1 per	375
<i>Primary Care Physicians</i>	3350
1 per	1534
Women	(25%)
<i>Annual medical graduates</i>	450
1 per (women over 50)	11,400
General Practitioners	%
Solo	34
× 2 partners (or co-ops)	29
× 3 partners (or co-ops)	16
× 4 partners (or co-ops)	9
× 5 partners (or co-ops)	<u>12</u>
	<u>100</u>

## WORKLOAD

GP work daily (numbers)	
Consultations	20-25
Home visits	1-2
Telephone	10-20

## COUNTRY PROFILES

## STRENGTHS

Small wealthy country

Costs of health care controlled

National health insurance—supplementary private insurance to cover co-payments

General practice—sturdy and recognised

Midi-specialists

Good continuity of personal and family care

GP as gate-keeper

Small practices for personal care

Good access and availability

Good college, standards and academia, but with poorly organised vocational training at present

Incomes of GPs—good

Good facilities

Good out of hours cover

Good health indices

Work load appropriate

No doctor shortage

## WEAKNESSES

Ageing population

No teams

No community responsibilities

Entry into practice difficult—buying and selling goodwill

Training—piecemeal

Too many students

## GENERAL OBSERVATIONS

Sound primary care working in a low cost system but needing better training for general practice and to reduce financial hardships for entry.

## NETHERLANDS

### THE NATION

Old history in a small European country (EC) with a past large empire. Democratic parliamentary monarchy. High standards of living and culture. Densely populated. Strong family ties and responsibilities and strong emphasis on social support, equality and responsibilities—possibly over-generous social welfare.

Ageing society (over 65s are 13%) with low birth and fertility rates. Low abortion rates with high use of family planning.

Effects of recession causing unemployment. Ethnic immigration high. Strong religious involvements and related social activities.

*Politicians* seeking drastic reductions in costs of welfare and health services, with rationing, improved insurance system, controls over new technologies.

*Providers* exercise budget controls over national and private insurance systems.

*People* generally satisfied with services.

*Professionals* generally satisfied over conditions and incomes.

### SYSTEM

Comprehensive insurance system in two parts (over 40 non-profit insurance companies).

- *compulsory health insurance* for workers (8% of wages) for two thirds population.
- *private insurance schemes* for the other one third—the higher earners.
- good access to GPs, with whom patients register.
- GPs act as *gate-keepers* and *referrers*.
- GPs are paid capitation fees.
- Specialists in academic hospitals are paid by salary. Many other hospital-based specialists are paid by fees for services through health insurance system—this encourages the retention of patients.

- *Alternative medicine* is popular
- *Physiotherapy* is widely used by direct referral from GPs and is covered by health insurance.

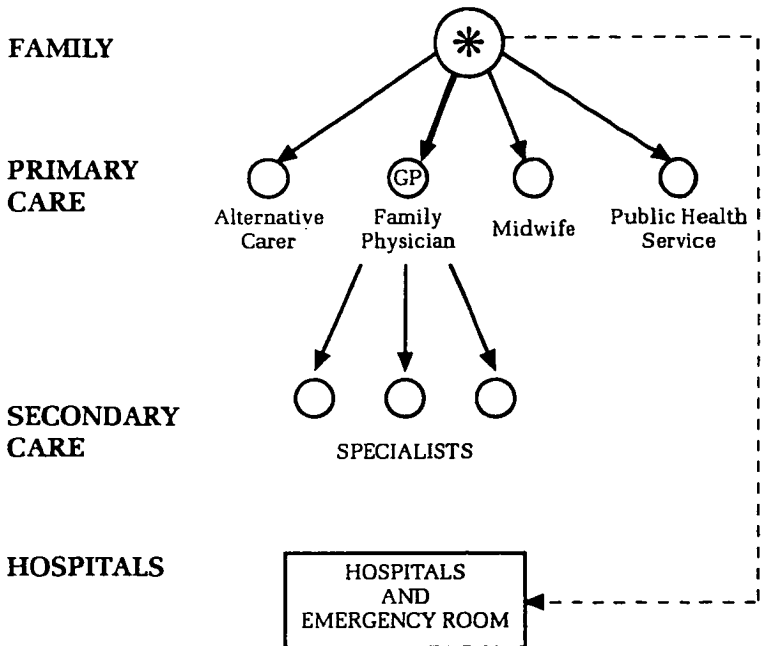
*Incomes.* GPs (net \$100,000 (£64,516) p.a. Specialists (net) \$150,000 (£100,000)–\$235,000 (£150,000) p.a.)

### STRUCTURE

Strong tradition of general practice with good status and respect.

Strong College, academic departments, research institutes.  
Poor relations with specialists.

Entry into general practice is difficult. There is a two-year vocational training for general practice, but with limited places and selection on a competitive basis. Mixture of hospital electives and general practice attachment. No examination. Too many GPs. Sale and buying of 'good will' now abolished.





At health centres *home teams* are being organised. These include various types of carers who visit patients at home. These community health centres are being set up in housing estates with government subsidies.

*Profession:* high status of GPs but they compete with specialists for patients. Referral system in action. Good incomes.

*Services:* competition with community midwives for home deliveries. Midwives work independently and are paid per case. They do not work as hand-maidens to GPs. They are used by insurance companies for home deliveries—GPs are too expensive.

GP—1 per 2300. Registered list of patients

two thirds income from capitation (national insurance)

one third by fees from private insurance. No co-payments

*Relations* with specialists are 'formal'. No long waits for referral appointments or admissions.

### **Obstetrics**

#### *Hospital*

- 65%—hospital deliveries ( $\frac{1}{2}$  by midwives)

#### *Home*

- 25% home deliveries by community midwife (4 year training) and maternity nurse.
- 10% at home by GP and maternity nurse. (GPs only deliver those with private insurance or where there is no midwife in the locality.

*Caesarean rate* 'under 10%'

### **Consultations**

#### *Annual per GP*

3.4 per person per year

7820 per year (2300 patients)

150 per week

30 per day (4 home visits)

80% in the office—12% home visits—8% phone

High rate of *GP prescribing* but at relatively low costs.

*Physiotherapy* is popular—23,000 physiotherapists ( $\times 4$  number of GPs).



WORKFORCE  
WORKFORCE

81

<i>Medical Manpower</i>	
GPs	6,500
Specialists	12,500 (being reduced)
Public health	2,150
Others (juniors etc)	<u>16,500</u>
	<u>37,650</u>
<i>Annual new medical graduates</i>	1,000
	(over $\frac{1}{2}$ are women)
1 per population)	15,000

OUTCOMES

- Good health indices
- High satisfaction by people
- GPs satisfied
- Good services for elderly and mentally ill but little GP input
- Good academia, research, education
- Over use of physiotherapy
- Few team concepts
- High costs GNP 8% +

DEMOGRAPHY

<i>Population</i> under 15—18.3% over 65—12.7%	15 million
<i>Life expectancy</i>	M 74 F 81
Birthrate	12.9 per 1000
Fertility rate	1.6 per woman
Infant mortality rate	7.1 per 1000 births
Low birth weight	4%
Caesarean section	less than 10%
Unmarried mothers	15%
Marriages	6.1
Divorces	1.9
Households/persons	2.5
GDP/capita	\$17,330 (£11,181)

## COUNTRY PROFILES

## COSTS

<i>Health Care costs</i>	
GDP%	8.3%
per capita	\$1438 (£928)

## WORKLOAD

75% persons consult GP in a year
41% persons consult specialist (referred)
14% persons consult physiotherapist
17% persons consult alternative medicine practitioner

## STRENGTHS

Stable society

Family orientated

Good welfare and social services for elderly etc

Affluent

Reorganisation plans

Cover and access good

GP as key in primary care

Patient registration with GPs

Capitation fees (two thirds) plus fees for those under private insurance (one third)

National health insurance system

GP as gate-keeper and referrer and generalist

Continuity of family care

College and institutes for GP research

GPs motivated to do PhD theses

GP incomes high

Good facilities—GP provided and some community health centres

## WEAKNESSES

High costs of health care

Unsatisfactory relations between GPs and specialists

No collaborative shared care

Little real team care for community

Prescribing rates high but costs low

Poor collaboration with public health

Obstetrics—-independent midwives compete for home care

Physiotherapy—high use (for debate)

Entry into general practice is difficult for young doctors

Vocational training at present difficult for young doctors to  
organise

## GENERAL OBSERVATIONS

Effective strong traditional system of primary care satisfying public and professionals. High costs are leading to attempts to introduce cuts and controls.

Within the system there are particular problems for primary care—difficulties of entry for young doctors, unplanned and uncoordinated training programmes, lack of planned team care and little GP involvement in community responsibilities and shared collaborative care with specialists.

## SPAIN

## THE NATION

A country with a proud history of culture and adventure. A democratic monarchy rapidly recovering from years of dictatorship and civil war. Now part of the European Community, but still one of its less affluent members.

The health system has changed through a national General Health Act (1986) which aims to achieve a comprehensive health service. Previously the system was a public-private mix, related to ability to pay.

Primary care (general practice) is well established and accepted by all, but with many changes taking place.

Demographically, still 1 in 5 under 15, but with low birth and fertility rates the proportion of over 65s (13%) will rise.

Variable standards of living—from very high in cities to poverty in many rural areas and minor cities. High smoking rates—one half of all women aged 15–25.

- *Politicians* have been involved with establishing the new health system and are awaiting results and benefits.
- *Providers*—regions and INSALUD (national insurance) face strict budgeting controls, causing delays in achieving changes and providing basic services.
- *Profession*—too many doctors, too many specialists, but primary care is becoming more popular among young doctors.

### SYSTEM

A slowly evolving national health system, with 95% of population covered, but with over 1 in 4 households holding supplementary private insurance for extra, better, private services.

*Funding* is through general taxation and national health insurance contributions (30% of wages). A National Institute of Health (INSALUD) is the administrative agency, with the Ministry of Health making policy decisions.

*Decentralisation* has been a major part of the new system. The 17 regions have responsibilities and budgets for providing health services.

*Health costs.* 80% come out of government funding. However, changes are slow and there still is a mix of public and private care with free choice for the people.

*Personal primary care* is provided at large government polyclinics (still few in number) or directly by private generalists or specialists. Many generalists (GPs) work part-time at government clinics (not polyclinics).

*Hospitals.* Two thirds are public and one third private (small 20–100 beds) and for profit.

A major problem is excessive numbers of *medical students* because of liberal university entry rules (per population 3 times the number of UK medical students).

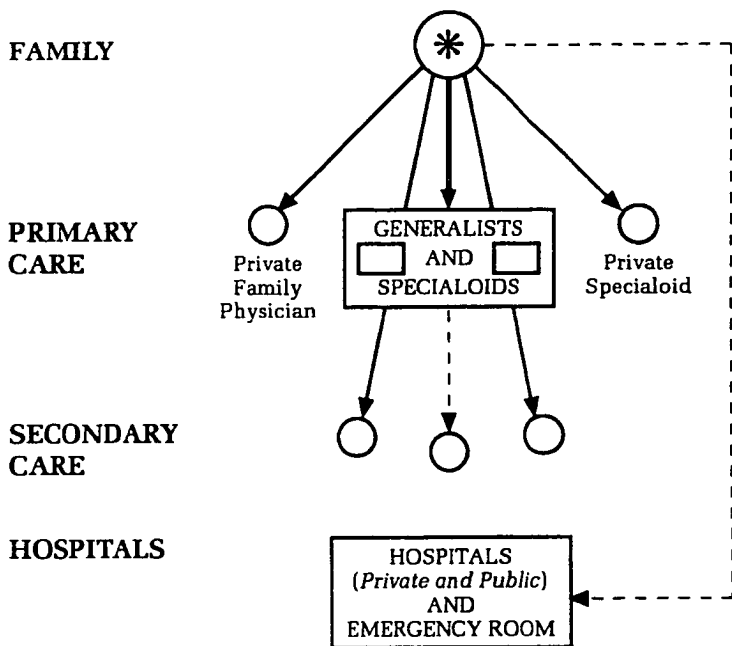
The result has been *unemployment or under employment* of many doctors.

*Public hospitals* provide access to emergency departments but with long waits.

The *Spanish Medical Association* tends to be conservative and little interested in primary care—but there is a keen young active *Society of Family and Community Physicians*.

### STRUCTURE

In summary, a changing system albeit slow and piecemeal—moving away from private practice to better quality public services. However, options for free choice will remain.



Most GPs still work *solo*. Partnerships and groups are unusual.

*Government polyclinics* are being built to high (lavish) standards with fine facilities. In towns 1 clinic to 20–25,000 with health teams including the following—

- GPs
- specialoid paediatricians

- manager and staff
- nurses
- social workers
- dentists

#### ADMINISTRATIVE STRUCTURE AND LEVELS

- Ministry of Health (for 39 million population)
- Regions (1 per 2.3 million)
- Health Area (1 per 200,000)
- Basic health zone (PHC) (1 per 20,000–25,000)

#### SERVICES

*Patients:* good access and availability with choice of private or public GPs. Free choice of doctors in theory, but limited by ability to pay and local availability. Traditional care was based on personal/family continuing care, but this may change within new polyclinics.

*Management:* solo doctors have basic management methods; no billing and relatively simple administrative arrangements with authorities. Little use of business methods. New polyclinics have appointed managers and staff and are computerised.

*Community care:* solo GPs are not often involved in preventive programmes.

It is intended that *new polyclinics and health teams* should accept responsibilities for their defined, designated communities.

*Profession:* the previous low status of GPs is changing due to the influx of more aggressive younger doctors (half the new entrants are women). However there are too many doctors and entry into general practice is not easy. Incomes for established GPs are good but not for younger doctors seeking jobs.

*Payments:* GPs in the past were on a capitation basis. Now in polyclinics they are salaried, plus local demographic weightings.

#### PROCESSES

In the process of change processes of work are changing too. For example in a *government polyclinic in Santander*

- Excellent modern purpose-built building with fine facilities and space
- 20–25,000 population
- *staff* 10 GPs, 3–4 paediatric specialoids, 10–12 nurses, 4–6 clerical staff, 1 Manager
- *consulting hours* 8-30 to 13-00 and 16-00 to 18-00
- *consultations* Daily 25–35 (by appointment)
- *Home visits* Daily 2–3
- *out of hours cover* none (patients are told to attend hospital)
- *high prescribing* volume and costs

GPs are intended to act as *gate-keepers* with a referral system, but there is direct access to private specialists.

*Relations and communications between GPs and specialists* are 'distant'.

### ***Education and training***

No departments of family medicine in medical schools.

Students can do a voluntary GP elective. Specialisation is their first choice.

A new 3-year *vocational training* programme has been started (voluntary) and based on government polyclinics.

(GPs in clinics are government employees and can be moved around.)

### OUTCOMES

- health care indices sound—moderate
- costs—GDP% 6.9—are low
- satisfaction—'Spanish people do not complain'
- excessive medical manpower
- PHC improving in quality and status
- Disciplinary bodies are said to protect doctors and not patients
- GP's income \$60,000 (£40,000)

COUNTRY PROFILES  
DEMOGRAPHY

<i>Population</i> under 15—20.1% over 65—13.1%	39 million
<i>Life expectancy</i> (years)	M 74 F 80
Birth rate	12.8 per 1000
Fertility rate	1.7 per woman
Legal abortion	NA
Low birth weight	7%
Infant mortality rate	9.9 per 1000
Caesarean section	10%
Unmarried mothers	6%
Marriages	5.3 per 1000
Divorces	0.6 per 1000
Household/persons	3.5
GDP/capita	\$10,920 (£7045)

COSTS

<i>Health care costs (annual)</i>	
GDP%	6.9%
per capita	\$754 (£486)

WORKFORCE

<i>Medical Manpower</i>	
Total physicians	132,000 (women 20%)
per 10,000	34
1 per population	296
(6000 unemployed doctors)	
women form 20% of present manpower, but 50% of medical students	
<i>Medical graduates</i>	
per year	8000
1 per population	5000
( $\frac{1}{2}$ are women)	
( $\frac{1}{4}$ general practice first choice)	



<i>Primary care physicians</i>	40,000
1 per population	975
( $\frac{2}{3}$ work for government)	

## WORKLOAD

<i>Primary physicians work</i>	
<i>Consultations</i>	
per day	25-35
per week	125-165
<i>Home visits (per day)</i>	2-4
<i>Hours per week</i>	35-40

## STRENGTHS

Working into new system with more emphasis on primary care in government polyclinics

National health insurance with universal coverage (but need for private supplementary insurance to cover co-payments)

## WEAKNESSES

Low health costs

Health service in transition

Power in specialists' hands

Excess numbers of doctors and medical students with unemployment of doctors

Too many specialists

General practice neglected but attempts to raise status by young groups

Direct access to specialists (for fees)

Poor GP—specialist relations

No strong academic departments of primary care for general practice

Poor training organisation

Access and availability partly depend on ability to pay

Free choice depends on ability to pay

GP incomes relatively low

### GENERAL OBSERVATIONS

A country in transition socially, economically and in health system.

A new national health system is attempting to provide better universal care—but many problems remain. Too many doctors. General practice has a poor professional status and image. Traditions of 'private practice is best' linger on. It will be interesting to observe the place and contributions of the new community polyclinics.

## JAPAN

### THE NATION

The history of Japan is ancient with social, cultural and religious customs originally based on Chinese and Korean traditions. It is only in the past 150 years, since the Meiji restoration, that more modern influences have brought profound changes.

For medicine, German educational influences were dominant at the turn of the century, centred around the hierarchical power of professors as autocratic heads of departments. The effects of this persist and have considerable influence on primary care.

Following World War II the influence of the American occupation created a competitive and entrepreneurial society in a nation that has become a world leader in technologies, commerce, industry and wealth. Yet, surprisingly, all these organisational successes have not created an efficient, effective, economic and equitable health system.

In the midst of much progress the Emperor remains as head of state, with a parliamentary system recently tainted with corruption and crime.

Even within its paternalistic culture, social conflicts occur. Material comforts and standards in housing lag behind, together with pockets of poverty. There are continuing attempts to isolate Japanese people from outside ethnic

contamination. 'Foreign workers' are admitted temporarily to carry out dirty, dangerous, demanding and demeaning work. They cannot become Japanese citizens.

It is a highly competitive society from childhood onwards, still with strong extended family ties, but these are becoming loosened because of job mobility. (61% of over 60s still live with son/daughter.)

Health care appears to have a relatively low priority with *politicians*; the medical *professional* power is in the hands of the Japanese Medical Association, but its power seems in decline with a membership of only one half of doctors; the *providers*, social insurance agencies, are worried over rising costs; but *people-power* to create changes in the health system does not appear coordinated, in spite of much dissatisfaction.

### SYSTEM

There is universal compulsory health insurance of two types—

- an employer–employee contributory scheme for two-thirds of the population (7–10% of wages)
- a government insurance scheme for self-employed, elderly, disabled and unemployed people

The system is administered by non-profit, recognised health insurance funds.

There is free-choice and direct-access to medical services and physicians. Co-payments exist for consultations, hospital services and medication.

There are agreed (between health insurance funds and health workers) scales of fees-for-services for physicians and for hospitals on a point system. Billing is carried out by physicians and hospitals. Scales for fees-for-service for physicians and hospitals are agreed between health insurance funds and health workers on a points system. Fees for the services of primary physicians tend to be low. Doctors in hospitals are salaried. It is customary for doctors to receive gifts from patients. With low fees on a points system the logical effect is for physicians to carry out more and more services.

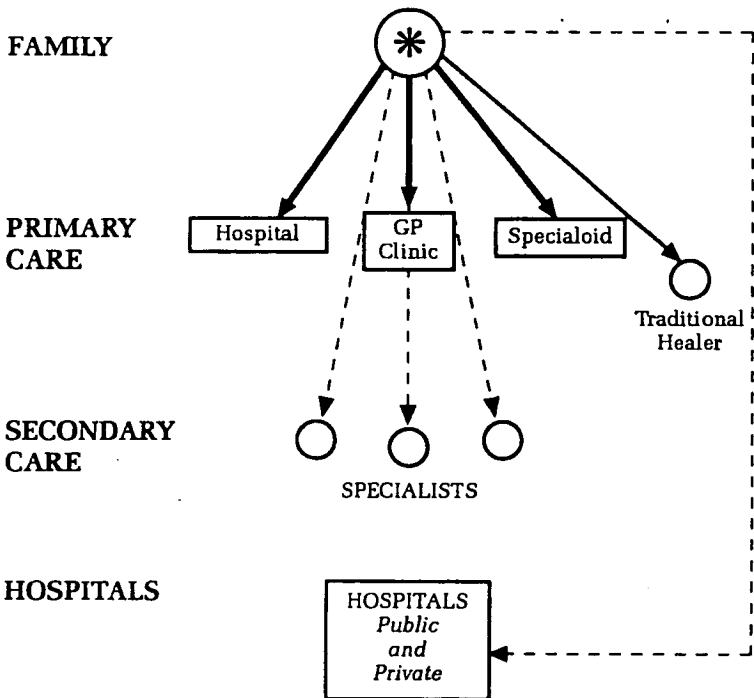
Professional political power is in the hands of academics; primary care has low influence.

It is stated that the cost of the health system is GNP 6.5%, but there is government concern over likely rise in costs and over the structure of the whole system.

### STRUCTURE

Primary care is not recognised as a 'specialty', but it exists and plays its part in care.

With free-choice and access to any physician, the flow of care is disparate. It is stated that first-contact care is provided by hospitals in 30% and clinics in 50% of cases.



The diagram shows the first-contact choice open to Japanese people—

- hospital emergency department
- primary 'clinic doctor'

- specialists in hospital or in private practice
- government public health centre
- traditional (alternative) healers

### *Clinic Doctors*

The '*clinic doctor*' is the nearest equivalent to a primary physician. He is a would-be specialist who has fallen off the ladder. The medical educational system encourages a hospital junior specialist career, but there are not enough places for all who seek it. After some years many such young doctors move out into primary care. They attempt to combine their sub-specialist experience with generalist primary care for patients in the community (as GPs).

Most work solo (single handed) from their own premises. However, there is an additional unique feature. Each doctor (or group) is allowed to set up and run a '*clinic*' of up to 20 beds (supposedly short term) into which they can admit patients. One third of these units have beds—truly a combination of ambulatory plus in-patient care. The incentives are continuing professional ambitions, but also extra fees for services. The clinic facilities and staff are all paid for by the doctors.

However, it appears that this clinic system is losing popularity among young medical graduates because of high costs and workload. Most clinic doctors now are over 50. (Clinic beds are 15% of all beds in the Japanese system, with average 11 per clinic.)

With public and private hospitals competing for primary care services there are plans for hospitals to set up their own primary care units in the community and to employ salaried doctors.

There is an extensive public health service system and community services, but with no evidence of good communications, team work or shared care with clinic doctors. (70% hospitals are private-for-profit—45% of all beds.)

### SERVICES

*Patients:* have free choice and access to health services which are affordable. Care is not truly comprehensive and tends to be specialty orientated. Continuity is variable and

with little evidence of longterm personal and family care. Emphasis in primary care appears to be on selling medicine with its mystiques and liberal use of quasi-placebos.

*Management:* billing of fees is a major part of practice organisation, with inducements to carry out as many services as possible. Computerisation is mainly for business purposes.

*Community:* there are no planned contracts or arrangements for community care and responsibilities. Organised preventive care is at public health centres.

*Profession:* primary care has low status, low recognition, no appropriate training, few academic units, low fees for services, but with many services providing high incomes.

*Services:* in addition to access to physicians alternative medical care is popular, but outside insurance reimbursements.

## PROCESSES

Clinic doctors are in contract with the insurance system to provide services for agreed fees.

Most clinic doctors work solo. Patients are seen by appointment, but long waits are customary.

*Consultations* are short (5–10 minutes). Average daily consultations number 70, but some 'Kamikaze doctors' are said to see 100–200 patients per day.

Annual consultations 15 per person.

High rates of *medication* and high annual costs per person, as well as high rates of *investigations*, using clinic resources to get fees.

*Patients* complain of the authoritarian manners of doctors, the lack of information and explanations and over-medication. There is considerable *shopping around*.

*Home visits* are rare.

*Specialoids* who seek to maintain their specialist experience will admit selected patients into their clinics for further investigations and treatments, including endoscopies and surgery.

*Referrals* to sub-specialists tend to be low partly because of fear of 'losing patients' by competition.

As noted, *preventive and community care* is carried out by

public health services, distinct from primary care—it includes services for elderly, disabled and mentally ill.

OUTCOMES

In spite of the apparent lack of a unified system the outcomes as shown by health indices are good.

- longest life expectancies in the world
- low infant mortality rates
- low GDP% for health
- high rates of medication
- considerable dissatisfaction among public

DEMOGRAPHY

<i>Population</i>	124 million (327 per sq km)
under 15—18.4%	
over 65—11.7%	(static population)
<i>Life expectancy</i>	M 76 F 82
Birth rate	11.5 per 1000
Fertility rate	1.7 per woman
Legal abortions	40 per 100 births
Infant mortality rate	6.0 per 1000 births
Low birth weight	5%
Caesarean section	8–10%
Unmarried mothers	NA
Marriages	5.8 per 1000
Divorces	1.3 per 1000
GDP/capita	\$25,430 (£16,406)
Persons per household	3.1
<i>Causes of death</i>	
Heart	22%
Strokes	15%
Cancer	27%

## COUNTRY PROFILES

## COSTS

<i>Health Care Expenses</i>	
GDP%	6.5%
Per Capita	\$1652 (£1066)

## WORKFORCE

<i>Medical Manpower</i>	
<i>Total physicians</i>	202,000
per 10,000	16.3
physician per	610
<i>All physicians</i>	women 10%
<i>Doctors in clinics</i>	32%
	(50% in 1965)
1 per	1600
<i>Nurses</i>	
1 per	170
<i>'Traditional doctors'</i>	75,000
1 per	1.650
<i>New medical graduates</i>	
annual	8400 (80 schools)
1 per population	14.750
(women 15-20%)	

## WORKLOAD

<i>A 'Clinic'</i>	
<i>Clinics (doctors)</i>	80,000
1 per	1.600
<i>Clinics with beds</i>	$\frac{1}{3}$ (23,000)
<i>Average beds per clinic</i>	$\frac{1}{11}$
	(15% of all beds)
<i>Staff per clinic</i>	
Doctors	1-3
Nurses	2-3
Technicians	0-3
Others	1-2
<i>Average daily consultations</i>	65
(range) per physician	(30-200)
<i>Average time per consultation</i>	5-10 minutes
<i>Annual consultations per person</i>	10-15



## STRENGTHS

Wealth +

High technologies

Competitive organised society

National Health Insurance

Low costs of health care

Good access and free choice

Good health indices

## WEAKNESSES

Hierarchical system of medical education

No organised primary care

Clinic doctors are failed specialists

Direct access to any doctor (specialists and specialoids)

Clinics with beds

High consultation rates + +

High medication rates and costs

Placebos + (pseudotherapies)

No training for primary care

No team care

No community responsibilities

Separation of public health services

Traditional healers—as many as clinic doctors

Low birth and fertility rates (for debate)

## GENERAL OBSERVATIONS

An Eastern paradox of highly efficient economic and technological society with a disorganised, inefficient and wasteful system—in spite of good health indices and low GDP% costs.

Primary care is neglected and in hands of 'clinic doctors' who are failed specialists. Low fees-for-services lead to high

consultation rates of short duration and high medication rates and costs.

Much dissatisfaction among public.

Changes are essential but there is no evidence of any realistic plans or leadership.

## HONG KONG

### THE NATION

Hong Kong, still a British colony until 1997, combines a colonial past, with a hugely successful commercial present and an uncertain political future.

Thriving, bustling and wealthy, with an amazing spread of high rise office and living accommodation fitting attractively into a small space (population density of 5599 per sq. km).

There is no 'unemployment', but much begging and pockets of poverty. High incomes are possible in the 2 (or more) job economy, with low taxation.

Demographically 90% of the 6 million population is Chinese and over 1 in 5 is under 15 and less than 1 in 10 over 65. Birthrate and fertility rates are surprisingly low. Marriage rate is high and divorce rate is low. Almost 4 persons per household.

It is a highly competitive and entrepreneurial society, with strong family bonds, but also with much crime, drug abuse, housing shortages and medical disabilities (especially in recent Chinese immigrants).

### SYSTEM

Past colonial influences are apparent in the health system.

- a mix of *private and public care*—private for those who choose it and can afford it, public government health services for the less affluent and for the public health
- a strong active and impressive *department of health* providing quiet effective leadership
- highly effective and efficient *public health services* controlling communicable diseases and achieving almost total preventive care for maternal and child welfare, and arrangements for social welfare of deprived and disabled people

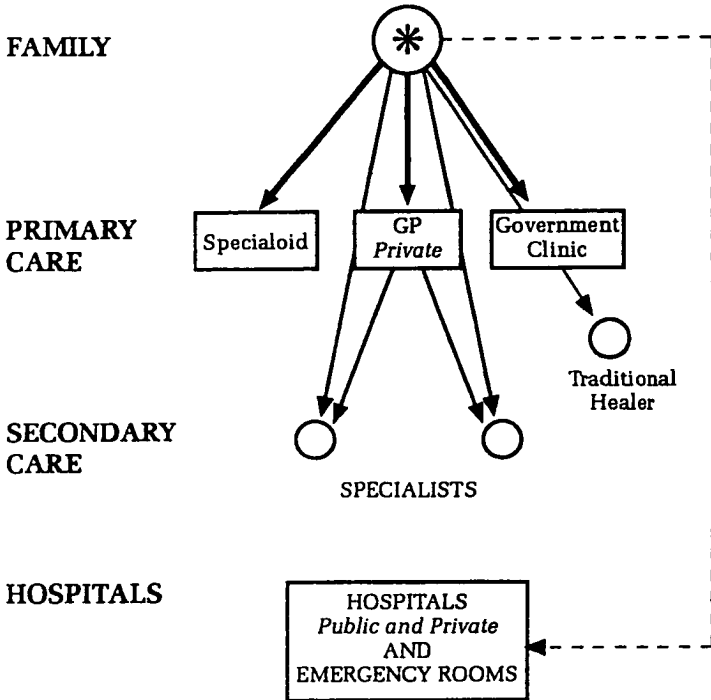
- in spite of '1997', radical improvements are taking place in the system—a new *Hospital Authority*, a *Primary Care Authority* and an *Institute of Medicine*
- *government services* are based at ambulatory polyclinics and public hospitals
- *private health care* is through ambulatory GPs, specialoids, specialists and for-profit hospitals
- there is no *national health insurance*, but many large companies have their own private health insurance arrangements
- *fees for services* are uncontrolled
- a particular feature is the '*estate doctor*'. With new high rise blocks accommodating up to 5000 people, there is a scheme by which the Housing Authority appoints (by ballot) GPs to provide private care and to have a ready-made practice with good income
- in this competitive situation *relations between generalists and specialists* are competitive and variable
- other features are the strong *selling and marketing of medicine* by doctors and the popularity of *traditional healers*

### STRUCTURE

In a seemingly disorganised system there is a sound recognisable structure.

With free access and free choice, the flow of primary care may be multifold—

- Private GP
- Private specialoid
- Private specialist
- Government polyclinic
- Government hospital department
- Estate doctor
- Private commercial group-partnerships
- Traditional healers



There are 5000 *physicians* in Hong Kong (1 to 1160) and one half of these are *GPs* (1 to 2320).

Of *GPs* (2500)—

- 2000 are in private practice
- 200 work in government clinics
- 300 are estate doctors

There are 60 *government polyclinics* (1 to 10,000) with 200 *GPs* and 400 nurses.

There are 2 *medical schools*, one is at Hong Kong University and one at the Chinese University (300 students per year). Active teaching of primary care. No mandatory vocational training, but the Hong Kong College of General Practice is active and has over 1000 members and fellows. It provides training and continuing education.

Most *GPs* (90%) work solo. There are some partnerships of

2-3 and 2 large commercial groups of 30-40 doctors, most of whom are salaried employees of the group.

*Traditional* healers are the real first-contact for most Hong Kong citizens, who often tend to seek their advice before visiting a doctor.

### SERVICES

*Patients:* there is good free access and choice to the many available first-contact services, but some payment is necessary, even a token at government clinics. Care tends to be ad hoc, brief, and transitory, and not yet on a continuing personal-family basis.

*Management:* business efficiency and management are important, with employed staff and equipment dealing with this. Solo practices also employ a nurse-receptionist.

*Community:* there is no involvement by private GPs in any community responsibilities. This is attempted at government clinics, but not in any planned or organised manner. However, as noted, government services do provide good preventive care and some home care is available through these clinics and voluntary organisations.

*Profession:* the status of general practice is high within the profession, due largely to the efforts of the Hong Kong College of General Practice and support from the Department of Health. The incomes of GPs are probably the highest in the world, with low taxation.

### PROCESSES

The quality of service is sound, but depends on local circumstances, such as volume and pressure of work and size of fees.

*Private GPs:* *Content of work* is limited to minor and chronic disorders, including some exotic diseases among recent Chinese immigrants.

*GP premises* tend to be a rented suite or adapted shop.

*Facilities* vary and depend to a degree on what is 'saleable' as well as on real needs. Thus, a GP may possess and use ECGs, basic pathology tests, small x-ray machine and physical therapy apparatus. Injections are popular with patients. Prescribing seems to be related more to patients' expectations than needs, with much use of placebos. Records are

basic and held by the practice; they are not transferrable to other doctors.

*Computerisation* is chiefly for business needs.

GPs work long hours, usually 9–1, and 4–8.

*Consultations* average 70 + per day or 5–6 minutes per consultation.

*Home visiting* is rare. Out-of-hours arrangements are left to each GP. Many solo GPs expect their patients to go direct to hospital emergency departments—and their patients accept this. The few large group practices do provide rota schemes. Hospital care: some GPs have privileges to admit their patients to private hospitals, sharing their care with specialists.

*Estate doctors* work from rented accommodation provided in tower blocks. Their patients tend to be of lower social groups, with poor levels of education. They employ a nurse-receptionist. Consultations 80–100 per day.

*Government clinics*: 60 clinics with 200 GPs (3–4 per clinic). Work is with acute minor and chronic disorders. It is expected that each GP should see 80–100 patients per day between 9 am and 5 pm. No home visiting by GPs.

## OUTCOMES

- Good health insurance
- Good access—availability
- Public—private mix of care
- Cheap in respect of GDP%
- Adequate medical manpower
- Improvement planning
- Well satisfied medical profession
- Public satisfaction uncertain
- High use of traditional healers

DEMOGRAPHY  
DEMOGRAPHY

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<i>Population</i>	6 million (5599 per sq. km)
over 15—20.7%	
over 65—8.8%	
<i>Life expectancy</i>	M 75 F 80
Birth rate	12.3 per 1000
Fertility rate	1.4 per woman
Legal abortions	34 per 100
Infant mortality rate	6.9 per 1000 births
Low birth weight	4%
Caesarean section	20%
Unmarried mothers	NA
Marriages	8.0
Divorces	0.9
Household/persons	3.7
GDP/Capita	\$11,540 (£7445)
<i>Causes of death</i>	
Cancer	30%
Heart	18%
Strokes	10%
Respiratory	20%

COSTS

<i>Health Care Costs</i>	
GDP%	4.5%
Per Capita	\$519 (£335)

WORKFORCE

<i>Medical manpower</i>	
Total physicians	5000
per 10,000	12
1 per	1160
Women	20%
GPs	2500
1 per population	2320

COUNTRY PROFILES  
WORKLOAD

Annual Consultations per person with GP	10
Traditional healer	5
Hospital	5

<i>GP Consultations</i>	
Per Day	70 ±
Time	5–6 minutes
Hours per week	50

STRENGTHS

Thriving and wealthy

Competitive—can be beneficial for achieving quality, but it  
can also be a 'weakness' with excessive and  
unnecessary placebo care

Young population

Public (government) and private (fees) for care

Good access and availability to private GP or  
government clinic

Good public health services

Good health indices

High GP incomes

Low taxation

GP recognised as important

Strong College of GPs, with teaching of general practice at  
medical schools

Vocational training well organised

Control of numbers of medical graduates

Adequate numbers of doctors

Low cost of health care as measured by GDP%

WEAKNESSES

No national health insurance

Private care depends on ability to pay



Competition + between doctors

Relations between GPs and specialists?

Direct access to specialists

Traditional care + + with questionable standards

Much placebo therapy

Selling of medicine by doctors

High consultation rates

### GENERAL OBSERVATIONS

Acceptable health services with good plans for the future. Primary care of good status, morale and income. Quality of services variable, excessive consultations and prescribing with few checks and controls. In its present high flying economy the country has services that it deserves.

## SINGAPORE

### THE NATION

A fine example of a successful and booming modern single city state. One of the world's most significant ports and commercial centres. Rediscovered 150 years ago by Sir Stafford Raffles, it became part of the British Empire until independence in 1959, when it became part of the Federation of Malaysia. In 1965 it gained separate sovereign status.

Still strong British influences on life, business and health care.

Population of almost 3 million with ethnic mix of Chinese (75%), Malays (15%), Indians (7%) and others (whites) (3%).

A democracy, but with virtually a single party parliament. Booming economy with good local standards of living, housing and full employment. Highly competitive society based on free enterprise, but also with welfare provisions for poor, aged and infirm.

Young population (growing by 1.3% annually)—27% is under 15 and only 4% over 65. High marriage rate, low

divorce rate, relatively low birth rate (abortion on demand) and fertility rates (1.8 per woman). Good extended family ties.

Health system—a mix of private practice and government services, with some national health insurance through employer-employee contributions:

- *Politicians*—support principle of public-private mix and are happy over proportion of government spending on health
- *Providers*—no national insurance system (public-private mix)—government clinics available for less affluent; private insurance for hospital care; many private companies offer private health insurance schemes as part of their employment-welfare benefits
- *Professionals* satisfied with high incomes
- *Public* also appear satisfied

### SYSTEM

The health system has been largely left for the medical profession to run as private practice in personal and hospital care, plus backup from government for the less affluent, through public and preventive services, including maternal and child care and services for the disabled and mentally ill.

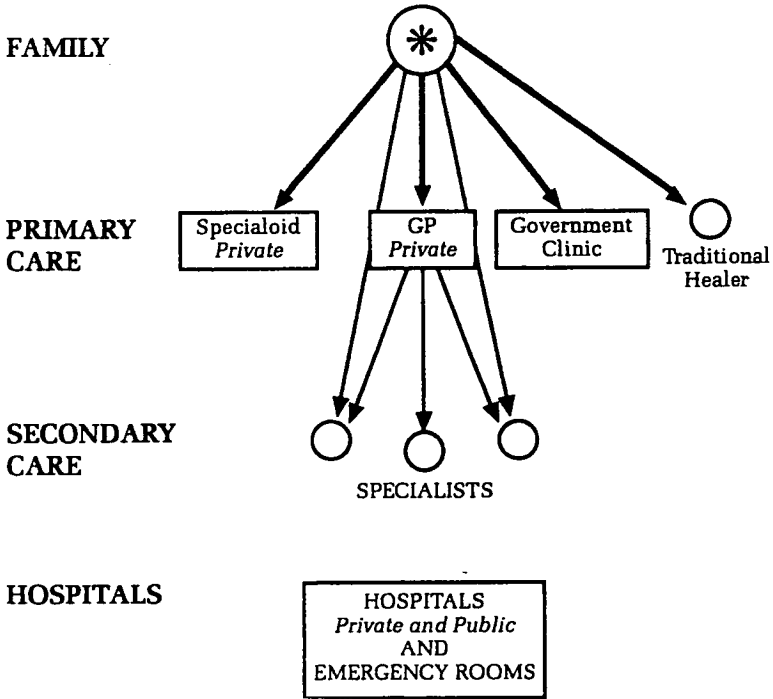
Family and self-care are emphasised. The health system is very cheap at GDP 3% (low taxation). One half of hospitals are privately owned and for profit, but most beds are in public hospitals.

Free choice of primary care depending on ability to pay. Much competition between physicians for private patients and much 'shopping around' by patients.

### STRUCTURE

In such a small city state the structure is relatively simple. There is a minister of health with a *government department* that is responsible for government polyclinics and hospitals. *Private practice* is allowed free rein with ethical standards regulated by the General Medical Council and local professional body.

*Primary care* has multiple points of access—



- private GP (generalist)
- private specialist
- government polyclinic (with salaried doctors)
- government hospital emergency clinic or specialist unit
- traditional healers (popular)

Most generalist GPs work solo. There are a few multi-specialty groups with some associated GPs.

#### GPs

- solo 70%
- 2-3 partners 20%
- large groups 10%

#### Note

- 75% of all primary care is by private GPs
- 60% of hospital care is in government hospitals

- one third of all doctors are GPs
- four fifths of GPs are in 'private' practice
- one fifth of GPs are in 'government' work

### SERVICES

*Patients:* receive available, accessible and affordable primary care of various forms from high technology specialists to traditional healers. Most care is 'ad hoc' with little evidence of personal-family continuity.

*Management:* in private practice emphasis is on good business efficiency and maximising profits, with solo GPs employing own staff and using modern business methods. Some groups are elaborately equipped.

*Community services:* are government organised for public health and prevention. Private practitioners are unprepared for extended community care and responsibilities. No real collaboration between private GPs and community services. Within government polyclinics there is loose collaboration between doctors and nurses.

*Profession:* GPs are active with their own thriving College, an academic department at the single medical school (150 students per year) (women students 50% but there are attempts to reduce quota to 33%). *Vocational training* is voluntary, based on UK pattern. Relatively high incomes of private GPs, but less than one half those of specialists. Government doctor (GP) salaries are about one half those of private GPs.

### PROCESSES

There is free choice and access to any first contact facility or professional.

*Private GPs:* work from own premises, either owned or rented, in suites or on housing estates.

- Consultation rates relate to fees charged—
  - low fees 70 consultations per day
  - higher fees 30–40 consultations per day
- *Home visits* rare
- *Out of hours cover*—variable, patients expect to attend hospital in emergency.

*Relations with specialists* are variable with competition for patients, who have direct access to all specialists.

### ***Polyclinics***

16 polyclinics: 1 per 150,000.

Sited in high population areas.

*Polyclinics visited*—fine premises and facilities.

Salaried and part time GPs, women doctors, trainees and others.

*High work rate*—expected per GP 70 consultations per day.

No *home visits* by GPs, but home nurses visit chronic sick and young babies.

No *out of hours* cover or rota.

- General medical care, screening, prevention, health education
- Maternal and child health
- Care of elderly
- Pharmacy
- MMR for TB
- Small Lab

### *Staff of a model clinic*

- 10 doctors
- 8 nurse practitioners
- 6 assistant nurses
- 2 home nurses
- 2 midwives
- 7 clerical staff

### OUTCOMES

- Good health indices
- High priorities for prevention
- Access and availability
- Competitive system

- Adequate manpower
- Low costs (GDP 3%)
- High professional enthusiasm of GPs

## DEMOGRAPHY

<i>Population</i>	2.7 million (4407 per sq km)
under 15—23.3%	
over 65—5.6%	
<i>Life expectancy (years)</i>	M 72 F 77
Birth rate	16.3 per 1000
Fertility rate	1.8 per woman
Legal abortions	on demand
Infant mortality rate	6.7 per 1000 births
Low birth weight	7%
Caesarean section	10%
Unmarried mothers	NA
Marriages	9.4 per 1000
Divorces	1.0 per 1000
Household/persons	4.7
GDP/capita	\$12,310 (£7942)
<i>Causes of death</i>	
Cancer	30%
Heart disease	20%
Strokes	10%
Respiratory	15%

## COSTS

<i>Health Care costs</i>	
GDP%	3%
Per Capita	\$380 (£245)

WORKFORCE  
WORKFORCE

111

<i>Medical manpower</i>	
Total physicians	3600
per 10,000	13.3
1 per	750
less than 20% of all physicians are women	
<i>Primary care physicians</i>	
	1142
1 per	2365

WORKLOAD

<i>GP Consultations</i> (daily)	30-70
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STRENGTHS

Thriving young society—competitive +  
 Relative wealth +  
 GP recognised with high status and support  
 Teaching of general practice in medical school  
 Active College of GPs  
 Vocational training  
 Good cover by public (government) and private mix  
 No shortage of doctors or GPs  
 High GP incomes  
 Low taxation  
 Good access and availability  
 Good health indices  
 Good government polyclinics  
 Good public health services  
 Low cost of health care by GDP%

WEAKNESSES

Direct access to specialists  
 No national insurance

## COUNTRY PROFILES

Private payments

Solo GPs—70%

No primary care teams

Little shared care

No community responsibilities by GPs

High consultation rates

No home visits

Poor out-of-hours cover

## GENERAL OBSERVATIONS

Good system in a small city state based on competitive private practice supplemented by government services. Works well because of highly successful economy. Provides satisfying care for all.

**THE UNITED KINGDOM**

## THE NATION

The *United Kingdom* (UK) comprises England, Scotland, Wales and N.Ireland. The UK is an old country readjusting to new roles. It has changed since World War II from the world's largest empire to an offshore island in the European Community.

It has moved down in the world wealth league from the richest to middle range with GDP per capita of \$15,000 (£10,000) compared with Switzerland at almost \$30,000 (£20,000).

Its social and welfare roots are strong and the National Health Service (NHS) is an essential part of its Welfare State.

Population is 57.5 million and its society is ageing, with over 15% over 56 and 1 in 5 under 15. Birthrate and fertility rate are relatively low.

## SYSTEM

The evolution of the NHS began 150 years ago with the formation of Sick Clubs to help provide pre-paid insurance for the poorest sections of the working communities.



The principle was formalised in 1911 by the National Health Insurance Act creating government pre-paid insurance for workers below certain incomes. These could 'register' with a GP who would receive capitation fees to provide care. Families and dependents were not covered.

In 1948 this insurance was extended to the whole population under the NHS. All persons were able to register with GPs of their choice to receive all necessary care. GPs remained independent contractors with the NHS and were paid by capitation and other fees for all persons registered with them. GPs provided their own staff, premises and equipment.

All hospitals were nationalised and hospital doctors became salaried employees of the NHS, but were allowed to do some private practice as well.

The third arm was the public health and administration service involved in health promotion and disease prevention.

#### THE NHS IN 1994

The NHS is popular with public and profession. There is a small voluntary private sector for specialist care in addition and to which 10% of population belong.

99% of the population are covered by the NHS which is funded mainly out of general taxation (80%), plus national health insurance contributions (15%) and small co-payments for drugs (5%).

The current cost of the NHS is 5.3% GDP (\$1077-£718) plus another 1% from private care, drugs and other items, bringing the total for all health care to 6.3% GDP.

Expenditure on hospital services is	60%
General medical services (GP)	20%
Public health	20%
Administrative costs are 6% of total expenditure	

Recent changes in emphasis have included—

- stronger management structure to improve efficiency
- more emphasis on primary and community care
- more consumer involvement and attention

- 'internal market' to encourage competition and value for money. This involves 'purchasers' (regional and district administrators) and 'providers' (hospitals and GPs)
- checks and controls to avoid duplication and to ensure economic use of high technologies and optimal numbers of medical and nursing manpower
- equity of resources to meet local needs
- better collection of data and information and its utilisation.

These changes result from the reorganisation of the NHS in 1990. They have yet to be assessed as to benefits in services to patients, control of costs and improvements in equity, efficiency and effectiveness as compared with the past.

### STRUCTURE

*Department of Health*, headed by a Secretary of State, is responsible to Parliament; policy making role.

*NHS Executive* is responsible to the Secretary of State for interpreting and implementing policies; allocates funds to Regional Health Authorities.

*Regional Health Authorities* (8, recently reduced from 14) set regional plans and distribute allocated funds to health care purchasing organisations.

*District Health Authorities* (DHAs; originally 190, being reduced by mergers to around 100) purchase health care from NHS Trusts (hospital and community) often in conjunction with Family Health Services Authorities; may run some services (hospital and/or community) pending the conversion of these to NHS Trusts.

*Family Health Services Authorities* (FHSAs; approximately 90) provide primary care services through contracts with general practitioners; work in close conjunction with DHAs (the government intends to legislate to combine DHAs and FHSAs in the near future).

*Primary Care* provided by independent GPs, in contract with FHSAs, one GP to 2000 population. Most work in groups of 4 or 5 or more doctors. Group practices may be 'fundholding': fundholding GPs receive allocations to purchase hospital and community health services for their

patients (instead of DHAs). Most GPs employ practice nurses, secretaries and receptionists; they work closely with district nurses, health visitors and midwives. Together these form 'The Primary Care Team' (in which social workers are sometimes included). Larger groups employ 'managers'.

*Self Care* exists with the public caring themselves for three quarters of all symptoms.

### **Medical Manpower**

<i>Hospital</i>	
Specialists	20,000
Junior doctors (in training)	40,000
<i>GPs</i>	33,000
<i>Others</i>	
(public health etc)	<u>7,000</u>
	<u>100,000</u>

There are 28 medical schools at present but some London schools are now amalgamating.

Annual graduates almost 4000 (or 1 per 14,500 of population).

### **GP's pay**

This is negotiated between the profession and the Department of Health and adjudicated by the Doctors' and Dentists' Pay Review Body.

If consists of

- capitation fees for each registered patient (extra for the elderly)
- fees for specified services such as preventive services, minor surgery, health promotion clinics
- basic practice expenses
- computer grants
- reimbursement (70% of wages) of employed staff
- reimbursement for use of premises owned by the practice
- other payments such as grants for continuing education, night visits etc.

In addition large practices can apply to become 'fund holders' and receive budgets per capita of around (£130) \$200 per

year to purchase non-emergency specialist investigations, pay for medication, employment of staff and provide other services such as physiotherapy, counselling and health promotion clinics for their patients at negotiated prices. If there are savings, these can be used for improving patient facilities and services in the practice.

Tables—show the growth of fund holding (introduced April 1991)

England/Wales	1991/2	1992/3	1993/4	1995 (estimate)
Number fund holding practices (% all practices)	312 (3.2%)	611 (6.3%)	1318 (13.7%)	1500
Number fund holding GPs (% all GPs)	1759 (6.5%)	3202 (11.7%)	6400 (23%)	10,500 (30%)
% population covered	7.1%	13.4%	25.4%	35%

(GP Statistics: England and Wales: 1982–1992 (Table 7 HMSO, 1993))

The *effects of fund holding* have not been assessed comprehensively yet. So far it appears that—

- prescribing costs seem to have been better controlled in fund holding practices, but are still rising
- numbers of referrals to specialists are similar to non-fund holders
- delays for specialist consultations and admissions have been reduced
- relations between GPs and specialists have been improved
- organisation and data collection have been improved
- new managerial careers for GPs have had to be created

*However, there have been problems—*

- untested scheme based on political ideological hypotheses
- political controversies over inequity
- 2-track system for hospital services
- high costs in extra work, extra staff, computerisation etc.
- GPs as purchaser-bargainers
- problems with local planning

*Issues*

- need for review of fund holding
- alternatives—

Consortia of practices

FHSAs as negotiators

FHSAs, DGH and Public Health in consort with GPs

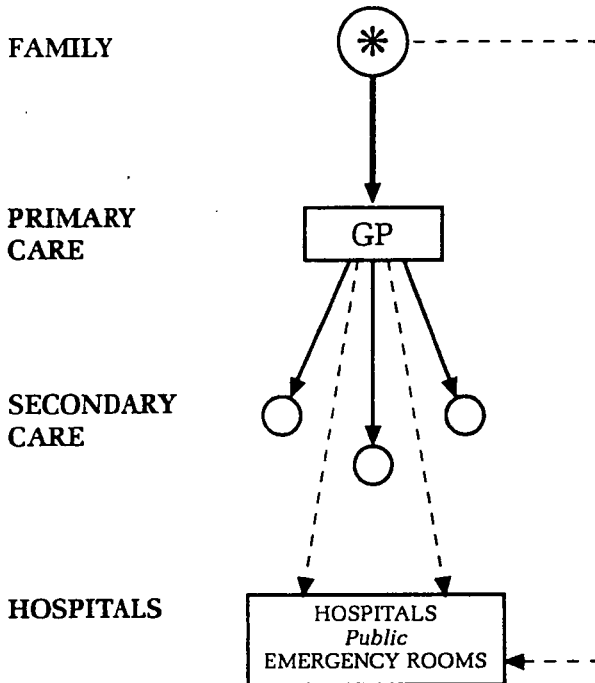
### SERVICES

Flow of care is through the GP who provides the entry into the NHS—apart from emergencies.

GP services include—

- A single entry point into NHS
- 24-hour access and availability
- long-term care
- personal and family care
- coordination of local specialist services and gate keeping roles
- responsibilities for disease prevention and health maintenance and promotion, immunisation, screening with cervical cytology and check-ups of new patients for all aged 75 and over.

*Patients:* know who is their GP and have direct access to him/her. Free choice of GP.



No direct access to specialist—this is through referral by GP except for accidents and emergencies.

*Management:* care for patients is now by the primary care team of GPs, nurses and others from their own base in the community. GP units are independent with freedom to organise and carry out work as they wish, but with responsibilities to patients and NHS. Annual reports must be provided and audits are being developed.

*Community:* schemes are being developed to extend responsibilities into the community through definition of at-risk-groups and working with social services and other voluntary agencies to tackle the social causes of illness.

*Professionals:* General practice is recognised as a special field with its own training programmes, skills, tools and research. It has high status and respect. It is first career choice for the largest percentage of medical graduates.

***GP income and expenses***

<i>GPs (1992)</i>	
GP Principals	33,500
Assistants	300
Trainees (Residents)	<u>1,875</u>
Total	<u>35,675</u>
per 100,000	63

*Average population per GP (registered patients)*

1800 to 2000 per GP

<i>Practice size</i>	<i>%</i>
solo	10
2 partners	12
3 partners	17
4 partners	19
5 partners	18
6 + partners	<u>24</u>
	<u>100</u>

Note that 61% are in groups of 4 or more GPs.

The *Primary Care Team* now consists of many members other than GPs—for example—

<i>Practice (employed by practice)</i>	
GPs	5
Practice nurses (part time)	3
Manager	1
Receptionists (part time)	10
Secretaries and Computer operators	2
<i>Attached (employed by NHS)</i>	
Home (district) nurse	2
Health visitors	3
Community midwife (part time)	2
Social worker and others	2
Total	30

***GPs and Hospital***

Urban GPs seldom have admitting *hospital privileges*, but in rural districts there are small community hospitals where GPs can admit their own patients.

Hospital services are arranged by referral from GP to specialists by letter and report (gate-keeper) and patients are returned to GP with full reports. Relations are good between GPs and specialists.

1 in 4 GPs have hospital appointments as clinical assistants to provide extra pairs of hands and as a part of a continuing educational process.

*Shared care* is a new concept, with GPs and local specialists seeking to promote better care through jointly agreed guidelines and collaboration for chronic conditions such as diabetes, asthma, cardio-vascular and similar conditions.

GPs have full and free access to *diagnostic services* at their local hospitals and also are able to arrange joint *domiciliary consultations* with specialists visiting patients at home.

### **Processes**

*A bird's eye view of a year in a typical general practice* (Fry 1992)

<i>Population registered 2000</i>	
<ul style="list-style-type: none"> <li>• 70% persons will consult one or more times yearly</li> <li>• 90% of families with consult one or more times yearly</li> </ul>	
<i>Face to face consultation</i>	3.5 per person
This means for average list of size of 2000	
<ul style="list-style-type: none"> <li>• 7000 consultations in year</li> <li>• 133 consultations per week</li> <li>• 27 consultations per day</li> </ul>	
of the 27—24 will be in office	
— 3 will be home visits	
average consultation length	8.25 min
<i>GP will be on-call</i>	1 night each week 1 weekend per month
<i>Hours of work per week</i>	
in contact with patients	37
other professional tasks	5
on call	<u>15</u>
	<u>57</u> hours



<i>Annual births</i>	26 (all in hospital)
20 deliveries by midwife	
3 delivered by caesarean section	
3 delivered by assisted delivery	
(5 legal abortions)	
<i>Annual deaths</i>	
16 in hospital	
5 at home	
2 elsewhere	
<i>Prescribing</i>	
• In UK average number of items prescribed per person is 8.8 per year	
• 60% of consultations include a prescription	
• average cost per item \$10.50 (£7)	
• average cost per person per year \$90 (£60)	
• average cost per GP \$157,500 (£105,000)	

OUTCOMES OF NHS

- Fully comprehensive health system
- GP in key position as single portal of entry and gate-keeper
- Cheap system (6.3% GDP)

DEMOGRAPHY

<i>Population</i>	57.2 million
Under 15—19.0%	
Over 65—15.4%	
<i>Life expectancy</i>	M 73 F 79
Birthrate	13.7 per 1000
Fertility rate	1.8 per woman
Infant mortality rate	8.4 per 1000 births
Low birth weight	7%
Caesarean section	12%
Unmarried mothers	25%
Marriages	6.8 per 1000
Divorces	2.9 per 1000
Household/persons	2.7
GDP/capita	\$16,070 (£10,368)

## COUNTRY PROFILES

<i>Causes of death</i>	
Heart disease	45%
Strokes	12%
Cancers	22%
Respiratory disease	12%

## COSTS

<i>Health care costs</i>	
GDP%	6.3
per capita	\$1077 (£718)

## WORKFORCE

<i>Medical Manpower</i>	
<i>Total physicians</i>	100,000
per 10,000	17.4
1 per	575
<i>Primary physicians</i>	
GPs	33,000
1 per	1742
<i>Annual medical graduates</i>	
1 per population	3950
	15,000

## WORKLOAD

<i>GP weekly consultations</i>	133
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## STRENGTHS

## NHS

GP strong with high status

GP as single portal of entry and gate-keeper

Costs of NHS are low

Teamwork

Shared care

Targets

Budgets

Community responsibilities

Good GP—specialist relations

## WEAKNESSES

Waiting lists

Rationing

Pay of doctors

Large groups and teams—teams diminish personal care

High prescribing costs

Standards variable

Uncertain relations between medical profession  
and government

## GENERAL OBSERVATIONS

In many ways the British NHS and general practice are influencing the world with innovations and examples, but they require testing and evaluation over some years.

General practice has survived 45 years of the NHS and is now stronger than ever, with extra powers from the new contract.

However, there are dangers that, moving from a personal family service to large groups and teams with modern business incentives, it may lose its basic strengths and roles.

## REFERENCES

FRY J, *General Practice: the Facts*, Oxford: Radcliffe 1992.

## 5

# *Comparisons of Quality*

The purpose of this chapter is

(a) to identify our beliefs about what makes for quality in health services, especially primary care;

(b) to test whether the most important of these beliefs can be supported by relating them to the present framework of principles accepted internationally about quality assessment and to such evidence as can be drawn from other sources.

### INTRODUCTION

This book describes similarities and differences between health systems, particularly in their provision of primary care. But we also express beliefs, for instance, about the importance of good primary care, and we make some judgements about aspects which seemed particularly strong or weak in each country.

Are these beliefs and judgements merely prejudices derived from our shared experience of working within one particular system? Or can they gain in validity if they are related to such principles as are accepted internationally about ways in which quality in health care can be recognised?

Behind any study like the present one must lie the question whether there are patterns of service-organisation which might in future prove best for all countries of comparable development, even if national characteristics require that certain differences should be maintained.

It was not a prior intention in this project to attempt any formal assessments of quality. Indeed it would have been far too ambitious. What follows in this chapter is a reflection after our visits had been completed. The aim is to test the validity of our beliefs and judgments by placing them within the framework of recognised principles and of supporting evidence about the assessment of quality, derived from the international literature.

Most of the drive and understanding about the assessment of quality has come from the United States in the last 30 years. The framework of thinking and experiment created by

such pioneers as Donabedian, Williamson and Brook has made it possible to examine and compare aspects of health care in an explicit way. The application of this framework to primary care owes more to European countries.

### OUR BELIEFS

Among the beliefs expressed in this book the most important are:

(i) that primary care, at its best and when playing an important part in a health care system, can ensure improvement in the health of individuals and populations, together with greater satisfaction with care.

It is also essential for ensuring that the system as a whole is equitable, effective and efficient.

(ii) that good primary care should provide:—

for a defined population if possible;

first contact care by direct access;

long-term personal and family care;

the capacity to recognise and treat common health problems;

close collaboration with specialists and other services;

the opportunity to choose a physician (or other team member)

who can be known and trusted as carer or adviser;

and who has had specific training for this role.

(iii) that it is only in a system where the primary-care physician has a social/legal obligation and contract to provide 24-hour cover that a health service can offer full access and availability and that 'gate-keeping' is possible.

### QUALITY ASSESSMENT

#### *Principles*

The essence of quality assessment is in seeking to test the value of actions by their results. It is 'a judgement concerning the process of care, based on the extent to which that care contributes to valued outcomes' (Donabedian, 1983<sup>1</sup>). This

approach contrasts with that of basing actions only on beliefs, traditions or 'current conventional wisdom'.

It goes almost without saying that the most important final outcome for a health system, or for those who organise or work in it, is the level of health of individuals or population. Except for the avoidance of harm ('*primum non nocere*'), this is the first aim to which the process of care is directed.\*

To validate the first statement of belief above, assessments are needed not only of health status for populations (reliable and comparable between countries), but also of satisfaction with care and its fair geographical and social distribution. 'Efficiency' demands the measurement of costs, since resources in every country can no longer match every need or want.

If there were significant differences, it would be necessary to show that they could be attributed, mainly at least, to differences in the quality and strength of primary care. *Its* quality and strength themselves therefore need to be assessed.

In this chapter this order will be followed. The assessment of outcomes will be considered before that of the process or structure of care. We will consider how far our own observations contribute to these assessments, then amplify them by introducing relevant evidence from other studies.

Assessments and comparisons are most persuasive when they can be expressed in measurements. But a basic problem is that there are important values which cannot be represented by measurements.

## OUTCOMES OF HEALTH SERVICES

### (a) Health status, mortality, morbidity:

We recorded the figures for expectation of life and for infant mortality. These are reliable for all the countries visited. They reveal only small differences (four years of life-expectancy for males, three for females—see Appendix I). For infant mortality, per 1000 living births, the lowest rate was in Sweden at 5.7, the highest in the United States and Spain at

\* Note: This principle must not be understood to mean that only a change towards better health is valuable. Care is valuable in itself, especially for those whose health is inevitably deteriorating.

9.9. But neither expectation of life nor infant mortality are ideal indicators of the activity or quality of health services because they are both subject to so many other influences. For example, mortality rates are heavily influenced by the distribution of income in a nation's population (in developed as in undeveloped countries) (Wilkinson, 1992<sup>2</sup>).

We also recorded the percentage of deaths attributable to different major causes—heart disease, strokes, cancer, respiratory and accidents. Although variations between countries must reflect to some extent the activity and quality of services, through prevention and health promotion as well as through treatment, the same difficulty applies.

There are measurements recorded in the literature which may be more closely related to the quality of health services. Neo-natal mortality is substantially influenced by both the availability or neo-natal intensive care units and the system of pre-natal care which provides entry into these units for infants at high risk of mortality and morbidity (Starfield, 1992<sup>3</sup>). (See Appendix II)

The study of avoidable deaths has been developed internationally in Europe and covers the European countries which we visited (Holland 1991<sup>4</sup>). Estimating the number of avoidable deaths from all conditions studied and relating them to total deaths between the ages of 0 and 64, it offers the following percentages:

Denmark	9.9
France	13.3
West Germany	11.5
Netherlands	12.8
Spain	18.6
United Kingdom	14.0

A closer relationship between the process of care and outcomes can be accepted through the use of 'intermediate' outcomes. For example, certain preventive activities are firmly established as reducing the incidence of specific diseases—notably immunisation against a number of infections. Figures for several countries visited by us are available in Starfield, 1992 after Williams and Miller (1991)<sup>5</sup> (see Appendix III). Such measures, although proxies for the

final outcome, health status, are particularly relevant to the quality of primary care.

It was possible for us, in some countries, to record the percentage of live-born infants weighing less than 2500 grams at birth. Infants born weighing less than this figure are at substantially higher risk of illness throughout childhood, as well as death in the first year of life (McCormick, 1985<sup>6</sup>). Figures for six of the countries visited by us are quoted by Starfield (1992) after WHO 1986<sup>7</sup> (see Appendix IV).

In summary, there are a small number of reliable and comparable measurements of the health status of populations. They were not all recorded by us and indeed they are not all available for all the countries we visited. With the main exception of inferior results in all measurements for the USA, differences are small. But the most important limitation lies in attributing any differences solely to differences of quality in the structure or process of health services—or more particularly of primary care.

#### (b) Satisfaction with care

Satisfaction is another final outcome by which the quality of health services must be judged. It is 'the client's judgement on the quality of care. It depends more on evidence of personal attention, interest and concern than on understanding of technical expertise, but clients are able to judge whether the outcomes of care meet their own expectations' (Donabedian, 1983<sup>1</sup>).

Surveys of satisfaction are relatively common within some countries, but internationally comparable studies are rare. Our study includes comments for each country visited concerning our impressions of the satisfaction with the health services as a whole and with primary care. (These impressions rated the United States and Japan relatively low compared to Canada, France, Germany, the Netherlands and the United Kingdom.) They are based on interviews with very small numbers of patients and are indeed no more than impressions. In no way do they permit fair comparisons between countries.

The most important international study assessing levels of satisfaction is that of Blendon (1990<sup>8</sup>), based on a choice of responses to three alternative statements:



- (i) 'only minor changes to the service are needed';
- (ii) 'fundamental changes are needed';
- (iii) 'so much wrong that we need a complete rebuild'.

This study covered many of the same countries as our own, but not Hong Kong, Singapore or Spain. It did include Italy and Australia. (see Appendix V).

Countries in descending order of satisfaction were: Canada, Netherlands, West Germany, France, Japan, Australia, Sweden, UK, Italy, USA.

#### (c) Costs

By far the most striking difference in outcome observed by us between the countries visited was in the cost of health services. For instance, whether expressed as a percentage of gross national product or as cost per head of population, there was a two-fold difference between the United States and the United Kingdom.

Our figures are compatible with those from other sources, for example O.E.C.D. 1993<sup>9</sup>, and are reliable for purposes of comparison.

#### (d) Summary of outcomes of health services

Limited information is available which is reliable and comparable across national boundaries. Differences between the developed countries visited are greatest in costs and least detectable in health status. Given the priority which ought to be accorded to health status, this is regrettable.

In the context of assessing the impact of primary care when it is at its best and strongest, they would nevertheless be useful, despite the limitations, if the effect of other influences could be excluded.

The obvious finding, if one attempts to aggregate and score all these outcomes, is that the USA shows the worst scores, whatever the criterion. The United Kingdom is found more often in the lower half of the range than in the upper. Sweden and the Netherlands are found in the upper half of all criteria of outcomes.

## STRUCTURE AND PROCESS OF PRIMARY CARE

The purpose of this section on structure and process is:

- (1) to identify those features which are both important and capable of assessment;
- (2) to point to those which can be compared between countries;
- (3) to relate our own findings to them, along with those from other relevant studies;

As must now be obvious, there are major difficulties barring the pursuit of the ideal of attributing differences in outcomes to particular features of a health service in its design and in what it provides. In principle, the more detailed the provision or action, the more likely that results can be related to it and compared—for example, in trials of different treatments for a specific disorder. But in the present study, as in any other concerned with comparisons of health services in their broad organisation, the variables are so many that the relation between process and outcome is inevitably obscured. For these reasons present activity in quality assessment, even within one country, still has to concentrate on comparing what is provided or done, most often having to make assumptions about the outcome. Most of the recent work in assessing the quality of primary care concentrates on structure and process for this reason. The same is true for our own observations and measurements.

Turning then to consideration of the structure and process of primary care, is there any international agreement, however informal, concerning which features or elements prove particularly useful in distinguishing between better and worse? If so, how far did our own observations and measurements coincide with them?

Primary care is one part of the total service. In answer to what people want and need, a health service overall has to provide prevention, recognition, assessment, management and rehabilitation for illness, injury and disability. It is concerned with the physical, psychological and social aspects of health and illness. People want and need care which is of high quality both technically and interpersonally.

From primary care, as one part, people need these same provisions, but with particular emphasis on:—

First contact care  
Longitudinal care

A broad and comprehensive range of responses  
Co-ordination of services

The quality of primary care can therefore be judged by the presence and quality of each of these broad features, which are now widely agreed to be essential and distinctive ones. (Starfield, 1979; Fry and Hasler, 1989; Parker, Walsh, Coon, 1976; Holmes *et al.*, 1978; Alpert and Charney, 1973; Weiner and Starfield, 1983; Stephens, 1979; White, 1967.) Also NHS Management Executive, 1993<sup>10-18</sup> (see Appendix VI).

Methods for examining, comparing and, where appropriate, measuring need to be developed for each. But they need to be reduced to 'discreet, clearly definable and precisely measureable elements' (Donabedian, 1982<sup>19</sup>). Within some countries such development has been achieved, experimentally in the main, but sometimes routinely.

Elaborating as an example only the first of these broad features—first contact care—the degree of accessibility or availability can be measured in respect of geographical proximity, hours of opening, financial barriers, delays in response particularly in emergency, adequacy of premises and equipment. In addition, the perception of availability and the use of the practice by the local population can be included. All these aspects have in fact been shown to be assessable in individual countries (Cartwright and Anderson, 1981; Jeffreys and Sachs, 1983; Butler and Calnan, 1987; Royal College of General Practitioners, 1985; Royal Commission on the National Health Service, 1979. From the USA: Penchansky and Thomas, 1981; Weiner and Starfield, 1982; Institute of Medicine, 1978).<sup>20-26</sup>

The other three features can be elaborated similarly, but maybe with greater difficulty.\*

But this book is concerned with international comparisons. As has been said already, it was not the prior intention to assess or compare quality, but only similarities and differences. There are nevertheless observations or measurements recorded by us for all or most of the countries which do have relevance to the assessment of the structure and process of primary care.

\* see footnote overleaf.

Examples are:—

- responsibility for a defined community;
- long-term responsibility;
- whether or not patients have direct access to specialists;
- is the primary care physician a 'gate-keeper'?
- responsibility for personal preventive services;
- access to laboratory and X-ray investigations;
- hours of work per week; \*\*
- mean consultation duration; \*\*
- formal postgraduate (vocational) training.

Such observations can be supplemented for some countries from other studies, for example:

Schroeder (1984);<sup>27</sup>

Weiner (1988);<sup>28</sup>

European Study of referrals from primary to secondary care (1992);<sup>29</sup>

The Interface Study (Crombie, van der Zee and Becker, 1990)<sup>30</sup> (see Appendix VII for the results of these studies).

A review of methods used in the United Kingdom for assessing the quality of primary care can be found in Humphrey and Hughes, 1992<sup>31</sup>: Medical audit in general practice. A guide to the literature: and in Irvine, 1990)<sup>32</sup>. Methods used in the Netherlands are described in Grol *et al.* (1988)<sup>33</sup> and in the United States in Starfield (1992)<sup>34</sup>.

### ***Summary on Structure and Process***

A large volume of literature on primary care has been created since the second world war, with apparently separate beginnings at about the same time in three or four of the countries

\*\* Those marked with asterisks raise the problem whether quality correlates with the lower or the upper end of the range of variation, as with prescribing costs, referral rates to secondary care or for specialist investigations—a problem at present unresolved in any country.

visited by us. But it is only more recently that this information has been organised in ways which contribute to quality assessment, even within single countries. Not surprisingly, the amount of information which has been collected in different countries for purposes of international comparison is very small.

It is encouraging, nevertheless, to find so much agreement internationally about the most important and distinctive features of primary care. But there is a danger that the distinctive features may distract attention too much from features which are shared with secondary or tertiary care—ones which people expect of *all* parts of a health service—as described above. The same processes of diagnosis and treatment, as carried out in the primary care setting, need to be assessed. Within countries this is now being done.

Amalgamating four primary care criteria (minimal direct access to specialists, responsibility for a defined population, longterm responsibility, comprehensive range of services) and using a simple scoring system (see Starfield, below) our rank order of the quality of structure/process in primary care is:—

Denmark	8
Netherlands	8
United Kingdom	8
Canada	5
France	4
Spain	4
Germany	3
Sweden	3
Hong Kong	3
Japan	2
Singapore	1
USA	1

The relationship of these findings to our belief about the influence of primary care on the outcomes of a total health service will be discussed in the next section.

## THE RELATION OF STRUCTURE AND PROCESS TO OUTCOME

The purpose of this section is to point to relationships which can be traced between the international differences in outcomes, described

earlier, and the rank order which we have proposed for the quality of primary care in the countries we studied.

From our own evidence and that added from other studies, what relationships can be traced between the outcomes of health services described earlier and the features of good primary care, as described in the last section of this chapter?

We have expressed our belief that primary care at its best can ensure improvement in the health of individuals and population, increase satisfaction and lower the cost of the whole service, and that countries where primary care is strong will show these positive outcomes to an extent not shown where it is weak.

The evidence concerning *health status* cannot be said either to support or to refute the belief. Although some of the small differences are in favour of it, it is impossible to attribute them securely to one influence.

Although the evidence concerning *satisfaction* with health services does not cover all countries, a rough correlation can be traced between Blendon's evidence of high satisfaction in Canada, Netherlands, low satisfaction in the United States on the one hand and our rank order of the quality of primary care in those countries. However, the low figures for satisfaction in the United Kingdom do not correlate well with other evidence on the quality of primary care in this country.

A possible relationship between the *cost* of a total health service and the quality of primary care can be argued more strongly.

There is of course, a prima facie case for supposing that a service in which primary care either is of high quality or plays a large part will cost less, simply because secondary care, whether specialist or in hospital or both, is so obviously expensive. But in reality, systematic studies do not always show savings from transfer of care from hospital to home or from secondary to primary (Berk and Chalmers, 1981;<sup>35</sup> Drummond *et al.*, 1986;<sup>36</sup> Horder, 1988<sup>37</sup>).

Maxwell (1978)<sup>38</sup> proposed a relationship between cost and both the accessibility and the comprehensiveness of primary care. He suggested that 'perhaps the most important single strength of the British National Health Service is the

pattern of general practice and the convention of referral from primary and secondary to tertiary care . . . over 80% of episodes of illness reaching the national health service are dealt with from start to finish by general practitioners who account, with associated prescribing costs, for well under 20% of total expenditure. The situation in the Netherlands and Denmark is similar . . . This control over access to the specialist, and the avoidance as far as possible of duplicated work-up between community-based and hospital-based specialists, may well be a key variable in the cost of the whole health care system'.

Among the ten countries included in Maxwell's study, three different patterns prevail concerning access to specialists, with the highest cost countries all allowing direct access to specialists. (see Appendix VIII)

But could the same relationship between cost and mode of access to care be argued today, fifteen years later? If the oriental countries are excluded, the relationship holds:—

(allow direct access to specialists)		(minimal direct access)	
	GDP% (1990)		GDP%
USA	12.4	Netherlands	8.1
West Germany	8.1	Denmark	6.2
Switzerland	7.4	Finland	7.4
Belgium	7.4	United Kingdom	6.1
Austria	8.4	Italy	7.6
<hr/>		<hr/>	
(aggregated)	43.7 av. 8.7		35.4 av. 7.8

all these figures from Office of Health Economics Compendium 8th ed. 1992.<sup>39</sup>

If the oriental countries Japan, Hong Kong, and Singapore, are included, the relationship does not hold (all three countries allow direct access to many types of doctor, yet devote a relatively small percentage of their GDP to the health services.)

The most convincing recent evidence that the cost of the total service is higher in most countries where direct access to specialists is the custom can be found in the European 'Interface Study' (see Appendix VII). In this table the accessibility of specialist care in a health system is ranked

according to the proportion of accessible professions. If this ranking order is set down alongside figures for %GDP and health expenditure per person, a consistent gradient can be shown between the upper middle and lower thirds of the list.

Countries in descending  
rank order

proportion/accessible professions	% GDP	Health expenditure per person
Fed. Rep. Germany	8.1	1063
Eire (upper)	7.1	480
Belgium	7.4	808
Switzerland	7.4	1393
Finland (private)	7.4	1148
Sweden	8.7	1311 6203
Denmark	6.2	889
France	8.9	1046
Austria	8.4	957
Portugal	6.7	227
Italy	7.6	799
Netherlands (private)	8.1	840 4758
Eire (lower)	7.1	480
Netherlands (public)	8.1	840
Norway	7.2	1027
Spain	6.6	465
Finland (public)	7.4	1148
United Kingdom	6.1	582 4342

A positive correlation with lower cost can also be shown between groups of countries in which the primary care physician (a) has responsibility for a defined community and (b) has long-term responsibility. But with consultation length there is a negative correlation.

Although the evidence which now follows is not concerned with international comparisons, it is nevertheless relevant to the question whether primary care influences the outcomes of health services.

In a controlled trial of care given by a Health Maintenance Organisation versus care by fee-for-service practice, for comparable populations in the United States, Manning *et al.* (1984)<sup>40</sup> showed that an HMO achieved a 40% reduction in



hospital admissions and a 25% reduction in costs (see Greenfield *et al.*, 1992)<sup>41</sup>. This work is echoed in that of Sjonell (1984)<sup>42</sup> in Sweden. A deliberate increase of primary care doctors and nurses, introduced in one district of Stockholm (but not in the neighbouring control district), decreased the use of hospital outpatient services by 26% and also achieved a 26% reduction in the annual rate of consultations with any physician by that population.

Both Sweden and Finland have, during the last 25 years, reversed their earlier health service policies in favour of developing primary care services from a low starting level. The 'Personal Doctor Programme' in Finland is said to have achieved greater cost-benefit than the system it replaced (Pritchard, 1992<sup>43</sup>), (but direct English-language references are lacking).

The opposite situation of withdrawal of the benefits of primary care is reflected in two studies from California (Lurie *et al.*, 1984 and 1986).<sup>44/45</sup> In these studies a group of medically indigent adults, who had previously received Medi Cal. benefits, were required in 1982 to pay for 'out-patient' or emergency visits. This group, now unable to pay, was compared with a control group from the same medical practice whose benefits were not terminated. Both access to care and health status worsened significantly in the first group. The findings were not transient. Although costs to the State of California were much reduced, the result was poorer health for the affected population.

### ***Summary of the Relation of Structure and Process to Outcome***

The evidence from our own findings and those of parallel studies neither supports nor refutes the hypothesis that there is a positive correlation between differences in the quality of primary care and differences in health status. On the basis of a single survey of satisfaction, a rough positive correlation can be traced. The argument for a correlation between lower health service costs and the quality of primary care is more convincing. Comparisons of cost are relatively reliable and they show large differences between countries. But the correlation is only apparent if countries with higher costs or lower costs are grouped together in order to minimise the effect of

exceptions. When this is done, positive correlation holds for most, but not all of the features of structure or process examined.

It remains to point to the temptation of interpreting correlations as representing cause and effect and to the difficulty of excluding the effect of other influences than primary care upon the outcomes of health service activity. For example, five other variables contributing significantly to differences in health expenditure between countries are identified by Gerdtham *et al.*, 1990.<sup>46</sup>

### REVIEWING THE 'STRENGTH' OF PRIMARY CARE IN RELATION TO OUTCOMES

This section summarises a parallel study from the United States. Starfield (1991<sup>47</sup> and 1992) has studied the relation between the structure/process of primary care and health service outcomes in a parallel, but not identical way. She examined the 'strength' of primary care within a system. The criteria for strength include some of those discussed above under the heading of quality (structure or process), for example—first contact, longitudinality, comprehensiveness and co-ordination. But to these others are added—'system characteristics'—which represent the importance given by government, professions or population to this part of the service, for instance—'the type of system', 'geographical organisation of primary care services' or the percentage of physicians who are specialists. Altogether there are eleven criteria and each is defined:

**FIRST CONTACT** 'Decisions about the need for specialty services are made after consulting the primary care physician. Requirements for access to specialists via referral from primary care are considered most consistent with the first contact aspect of primary care.'

**TYPE OF SYSTEM** 'Regulated primary care or public health centres are considered to be the highest commitment to primary care. Regulated primary care implies that national policies influence the location of physician practices, so that they are distributed throughout the population rather than concentrated in certain geographic areas. Public health centres are also assumed to represent the equitable distribution of physician resources.'

**TYPE OF PRIMARY CARE PHYSICIAN** 'Generalists (family or general practitioners) are prototypical primary care physicians because the nature of their training is exclusively devoted to primary care practice. General paediatricians and general internists are

considered intermediate primary care practitioners because their training has a major sub-specialty focus'.

Assigning scores, from zero (connoting the absence or poor development of the characteristic) to two (connoting a high level of development of the characteristic), Starfield rates the 'primary-care-ness' of each country. The unweighted scores for each country are averaged to derive this primary care score.

Starfield's study overlaps with ours in that it includes Canada, West Germany, Netherlands, Sweden, United Kingdom and United States. It does not cover Denmark, France, Hong Kong, Japan, Singapore or Spain. It does include Australia, Belgium and Finland (countries not visited by us).

On the basis of her eleven criteria (see Appendix IX) and by the number of indicators for which the country falls into the top (best) third of the distribution and the number for which it falls into the bottom (worst) third of the distribution (pg. 230. Table 15.9)—the rank order of countries was as follows:—

United Kingdom	1.7
Denmark	1.5
Finland	1.5
Netherlands	1.5
Canada	1.2
Sweden	1.2
Australia	1.1
Belgium	0.8
West Germany	0.5
USA	0.2

(The differences from our rank order, pg. 10 are minimal.)

Starfield relates these estimates about the strength of primary care to the health outcomes, satisfaction and cost of health services.

She *does* find correlations with those indicators of health status, described earlier in this chapter, for which comparable evidence between countries is available. But the differences between the countries at the top and bottom of the range is small on each criterion. If the four countries with the best scores are aggregated and compared with the four

countries with the worst scores, the overall difference is about 10%.

So too with satisfaction, based again on Blendon's study<sup>7</sup>. If the countries with the best scores are aggregated and compared with those with the worst ones, satisfaction does correlate with the primary care score (despite the anomalous figure for the United Kingdom).

Costs: The correlation between the primary care score and the costs of the total service is as follows:

Countries in primary care score order		% GDP and 1992
United Kingdom	6.3	
Denmark	5.8	
Finland	7.4	
Netherlands	8.3	
Canada	8.9	av 7.3
<hr/>		
Sweden	9.0	
Australia	7.5	
Belgium	7.8	
West Germany	8.2	
USA	12.0	av 8.8
<hr/>		

If the top five countries (high primary care scores) are aggregated and compared with the bottom five, the combined costs are 17% lower in countries with better primary care scores.

**Summary: Starfield's work on the strength of primary care**  
Discrepancies between our work and that of Starfield are minimal. This is important since Starfield's work appears to have been designed from the beginning to concern itself with evaluation.

## CONCLUSION

In this chapter we have selected the most important among the beliefs which we have expressed in a book which is concentrated on descriptions, measurements and comparisons. Because we have spent our working life in primary care in one country, we cannot completely avoid being ourselves

the product of one system. Hence the need for a critical examination of these beliefs which become, as it were, hypotheses for testing.

It is important to find out how far our beliefs are shared in the other countries visited. It is for this reason that evidence has been sought from the relevant literature and placed alongside our own findings.

This has been done within the current framework of principles for assessing quality in health care. Whatever differences exist between countries now or should continue between them in future, there is one aim which is undoubtedly shared by all—to improve the quality of their own health services. Better health is a universal quest and all countries today have to marry this aim with that of controlling costs.

What conclusions can be reached?

*Our first statement of belief* was that primary care, at its best and when playing an important part in a health system, can ensure improvement in the health of individuals and populations, together with greater satisfaction with care. It is also essential for ensuring that the system as a whole is equitable, effective and efficient.

Support comes, of course, from the policy of the World Health Organisation since 1978 in promoting primary health care and advocating that all countries should give greater priority to this part of a total health service. But the Alma Ata concept of primary *health* care is wider than has been discussed in this book, because it includes aspects of a country's life and government such as nutrition, sanitation, housing, education or the extent of poverty. Compared with that concept, this book and this chapter have been confined to primary *medical* care.

Support also comes from those countries, such as Finland and Sweden, which, previously concentrating on the developments of secondary and tertiary health services, have reversed their policy. It may also come from a number of other countries at present considering or planning a similar change, in several parts of the world.

But there is a distinction between such evidence of shared beliefs, on the one hand, and, on the other, systematic testing

of the proposition that the structure and process of primary care at its best improves a country's or a locality's health status and reduces costs.

We have been able, on the one hand, to collect clear evidence about international differences in the cost of health services and, on the other, a number of observations and measurements of aspects of primary care which are important for assessing its quality and for which evidence from different countries either has been or could be found. Like Starfield, we have claimed that a correlation can be traced between the cost of a health service and certain aspects of structure and process in its primary care; this negative correlation becomes apparent if countries with lower cost services are grouped together and compared with a group of countries with higher costs. Can we then go on to claim that a country which improves or strengthens its primary care will reduce the cost of its health service? Our evidence, particularly that from the United States and Scandinavia suggests that this might be so, but we have, of course, not been able to exclude the many other possible influences which might account for lower costs. This makes it impossible to regard the correlation as evidence of cause and effect.

The same important limitation applies to such evidence as can be found about the relation between either the health status of a country or the satisfaction of its population with its health service, on the one hand, and the quality of primary care on the other. Differences in health status between the countries observed by us are in any case much less obvious than differences in cost. Meanwhile, the evidence on satisfaction is based on a single study only.

Satisfactory international comparisons of equity, whether in the distribution or the use of health services or in the health status of different social and geographical divisions within countries—do not yet seem to be agreed (Fox, 1989;<sup>48</sup> Taylor, 1992<sup>49</sup>). They have therefore not been discussed in this chapter. Yet this omission is important. *Within* countries, developed or undeveloped, it has been repeatedly demonstrated that no more than one-third of the variation in mortality rates can be attributed to the quality of medical care. Two-thirds of the variation are attributable to the distribution of income in a nation's population. Japan currently

has the highest life expectancy in the world, as well as a relatively egalitarian distribution of income (Horowitz J C, 1993<sup>50</sup>; Wilkinson R G, 1992<sup>51</sup>).

The most we can claim is that our first statement of belief has considerable support from other sources and that it remains a reasonable hypothesis for further consideration in discussions about the quality and costs of health services.

Turning to *our second belief* concerning what good primary care should provide, a very large measure of agreement can be found in the relevant literature, particularly concerning first contact care and long-term personal care. Starfield's important work also stresses comprehensiveness and co-ordination as distinctive and central features of primary care. They are implied in the alternative wording which we have used. Agreement on these features is widespread and encouraging.

It might be objected that the realities of primary care at present do not support all that either we ourselves or Starfield propose. Few countries at present define primary care populations. Some do not yet insist on a specific training for primary care physicians. The acceptance in some countries of specialists as providers of primary care does not favour a high degree of continuity; nor, sadly, does the development of group practice and interprofessional teamwork, when contrasted with the traditional role of the general practitioner or family physician. But our belief is concerned not with the wide range of existing reality, but with what primary care *should* provide—and does already provide, when at its best.

Consideration of the six characteristics which we believe primary care should offer must lead to the conclusion that primary care physicians, like those in other branches of the profession, should receive a training appropriate to their future work and that this should be of a relatively broad and general nature. It should not be biased towards any other particular specialisation. The assumption, still frequently made, that a training in other specialties can be an equally appropriate background to practice in primary care, is not compatible with the six characteristics described. Indeed it has been shown that doctors trained for another specialty,

but working in primary care, do bring a special bias and do lack appropriate training (Mencken and Sheps, 1985;<sup>52</sup> Roos, 1979<sup>53</sup>). The advantages of specialist expertise do not extend beyond the borders of the specialisation (Rhee *et al.*, 1981<sup>54</sup>; Payne *et al.*, 1984<sup>55</sup>; Franks *et al.*, 1992<sup>56</sup>).

Primary care physicians are more likely than specialists to provide continuity and comprehensiveness and these qualities are associated with certain improved outcomes in patients of all ages (Franks *et al.*, 1992)<sup>56</sup>.

We turn finally to *our third belief*—that it is only in a system where the primary care physician has a social/legal obligation and contract to provide 24-hour cover that a health service can offer full access and availability and that gate-keeping is possible.

When primary care physicians provide or arrange care only in office hours, people who have an urgent problem—or think that they have—can only turn to a hospital, with or without the help of an ambulance service. This overloads accident and emergency departments, brings inappropriate problems to them and multiplies delays. The gate is left wide open. Meanwhile, the service lacks the availability offered by home visits or even by telephone discussion with a known person (Braveman *et al.*, 1994; Relman, 1994)<sup>57,58</sup>.

Countries visited by us where primary care physicians have a legal obligation to provide out-of-hours cover are Denmark, Netherlands, United Kingdom, but not Japan, Hong Kong, Singapore, Sweden or Spain (except in Spanish rural areas). In Canada, France, Germany, it could be said that there is a social obligation. The situation in the USA is too varied for classification.

We observed in several countries the inappropriate and excessive use of hospital emergency services when primary care outside normal working hours is not available.

*Overall*, this study shows how much need there is for health status measures and measures of satisfaction which are comparable internationally. There is equal need for features of primary care which are precise, measurable and comparable. Much of the evidence brought forward in this chapter is crude. The difficulties of relating outcomes to process and structure have been emphasised repeatedly.



International measurements do not need visits—most can be found in libraries. But description does need visits. No adequate commentary on primary care can rely on measurements alone. There will always be a need for the experienced observer to look at first hand, in order to comment on those many and important aspects of care which defy measurement.

### *Acknowledgement*

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### REFERENCES

1. DONABEDIAN A. 1983. The Quality of Care in a Health Maintenance Organisation; a personal view. *Inquiry* vol. 20 218–222.
2. WILKINSON R G 1992. Income distribution and life expectancy. *British Medical Journal* 304. 165–8.
3. STARFIELD B. 1992. Primary Care. Concepts, evaluation and policy. New York. Oxford University Press.
4. HOLLAND W W ed. 1991. European Community Atlas of 'Avoidable deaths'. Vol. I. 2nd edition. Oxford University Press.
5. WILLIAMS B and MILLER C A. 1991. Care for young children. Findings from a 10-year study. Arlington. National Centre for Clinical Infant Programs.
6. McCORMICK M. 1985. The contribution of low birthweight to infant mortality and childhood morbidity. *New England Journal of Medicine*. 312. 82–90.
7. WHO 1986. World Statistics Annual. Geneva. WHO.
8. BLENDON R J, LEITMAN R, MORRISON I and DONELAN V. 1990. Satisfaction with Health Systems in Ten Nations. *Health Affairs—Summer*. 185–92.
9. OECD. 1993. Health Data.
10. STARFIELD B. 1979. Measuring the attainment of primary care. *Journal of Medical Education* 54. 361–9.
11. FRY J and HASLER J. 1986. Primary health care 2000. Edinburgh. Churchill Livingstone.
12. PARKER A, WALSH J and COON M. 1976. A normative approach to the definition of primary health care. *Milbank Memorial Fund Quarterly* 54. 415–38.
13. HOLMES C, KANE R, FORD M and FOWLER J. 1978. Towards the measurement of primary care. *Milbank Memorial Fund Quarterly* 56. 231–52.
14. ALPERT T J and CHARNEY E. 1973. The education of physicians for primary care. U.S. Department of Health and Welfare Publication (HRA) 74–3113. Rockville, Md.

15. STEPHENS W J. 1979. An analysis of primary medical care. An International Study. Cambridge. Cambridge University Press.
16. WEINER J and STARFIELD B. 1982. Measurement of the primary care role of office physicians. *American Journal of Public Health* 73. 666-71.
17. WHITE K L. 1967. Medical care research and health service systems. *Journal of Medical Education* 42. 729-41.
18. NHS MANAGEMENT EXECUTIVE. 1993. New world, new opportunities. London. NHS Management Executive.
19. DONABEDIAN A. 1982. The definition of quality: a conceptual exploration. Vol. 2. The criteria and standards of quality. Ann Arbor. Health Administration Press.
20. CARTWRIGHT A and ANDERSON R. 1981. *General Practice Revisited*. London. Tavistock Publications.
21. JEFFREYS M and SACHS H. 1983. *Rethinking General Practice*. London. Tavistock Publications.
22. BUTLER J and CALNAN M. 1987. Too many patients? A study of the economy of time and standards of care in general practice. Aldershot. Avebury.
23. ROYAL COLLEGE OF GENERAL PRACTITIONERS. 1985. What sort of doctor? Assessing quality of care in general practice. Report from General Practice 23. London. Royal College of General Practitioners.
24. ROYAL COMMISSION ON THE NATIONAL HEALTH SERVICE. 1979. Access to primary care. Research paper 6. London. Her Majesty's Stationery Office.
25. PENCHANSKY R and THOMAS J W. 1981. The concept of access; definitions and relations to consumer satisfaction. *Medical Care* 19. 127-40.
26. INSTITUTE OF MEDICINE. 1978. A manpower policy for primary health care. Report of a study. Washington DC. National Academy of Sciences.
27. SCHROEDER S A. 1984. Western Europe responses to physician oversupply. Lessons for the United States. *Journal of the American Association* 252. 373-84.
28. WEINER J. 1988. A comparison of primary care systems in the USA, Denmark, Finland and Sweden: Lessons for Scandinavia? *Scandinavian Journal of Primary Health Care* 6. 13-27.
29. ROYAL COLLEGE OF GENERAL PRACTITIONERS. 1992. The European study of referrals from primary to secondary care. Occasional Paper 56. London. Royal College of General Practitioners.
30. CROMBIE D L, VAN DER ZEE J and BACKER P. 1990. The interface study. Occasional paper 48. London. Royal College of General Practitioners.
31. HUMPHREY C and HUGHES J. 1992. *Medical Audit in General Practice. A practical guide to the literature*. London. King's Fund Centre.
32. IRVINE D H. 1990. Standards in general practice: the quality initiative revisited. *British Journal of General Practice* 40. 75-7.

33. GROL R, MESKER P and SCHELLEVIS F. (eds.) 1988. Peer review in general practice. Nijmegen University. Department of General Practice.
34. STARFIELD B. 1992. Primary Care. Concepts, evaluation and policy. New York. Oxford University Press.
35. BERK A A and CHALMERS T C. 1981. Cost and efficacy of the substitution of ambulatory for inpatient care. *New England Journal of Medicine* 304. 393-7.
36. DRUMMOND M F, LADBROOK A, LOWSON K and STEELE A. 1986. Studies in economic appraisal in health care. Vol. 2. Oxford University Press. 201-51.
37. HORDER J P. 1988. Cost effectiveness of hospital versus community care. in: *Health provision under financial constraint*. ed. Binns and Firth. London. Royal Society of Medicine.
38. MAXWELL R J. 1978. *Health and Wealth*. Lexington.
39. OFFICE OF HEALTH ECONOMICS. 1992. *Compendium of health statistics*. 8th edition. London. Office of Health Economics.
40. MANNING W G, LEIBOWITZ A, GOLDBERG G A, ROGERS W H and NEWHOUSE J P. 1984. A controlled trial of the effect of a pre-paid group practice on use of services. *New England Journal of Medicine* 310. 1505-10.
41. GREENFIELD S, NELSON E C, ZUBKOFF M, *et al.* 1992. Variations in resource utilisation among medical specialists and systems of care: Results from the medical outcomes study. *Journal of the American Medical Association* 267. 1624-30.
42. SJÖNELL G. 1984. Relationship between use of increased primary health care and other outpatient care in a Swedish urban area. Stockholm Sundyberg.
43. PRITCHARD P M M. 1992. Personal communication.
44. LURIE N, WARD N B, SHAPIRO M F and BROOK R H. 1984. Termination from Medi-Cal benefits. Does it affect health? *New England Journal of Medicine* 311. 480-4.
45. LURIE N, WARD N B, SHAPIRO M F and BROOK R H. 1986. Termination of Medi-Cal Benefits. A follow-up study one year later. *New England Journal of Medicine* 314. 1266-8.
46. GERDTHAM U G, SOGAARD J, JOHNSSON O N B and ANDERSSON F. 1990. A pooled cross sectional analysis of the health care expenditure of OECD countries. Paper prepared for a second World Congress on Health Economics. Zürich. September.
47. STARFIELD B. 1991. Primary care and health. A cross national comparison. *JAMA* 266. 2268-71.
48. FOX J. (ed) 1989. *Health inequalities in European countries*. Aldershot. Gower.
49. TAYLOR C E. 1992. Surveillance for equity in primary health care. *International Journal of Epidemiology* 21. 1043-1049.
50. HOROWITZ J C. 1993. Towards a social policy of health. *New England Journal* 329. 130-3.
51. WILKINSON R G. 1992. National mortality rates. The impact of inequality. *American Journal of Public Health* 82. 1082-4.

52. MENCKEN M and SCHEPS C G. 1985. Consequences of an oversupply of specialists: the case of neurology. *Journal of the American Medical Association* 253. 1926–8.
53. ROOS N P. 1979. Who should do the surgery? Tonsillectomy—adenoidectomy in one Canadian province. *Inquiry* 16. 73–83.
54. RHEE S O, LUKE R D, LYONS T F and PAYNE B C. 1981. Domain of practice and the quality of physician performance. *Medical Care* 19. 14–23.
55. PAYNE B C, LYONS T F and NEWHAUS E. 1984. Relationship of physician characteristics to performance quality and improvements. *Health Services Research* 19. 307–32.
56. FRANKS P, CLANCY C and NUTTING P A. 1992. Gate-Keeping Revisited—Protecting Patients from over-treatment. *New England Journal of Medicine* 327. 424–429.
57. BRAVEMAN P, MYLO SCHAAF V, EGERTER S, TRUDE BENNETT P H and SCHECTER W. 1994. Insurance-related differences in the risk of ruptured appendix. *New England Journal of Medicine*. 331. 444–449.
58. RELMAN A S. 1994. Medical Insurance and Health—What about managed care? *New England Journal of Medicine*. 331. 471–472.

## APPENDIX I

### *Demographics*

Country	IMR per 1000 births	Life expectancy (years)	
		M	F
US	9.9	73	80
Sweden	5.7	75	81
Netherlands	7.1	74	81
Germany	?	73	79
Japan	6.0	76	82
Singapore	6.7	72	77
Hong Kong	6.9	75	80
Canada	7.3	74	81
Denmark	8.8	73	79
Spain	9.9	74	80
France	7.5	73	81
UK	8.4	73	79

*Source:* Economist. Pocket World in Figures. 1992.  
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APPENDIX II  
APPENDIX II

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	<i>Neonatal mortality</i>
Australia	5.43
Belgium	5.21
Canada	5.12
Denmark	5.10
Finland	4.01
Germany (Federal Republic)	4.77
Netherlands	4.80
Sweden	3.95
United Kingdom	5.28
United States <sup>a</sup>	6.71

*Source:* National Center for Health Statistics Data Bank. (Courtesy Robert Hartford and Sam Notzon.)

<sup>a</sup>The relatively high mortality rates for the United States as a whole are also found among the white population only, with a neonatal mortality rate of 5.81, a postneonatal mortality rate of 3.13, and a total infant mortality rate of 8.94.

APPENDIX III  
*Completed immunisation rates in preschool children  
1985-87*

	<i>DPT</i>	<i>Measles</i>	<i>Polio</i>
Belgium	95.0	90.0	99.0
Denmark	94.7	82.0	100.0
Finland	90.0	81.0	95.0
Germany (Federal Republic)	95.0	50.0	95.0
Netherlands	96.9	92.8	96.0
Sweden	99.4 <sup>a</sup>	93.6	98.2
United Kingdom	87.0	76.0	98.2
	(pertussis 73.0)		
United States	64.9	60.8	55.3
(whites only)	(68.7)	(63.6)	(58.9)

*Source:* Williams and Miller. Preventive Health Care for Young Children: Findings from a 10 country study and directions for US policy. Arlington VA. National Center for Clinical Infant Programs. 1991, table B.10, p. 76.

<sup>a</sup>Age 3, except age 4 in United States.

## APPENDIX IV

*Percentage of live-born infants who are of low birthweight 1983-4*

Australia	5.8
Belgium	5.4
Canada	5.8
Denmark	5.7
Finland	3.7
Germany (Federal Republic)	5.5
Netherlands	4.0
Sweden	4.2
United Kingdom	6.7
United States	6.8

*Source:* Percentage of live-born infants who are of low birthweight, 1983-4. World Statistics Annual. World Health Organisation. Geneva. 1986, pp. 47-9.

## APPENDIX V

## Satisfaction Blendon 1990

THE PUBLIC'S VIEW OF THEIR HEALTH CARE  
SATISFACTION WITH SYSTEM IN 10 NATIONS, 1990

	Minor changes needed <sup>1</sup>	Fundamental changes needed <sup>2</sup>	Completely rebuild system <sup>3</sup>	Per capita health expenditure (U.S. dollars)
Canada	56%	38%	5%	\$1,483
Netherlands	47	46	5	1,041
West Germany	41	35	13	1,093
France	41	42	10	1,105
Australia	34	43	17	939
Sweden	32	58	6	1,233
Japan	29	47	6	915
United Kingdom	27	52	17	758
Italy	12	46	40	841
United States	10	60	29	2,051

<sup>1</sup>On the survey, the question was worded as follows: "On the whole, the health care system works pretty well and only minor changes are necessary to make it work better."

<sup>2</sup>There are some good things in our health care system, but fundamental changes are needed to make it work better.

<sup>3</sup>Our health care system has so much wrong with it that we need to completely rebuild it.

*Source:* Blendon The public's view of their health care systems in 10 nations. Health Affairs. 1990, pp. 185-192.

## APPENDIX VI

***Primary health care defined***

1.4 The best, if rather elaborate, definition of primary health care has come from the World Health Organisation<sup>6</sup>. The WHO describes primary health care as “essential care based on practical, scientifically sound and acceptable methods and technology, made universally available to individuals and families in the community through their full participation and at a cost the community and country can afford and maintain at every stage of their development, in the spirit of self-reliance and self-determination”.

1.5 The definition goes on to say that primary health care 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 and economic developments of this country. It is the first level of contact for individuals, the family and the community with the national health system, bringing health care as close as possible to where people live and work, and provides promotive, preventive, curative and rehabilitative services accordingly”.

1.6 Primary health care is at its most effective when integrated with other health care services—including, of course, hospitals—and when it works in close collaboration with local social, welfare, environmental, and education systems—for example, through ‘healthy alliances’.

***Cardinal principles***

1.7 Primary health care is highly professional and intensely personal. People are entitled to expect:

- Safe, effective clinical practice.
- Accessible and appropriate local services.
- Access to “named” professional practitioners, including “named nurses”.
- Services that can overcome barriers of language, discrimination and deprivation.

- Twenty-four hour cover.
- Confidentiality at all times.
- Continuity, within a minimum number of individuals involved.
- A range of treatment choices and options to meet their health needs.
- Value for money.
- Clarity of provision without confusion over who does what.
- The ability to be involved in decision-making about their care and to be informed about the range of choices available to them.
- Services that work well together and with other agencies.

*Source:* NHS Management Executive 1993. 'New World, New Opportunities'. London. HMSO.

## APPENDIX VII

### 1. Schroeder (1984), comparing five countries (including Belgium)

	West Germany	Netherlands	United Kingdom	United States	Belgium
% population covered for					
health care	100	100	100	87	99
primary care physician assigned to defined population	no	yes	yes	no	no
self-referral to specialists	yes	no	no	yes	yes

*Source:* Schroeder S A. 1984. *Journal of the American Association*. 252. pp. 373–384. Copyright 1984 American Medical Association.

2. Weiner (1988) compared four countries (including Finland) and made a general assessment of the degree to which three of the main features listed above (first contact care, comprehensiveness and co-ordination), together with family centredness and community centredness, were attained, relative to 'idealised' standards described in the literature. This assessment involved visits to providers, planners and researchers in the four countries. Taking comprehensiveness as an example from this study:—



	Denmark	Sweden	USA fee-for-service	USA hmo	Finland
Range of services available	±	+	±	+	+
Focus on prevention (children)	+	+	±	±	+
Focus on prevention (adults)	-	-	+	±	-

Source: Weiner J. Scandinavian Journal of Primary Health Care. 1958. 6. pp. 13-27.

3. The European study of referrals from primary to secondary care (R.C.G.P. 1992) covers six countries included in the present study, together with nine others. The most relevant information is, first, about the percentage of general practitioners among all doctors (Table 6.1)

Denmark	25%	Belgium	46%
France	54	Germany DDR	50
Germany FRG	34	Hungary	24
Netherlands	18	Republic of Ireland	42
Spain	15	Italy	26
United Kingdom	42	Norway	29
		Portugal	23
		Switzerland	15
		Yugoslavia	42

The same study records the delay between referral and specialist first appointment (mean delay in days):—

Denmark	26.2	Belgium	7.5
France	6.3	Hungary	1.5
Germany FRG	6.9	Republic of Ireland	27.4
Netherlands	10.8	Italy	10.7
Spain	12.0	Norway	33.7
United Kingdom	36.3	Portugal	28.5
		Switzerland	12.5
		Yugoslavia	7.1

All countries 18.2

Source: RCGP. Occasional Paper 48. Table 6.1.

4. The INTERFACE STUDY (Grombie, van der Zee and Becker, 1990) covers sixteen countries in Europe. Two tables are particularly relevant. The first (Table 5.5) is about the percentage of services never or almost never provided by 16 doctors in each country. The services are subdivided into four categories.

PERCENTAGE OF SERVICES NEVER OR ALMOST NEVER PROVIDED BY 16 GENERAL PRACTITIONERS IN 15 EUROPEAN COUNTRIES

Country	Total %	Preventive and supportive %	Minor surgery %	X-ray %	Clinical laboratory %
Spain	80	41	100	90	93
Portugal	N/A	40	N/A	100	88
France	68	13	71	95	86
Italy	68	25	88	100	73
Austria	64	43	33	100	70
Republic of Ireland	59	8	14	100	76
Holland	55	12	50	100	60
Belgium	53	16	25	100	59
Great Britain	52	12	57	100	52
Sweden	45	7	13	100	33
Denmark (outside Copenhagen)	44	12	38	100	38
Denmark (Copenhagen)	41	9	25	100	33
Switzerland	33	0	29	55	44
Norway	25	0	17	80	10
West Germany	19	12	38	20	19
Finland	10	16	14	0	10
All countries	49	17	41	83	53

Table 4.4 shows for each country the proportion of directly accessible professions (medical specialties) within the system. For this purpose the denominator is the total number of professional groups available within the system. (In the Federal Republic of Germany there were 33 professional services available and 82% of these were contacted by direct access. In the United Kingdom, very few specialists can be approached by direct access; they exist in such specialties as venereal diseases and trauma.

**ACCESSIBILITY OF HEALTH CARE SYSTEMS:  
SPECIALIST CARE (PROPORTION DIRECTLY  
ACCESSIBLE PROFESSIONS)**

Rank Order	Health care system	Rate	N (of relevant professions)
1	Federal Republic of Germany	.82	33
2	Ireland S <sub>2</sub> (medium/high income)	.81	31
3	Belgium	.79	33
4	Switzerland	.78	32
	Finland S <sub>2</sub> (private)	.78	32
6	Sweden	.74	34
7	Denmark Copenhagen	.68	34
8	France	.65	34
9	Austria	.62	31
10	Denmark outside Copenhagen	.29	34
11	Portugal	.18	32
12	Italy	.15	33
13	The Netherlands (private)	.13	34
16	Ireland (low income)	.09	34
	The Netherlands (public)	.09	34
	Norway	.09	33
	Spain	.09	33
18	Finland (public)	.03	32
19	United Kingdom	.00	32

*Source:* RCGP. Occasional Paper 48. Tables 4.4, 5.5.

## APPENDIX VIII

***Access to Specialist Physicians and the Cost of Health  
Care***

	Percentage of GNP spent on Health Care
Countries with direct uncontrolled access by patient to the specialist	
West Germany	9.4
United States	8.7
Sweden	8.5
France	7.9

	Percentage of GNP spent on Health Care
<hr/>	
Countries with direct access to specialists, but where patients will have to pay the difference between the specialist and general-practitioner rates of fee	
Australia	7.3
Canada	7.1
Italy	7.1
Switzerland	6.9
Countries where access to the specialist is normally by referral from the primary-care physician	
Netherlands	7.9*
United Kingdom	6.1

*Sources:* Chiefly J G Simanis *National Health Systems in Eight Countries* (Washington, D.C.: DHEW, 1975), for referral patterns supplemented by my own enquiries in the countries concerned.

\*Why, then, is the Netherlands' expenditure on health care comparatively high? Two major reasons are prosperity (relative to the United Kingdom) and lack of effective control over costs. Another interesting point is that methods of paying physicians may make a major difference. In the Netherlands the general practitioner is essentially salaried and the specialist works on a fee-for-service basis. There is therefore a greater incentive to refer time-consuming cases than in the United Kingdom, where the specialist is salaried and the general practitioner receives fees for at least some services.

from: Maxwell (1978) with permission.

## APPENDIX IX

### *Cross-national Comparisons of Primary Care*

#### **Criteria for Rating of Health System Characteristics Related to Primary Care**

*Type of system.* Regulated primary care or public health centers are considered to be the highest commitment to primary care. Regulated primary care implies that national policies influence the location of physician practices so that they are distributed throughout the population rather than concentrated in certain geographic areas. Public health centers are also assumed to represent the equitable distribution of physician resources. Intermediate scores connote systems where incentives for equitable distribution are present and moderately effective.

*Type of primary care practitioner.* Generalists (family or general practitioners) are the prototypical primary care physicians because the nature of their training is exclusively devoted to primary care practice. General pediatricians and general internists are considered 'intermediate' primary care practitioners because their training has a major subspecialty focus. Other specialists are not considered primary care physicians because their training is focused on subspecialty issues.

*Financial access to care.* Universal government-sponsored national health or a national health entitlement is considered most conducive to access to primary care services. National health insurance sponsored by nongovernmental agencies is considered intermediate because of the absence of uniform benefits. Absence of national health insurance is not considered conducive to access to primary care.

*Percentage active physicians who are specialists.* A value below 50% is considered indicative of an orientation toward primary care. Values of 50–75% are considered intermediate and values above 75% are considered to indicate a specialty-oriented system.

*Salary ratio of primary care physicians to specialists.* A high ratio of 0.9:1 (or above) of average salary of primary care physicians to specialty physicians is considered an incentive toward primary care. A low ratio (0.8 or less) is considered an incentive toward a specialty oriented system. Ratios between .8 and .9 are considered intermediate.

System characteristics not scored for primary care are where care is provided (since there is not evidence that one type of site is better than another), the type of reimbursement of generalists and of specialists (since the impact of type of reimbursement on incentives for primary care practice is not well known), whether or not generalists care for patients in hospitals (since there is little evidence on the impact of this feature of a health services system), and whether or not specialists are restricted to hospitals (since consultations with primary care physicians might be enhanced by limited specialty practice in the community). Even though the assignment of primary care services to a defined geographic area is considered conducive to community orientation and hence potentially pursuant to high level primary care, no points are assigned since community orientation is assessed directly.

### **Criteria for Rating Practice Characteristics Related to Primary Care**

*First contact.* First contact implies that decisions about the need for specialty services are made after consulting the primary care physician. Requirements for access to specialists via referral from primary care are considered most consistent with the first-contact aspect of primary care. The ability of patient to self-refer to specialists is considered conducive to a specialty-oriented health system. Where there are incentives to reduce direct access to specialists but no requirement for a referral, an intermediate score is assigned.

*Longitudinality.* Longitudinality connotes the extent of relationship with a practitioner or facility over time that is not based upon the presence of specific types of diagnoses or health problems. Highest ratings are given where the relationship is based upon enrolment with a source of primary care, with the intent that all nonreferred or nondelegated care will be provided by the practitioner. Lowest rates are given where there is not an implicit or explicit relationship over time and intermediate scores are assigned where this relationship exists by default rather than intent.

*Comprehensiveness.* The extent to which a full range of services is either directly provided by the primary care physician or specifically arranged for elsewhere is the measure of comprehensiveness. Highest ratings are given to arrangements for the universal provision of extensive and uniform benefits and for preventive care. Intermediate ratings are given to arrangements for the provision of *either* extensive benefits or preventive care, or for concerted efforts to improve these for needy segments of the population. Low ratings are given when there is no policy regarding a minimum uniform set of benefits.

*Coordination.* Care is considered coordinated where there are formal guidelines for the transfer of information between primary care physicians and specialists. Where this is present for only certain aspects of care (such as long-term care), intermediate ratings are given. Low ratings reflect the general absence of guidelines for the transfer of information about patients.

*Family centeredness.* High ratings are given to explicit assumption of responsibility for family centred care. One point is assigned if variable or moderate. Low ratings are given if largely lacking.

*Community orientation.* High ratings are given where practitioners use community data in planning for services or for the identification of problems. Intermediate values are assigned where clinical data derived from analysis of data from the practice is used to identify priorities for care. Low ratings are given when there is little or no attempt to use data to plan or organise services.

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*Source:* Starfield, B. Primary Care, Concepts, Evaluation and Policy. OUP. New York. 1992. pp. 219-220. By permission of Oxford University Press.

## 6

### *Issues and Options Raised by this Study*

The aim of this study was to examine and compare primary health care in selected countries with different health systems.

We collected and analysed available data, supplementing these with our own observations and interpretations.

It proved difficult to compare the available data from different countries because they were presented in different ways, with differing definitions and measurements. However, it was possible to arrive at general impressions. We found that primary care existed and was practised in some form everywhere, but that its patterns differed, influenced by national historical, cultural, social, economic and political factors.

A particularly important impression was about the current strength and status of primary care within the health system as a whole. Following Starfield's (1992)<sup>1</sup> criteria, we decided that there were three grades in the countries we visited:

- strong: Canada, Denmark, Netherlands, United Kingdom
- intermediate: France, Germany, Hong Kong, Singapore, Spain
- weak: Japan, Sweden, United States of America

Among the reasons for the weakness were pay differentials between specialists (high) and generalists (low); little emphasis on primary care in medical schools; low status of academic departments of primary care (if they exist); poorly organised postgraduate preparation, i.e., training that is shorter and less rigorous than the training for other specialties. All these factors influence career choice, but in at least one country only those students with the highest marks in the final examination can enter a specialised career with the best training posts, leaving primary care to those who are less successful.

In most systems specialists have long held the main political power and influence.

Before moving to the *options/questions* which seem to us to emerge as most important at the end of this study, it may be useful again to summarise what we see as the essential role of primary care.

It should provide services which, being based on patients' needs:

- (1) are available and accessible for first-contact professional care when the individual or family decide that this is required;
- (2) are comprehensive because
  - (a) they include assessment, diagnosis, management and prevention;
  - (b) they take account of physical, psychological and social aspects of patients' problems;
  - (c) they consider the family and community, where appropriate, as well as the individual patient;
- (3) offer long-term continuity with a person or a team;
- (4) are co-ordinated internally and with secondary specialist services, through collaboration and referral.

We also confirm our belief that primary care should, if possible

- (a) be free at the time of use;
- (b) be provided for the whole of a small population (e.g., 200: in a rural area, up to 25,000 in an urban area).
- (c) include a contract for 24-hour cover, so that gate-keeping is possible.

The most important *options/questions* which emerge from this study can be raised under the headings: What sort of care? Who should provide it? Where? With what outcomes?

#### WHAT SORT OF CARE?

- (1) How much should be provided at the primary rather than the secondary level? The present trend, in contrast with the recent past, is to transfer as much care as possible from secondary to primary: economic pressures and



technical developments favour this process. The preference of patients for home care varies from country to country. This transfer of care seems likely to continue, but it demands increased training and teamwork, supporting professionals who can together offer more comprehensive personal, family and community care. The improvement of health and prevention of disease challenges them to increased understanding and involvement with psychological and socio-economic problems.

- (2) Are people prepared to accept more responsibility for their own health—for example, in not smoking, regular exercise, safe sex, sensible diet, weight control and moderation in the use of alcohol and other drugs? With increased information through the media and a changing attitude to professional authority, this seems probable.
- (3) Because primary care provides the first professional contact, the work represents what people themselves judge to be their need. Half the work seems likely to continue to be with minor self-limiting conditions, one third with chronic diseases and one sixth with acute major life-threatening situations. Rightly or wrongly people remain more concerned with these experienced threats than with prevention. Persistent advocacy and education are needed if coverage is to be complete for the limited number of preventive measures which are effective.
- (4) 24-hour care? Who should provide out-of-hours cover at night, weekends or during holidays? We saw many good examples of organised rotas, for instance in Denmark and the Netherlands, where GPs co-operated to cover their local communities. It is not acceptable that patients should have no alternative except to take their problems to a hospital or fend for themselves—as we also saw.

#### WHO SHOULD PROVIDE PRIMARY CARE?

Primary care is being provided at present by many different sorts of professional, generalist and specialist physicians and others—nurses, midwives, physiotherapists, psychologists, counsellors and traditional healers.

Generalist or specialist? The most important issue at

present is whether generalist or specialist physicians should offer primary care. Generalists dominate in Canada, Denmark, Hong Kong, the Netherlands, Singapore and the United Kingdom. Specialists or specialoids (paediatricians, internists, gynaecologists) provide it where there is direct access to them and free choice, as, most notably, in the USA or Germany (and France to a lesser extent). Free choice exists unless there are regulations to prevent it.

The alternative to free choice is the 'gate-keeper' system, requiring referral to most specialists through a generalist (and, in principle, referral back). In the United States gate-keeping is provided by health maintenance organisations. It is only possible where a doctor or practice is under contract to provide a 24-hour service for patients who are registered with them.

There are pros and cons. Specialists working in primary care tend to offer longer consultations, to carry out more investigations and more treatments, to see a higher proportion of more seriously ill patients and to have higher costs per consultation. There has been some evidence from the United States (Payne *et al.*, 1984<sup>2</sup>, Rhee *et al.*, 1981<sup>3</sup>) that specialists working in primary care offer higher quality, but only within the limits of their particular specialty.

By contrast continuing care is more difficult for specialists to provide, particularly long-term continuing care for a wide variety of problems. Comprehensive care is also more difficult for specialists who, by definition, concentrate on a limited range of clinical problems and techniques. There is a greater risk that assessment will be biased.

Grouping of different specialists in one service is a possible response to these limitations, but where the patient is free to consult more than one physician, failures of communication become more frequent. An essential feature of the generalist's role as gate-keeper is that a referral should be accompanied by a case-history and that the specialist responds with a report which then contributes to a patient's long-term health record. The record should move if the patient moves or changes his/her personal doctor.

Another response is in group practices which encourage generalists to develop special interests. Many doctors in primary care want to develop particular interests or skills.

This can contribute to the work of the group as a whole, by providing additional expertise in situ, for instance in rheumatology, diabetes, asthma, child care, psychiatry. Some generalists may have acquired skills in endoscopy, for example. But to maintain special skills or knowledge there must be ongoing experience and updating. This may be possible in larger group practices and in collaborative work with specialists, but the usual primary care population may not yield a sufficient proportion of less common disorders in a particular field. There is also a risk that the doctor's special interest will gradually distort his/her role as a generalist by attracting too many patients with one group of problems, leaving too little time for the others. We saw examples of this.

### DOCTOR OR NURSE?

Another option in some of the countries we visited is whether primary care should be provided by nurses. This question takes different forms. At one extreme nurses have long been providing front-line nursing care in many countries. At the other extreme, where doctors are in short supply, nurses with or without additional training are carrying out many of the tasks more commonly done by doctors. In USA and Canada, for example, 'nurse practitioners' fill a gap and have special training for the purpose, although shorter than the training of doctors in medical schools. The quality of the care which they give has been compared with that of doctors (Spitzer et al, 1974<sup>4</sup>). The desire of many nurses to play a larger (and perhaps more technical) role in health care makes it likely that nurses will take on more tasks in primary care, even in countries where the coverage of the population by doctors is adequate. There is more than enough work for both. This trend is therefore to be welcomed, provided that it is not used for economic reasons to substitute workers with less appropriate training for those with more, when this is to the disadvantage of patients.

**WHERE SHOULD PRIMARY CARE BE PROVIDED?**  
Providing available and accessible care has to take account of local geography and the extent to which local resources can provide what is needed.

Thus in urban areas the site may be a single physician's private office or the premises of a group practice, housing a team of doctors, nurses and other professionals. These may be privately owned or provided by government, purpose-built or adapted. Government-owned premises can be large enough to act as polyclinics, combining generalist and specialist services.

Should primary care be provided from hospitals? Insofar as accident and emergency services form part of primary care, this is inevitable. But such departments are less accessible geographically than most buildings intended for primary care and they rapidly become less available when misused for dealing with problems which are not emergencies. At best providing brief episodic care, they cannot fulfil the essentials of primary care listed above.

Should general practitioners or family physicians look after their own patients in hospitals? This must depend on the nature of the patient's problem, the type, size and proximity of hospital, the willingness of the doctor to give time to this function and the availability of specialist support when needed. Patients appreciate continuing care by their 'own doctors' in this way. Many doctors enjoy something which they see as a privilege, but the benefits and costs have not been assessed. There is a strong case for general practitioners to look after their own patients in a nearby 'community' hospital, developing shared care with specialists.

Should patients be looked after and visited in their homes? The amount of home visiting by doctors has declined in all systems, chiefly because of the time required and the congestion of traffic in cities. Nevertheless it continues and will continue to be an important part of primary care, valued in many countries by patients and doctors alike, both as a privilege and as an opportunity to see the living conditions of the family and local community. There are many disabled, handicapped or elderly patients who particularly benefit from regular visiting. If this is not done by a doctor, it should be done by nurses who are members of the primary care team.

#### WITH WHAT OUTCOMES?

Within primary care there are, as we have seen, wide variations in many different aspects. As in other fields, activities

need to be submitted to critical questioning, checks and comparisons to eliminate processes which have no useful outcome and to reinforce those which are effective or valuable in other ways. Costs have also to be considered in every country.

The measures needed can only be obtained through improvements in data collection and evaluation as part of audit exercises. Although computerisation and other information technologies are becoming available in primary care services, they are seldom yet adequate to provide answers.

New trends in particular need to be monitored and compared with existing alternatives. For example, do 'managed care' or 'budget holding' improve care? Reduce costs?

### FINAL COMMENTS

Primary health care is an inevitable and essential level of care in the structure of all systems. It has its own skills and expertise, with its own requirements for education, training and research.

There is no single national best-buy system of health care suitable for all nations nor any single form of primary care that would be acceptable.

Alongside the questions which are being debated in most of the countries we visited and which have been outlined in this chapter, we found some common trends. Among the most important are trends:

- (1) towards greater involvement of individual patients in decision-making and representation of patients in discussions on policy;
- (2) towards the transfer of care from expensive large institutions towards smaller ones where people live and work—'the community';
- (3) towards the elimination of ineffective processes of care through critical review of performance;
- (4) towards group practice and teamwork between a number of professions in direct contact with patients—'the primary care team';
- (5) towards shared care between generalists and specialists,

particularly in obstetrics and for chronic disorders such as diabetes or asthma or psychiatric/mental illness;

- (6) towards the inclusion in assessment of (a) environmental, social and economic problems affecting health, (b) mental and emotional reactions in the individual at home and at work;
- (7) towards using the concept of 'at risk groups' for preventive purposes;
- (8) towards 'managed care', 'fund holding' and 'purchaser-provider' arrangements in the organisation and remuneration of doctors, nurses and other staff;
- (9) towards acceptance that change is constant and inevitable.

In a changing world primary care needs its own strong, imaginative and creative professional leadership, supported by appropriate education, training and research; but leadership depends on information and consultation.

Information technology and rapid travel have made it easier for us to learn from each other within our varied systems of primary care. We saw many examples of excellent practice in all the countries we visited. They contribute to a network through which a core of excellence can be created.

#### REFERENCES

1. Starfield B. 1992. *Primary Care. Concept, Evaluation and Policy*. New York. OUP.
2. Payne B C, Lyons T F and Neuhaus E. 1984. *Relationship of Physician Characteristics to Performance Quality and Improvement*. Health Services Research. 1993. 307-332.
3. Rhee S O, Luke R D, Lyons T F and Payne B C. 1981. *Domain of Practice and the Quality of Physician Performance*. Medical Care. 19 14-23.
4. Spitzer W O, Sackett D I, Sibley J C, Roberts R S, Gent M, Kergin D J, Hackett B C and Olynich C A. 1974. *The Burlington Randomized Trial of the Nurse Practitioner*. New England Journal of Medicine. 290. 251-6.