



LONDON HEALTH CARE 2010

Changing
the future of
services in
the capital



KING'S FUND COMMISSION ON THE FUTURE OF LONDON'S ACUTE HEALTH SERVICES

London Health Care 2010
Changing the future of services in the capital

London Health Care 2010

*Changing the future of services in
the capital*



King's Fund Commission
on the Future of London's Acute Health Services

© 1992 King's Fund

All rights reserved. No part of this publication may be reproduced, stored in any retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without prior permission.

ISBN 0 9518893 5 4

Published by the
King's Fund London Initiative
2 Palace Court
London W2 4HS
(telephone 071-727 0581)

Cover photograph by
Philip Starkling
Design and print by Intertype

Contents

List of boxes, figures, maps and tables 6

Executive summary 9

Definitions 11

Introduction 15

I The context

1 London health in context 19

2 Health services in London: An historical and policy perspective 22

II The present

3 Londoners: Their health and attitudes to health care 39

4 London's health services today 45

5 Medical education and clinical research in London 60

III The future

6 Twenty-first century health care in London: The Commission's strategy 69

7 Changing the future of health care in London: The Commission's recommendations 89

References 99

Appendix 1 Membership of the King's Fund Commission 102

Appendix 2 Terms of reference 103

Appendix 3 The work of the King's Fund Commission 104

Appendix 4 Funding development of primary and community health care in London 107

BOXES, FIGURES, MAPS AND TABLES

- Box 2.1 One hundred years of enquiries into health services in London 27
 - 2.2 Change in London stimulated by enquiries 30
 - 2.3 Hospital closures in London 1979–87 32
- 6.1 Two London women with breast cancer in 2010 82
- 6.2 Orthopaedics in the twenty-first century 83
- 6.3 A London child with asthma in 2010 83
- 6.4 Dermatology in 2010 84

- Figure 1.1 Estimated rate of unemployment in the London Boroughs, February 1992 20
 - 2.1 London population trends, 1801–2011 23
 - 2.2 Distance of Thames Regions from RAWP targets, 1977–78 – 1988–89 31
 - 2.3 Average available acute beds per 1,000 resident population, NHS hospitals, 1982–90 31
 - 4.1 Who is treated in London status areas, patient flows, 1988–89 51
 - 4.2 Where Londoners are treated, patient flows, 1988–89 51
 - 6.1 Health services 2010 77
 - 6.2 Current provision of major acute hospitals in London 86
 - 6.3 An illustrative example for a future pattern of health services in London 87

- Map 1 Greater London: Health service and local government boundaries 12
 - 2 The district health authorities of London by status category 14

- Table 2.1 Growth in independent medical/surgical hospital capacity, 1977–91 34
 - 2.2 Independent and public sector care home capacity for elderly, chronically ill, and physically disabled people, 1991 34
 - 3.1 Area variations in all-cause mortality, all ages, 1985–89 (SMRs) 41
 - 3.2 Area variations in avoidable mortality, 1985–89 (SMRs) 42
 - 3.3 Public dissatisfaction with the NHS, 1991 42
 - 3.4 Public perceptions of need for improvement in health services, 1991 43

Table 4.1	Health care expenditure, 1989–90 (£ billion)	46
4.2	Available NHS beds per 10,000 resident population by status category, all acute specialties group, 1989–90	47
4.3	WTE staff numbers per 100,000 residents by staff group, 1989–90	48
4.4	Annual throughput by status category, all acute specialties group, 1989–90	49
4.5	Average length of stay by status category, all acute specialties group, 1989–90	49
4.6	WTE staff per 10,000 episodes, all acute specialties group	50
4.7	Average cost per episode by status category, all acute specialties group, 1989–90	50
4.8	A comparative profile of district nursing services in London, 1989–90	54
4.9	FHS expenditure per capita resident population, 1989–90	55
4.10	A comparative profile of GP services in London, 1989–90	56
5.1	The medical schools of London University	60
5.2	Postgraduate institutes of London University	61
5.3	London's teaching hospitals	62
5.4	London's postgraduate teaching hospitals	62
6.1	Estimated reductions in bed needs for seven acute specialties by 2010	85
7.1	The Commission's recommendations for the future organisation of medical education in London	96
A4.1	Estimated reductions in bed needs for seven acute specialties by 2010	109
A4.2	Estimated levels of surplus beds in 2010 at varying hospitalisation rates and activity levels	109
A4.3	Major acute hospitals and Special Health Authorities in London	110
A4.4	Estimated savings from reduction in sites and bed numbers – revenue estimates	113

EXECUTIVE SUMMARY

London Health Care 2010: Changing the future of services in the capital analyses the interlocking problems posed by health services, medical education and research in the capital. It warns that health services in London may become unsustainable unless there is the political will to back a strategy of fundamental reform. It recommends a radical programme of investment and restructuring to reshape services to meet the challenges of the new century.

The present

Overall, Londoners receive a poor deal from services as they are presently organised. Despite the fact that Londoners' overall health status is as good or better than that of people living in comparable parts of England, they express greater dissatisfaction with health services. Inner city residents have difficulty getting standard hospital care because of the concentration of specialist provision in the capital's central hospitals, whereas people living in outer London have poor access to specialist care. Large groups, such as elderly people and those with mental health problems, are especially disadvantaged.

Overall, in 1989-90 some 2.9 billion – or around 20 per cent – of all English hospital and community health services expenditure went on services in the city, which contains 15 per cent of the country's population. An additional £266 million was spent on London's Special Health Authorities which have a largely London-based caseload while retaining national responsibilities for postgraduate education and research.

Implications of the NHS reforms.

Health care in London costs an average of 20 per cent more than elsewhere in England, with services in outer-London close to the national average and care in the inner-city costing 45 per cent more. An episode of care in a London teaching hospital – at an average of £1,052 – costs almost twice as much as one in a non-teaching hospital in the capital.

The high cost of treatment in inner London will diminish traditional flows of patients from outer London and elsewhere in the south east. At the same time, the funds available to inner London purchasers will fall as they become determined by the numbers of people living locally. The introduction of charges for land and equipment will increase London's costs further relative to other NHS providers. There is a real risk that services for Londoners may be jeopardised, especially if costs per case in inner-London increase still further as a result of carrying a higher proportion of fixed costs as volumes fall.

Medical education and research

This would impose new strains on London's medical education and research capacity, which has already been eroded by persistent problems with services. London trains a third of all medical students in the United Kingdom. Some £300 million were spent on medical education in London in 1989/90, with an additional £130 million in service increment for teaching and research going directly to London health authorities with teaching responsibilities. However, many of the capital's medical schools do not offer a sufficiently broad university-based programme of medical education. Nor can the traditional teaching hospitals provide comprehensive clinical experience for doctors in the next century. Medical research in the capital is fragmented and divorced from the basic science departments of the University of London.

Future developments

Demographic, technological and social changes are forging new patterns of health care. Changes in public education and expectations will enable people to be much more actively involved in decisions affecting their treatment. Advances in information and health care technology will allow a considerable proportion of the work that currently takes place in outpatient and other acute hospital settings to shift into primary and community-based care. Hospitals undertaking acute clinical care are likely to become smaller and more specialised.

The Commission's Recommendations

Services in London must be reshaped if they are to respond to these challenges. Without offering a prescriptive blueprint, *London Health Care 2010* outlines a pattern for services in which primary health care is central, and draws on a wider range of community based and hospital services to provide well-integrated patient care.

The King's Fund Commission recommends a £250 million programme of investment in London's primary and community-based health services. Acute care should be located on fewer sites and the provision of specialist services should be rationalised. Costings undertaken for the Commission indicate that this programme is achievable within existing resources, since the consolidation of hospital services should free monies for reinvestment.

Medical education and research should be focused on five new Faculties incorporating existing medical schools and postgraduate institutes. These would contract with a wide variety of London providers for the clinical training of medical students. The number of doctors trained in London should be reduced by a third.

This programme will only be successful if there is the political will to back fundamental change. A task force directly accountable to the Secretaries of State for Health and for Education should be established to implement it by working through the existing authorities.

DEFINITIONS

London

Defining London is difficult. The health service, the metropolitan police, the electricity and gas boards, post office, telecommunications and water authorities all have different definitions of the city. In some contexts, the area enclosed by the orbital M25 motorway is now coming to mean London.

The King's Fund Commission has used the following definitions for London:

Greater London

The area administered by the Greater London Council (GLC) before its abolition in 1985 (see Map 1).

Inner London

The area covered by the Inner London Education Authority (ILEA) before its abolition in 1989. This includes the health districts of Riverside; parts of Parkside; City and Hackney; Bloomsbury and Islington; Hampstead; Tower Hamlets; Greenwich; Lewisham and North Southwark; Camberwell; West Lambeth; and Wandsworth.

Outer London

This covers parts of Greater London not included in the old ILEA area, and includes the health districts of Barnet; Ealing; Harrow; Hillingdon; Hounslow; parts of Barking, Havering and Brentwood; Haringey; Enfield; Newham; Redbridge; Waltham Forest; Bexley; Bromley; Croydon; and parts of Kingston; Merton and Sutton; and Richmond.

In addition, the Commission's report uses a set of terms derived from the King's Fund Institute's analysis of health and health care in London, which compares parts of the capital with parts of other English cities with similar characteristics (Benzeval *et al.*, 1992; Boyle and Smaje, 1992a). These are:

Inner deprived London

This term groups together the London health districts of Parkside; Riverside; Hampstead; Bloomsbury and Islington; Haringey; City and Hackney; Tower Hamlets; Newham; Lewisham and North Southwark; Camberwell; West Lambeth; and Wandsworth in order to make comparisons with equivalent parts of other major English cities.

Map 1 Greater London: Health service and local government boundaries

In health service terms Greater London is divided between four Regions. Outer London district health authority (DHA) boundaries (shown in black) tend to coincide with borough boundaries (shown in blue), although there are three which also incorporate the neighbouring non-London districts of Spelthorne, Esher and Havering. Inner London district health authority areas depart substantially from borough boundaries.

Family health service authorities (FHSAs) (formerly known as family practitioner committees (FPCs)) cover London boroughs or groups of boroughs, and are indicated by blue shading. They are:

- 1 Barking and Havering
- 2 Barnet
- 3 Brent and Harrow
- 4 Bromley
- 5 Camden and Islington
- 6 City and East London (City, Hackney, Newham and Tower Hamlets)
- 7 Croydon
- 8 Ealing, Hammersmith and Hounslow
- 9 Enfield and Haringey
- 10 Greenwich and Bexley
- 11 Hillingdon
- 12 Kensington, Chelsea and Westminster
- 13 Kingston and Richmond
- 14 Lambeth, Southwark and Lewisham
- 15 Merton, Sutton and Wandsworth
- 16 Redbridge and Waltham Forest



Urban London

This term groups together the health districts of Hounslow and Spelthorne; Ealing; Waltham Forest; and Greenwich.

High-status London

This term groups together the health districts of Hillingdon; Harrow; Barnet; Bexley; Enfield; Redbridge; Barking, Havering and Brentwood; Bromley; Croydon; Merton and Sutton; Kingston and Esher; and Richmond and Twickenham.

Map 2 shows these different groupings. A fuller explanation of these terms, the urban context they refer to and the way in which they are used in the Institute's comparative analyses is given in Chapter 1 of *The Health Status of Londoners: A comparative perspective* and Chapter 2 and Appendix 1 of *Acute Health Services in London: An analysis* (Benzeval *et al.*, 1992; Boyle and Smaje, 1992a).

Acute services

There is no general agreement about the services covered under the term 'acute health services'. When the term is used in this report, it includes the following hospital-based services:

General medicine (including chest medicine)
 General surgery
 Ophthalmology
 Paediatrics
 Trauma and Orthopaedics
 Dermatology
 Genito-urinary medicine
 Rehabilitation
 Psychiatry
 Gynaecology and Obstetrics
 Ear, Nose and Throat

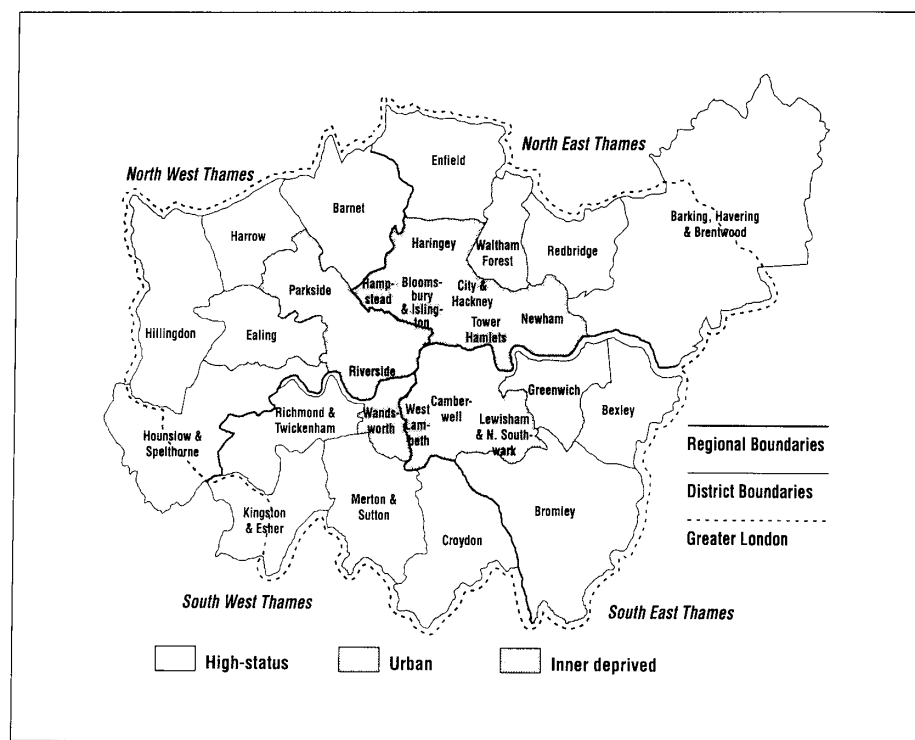
However, readers should note that the King's Fund Institute's *Acute Health Services in London* – upon which many of the statistics and tables in this report are based – uses a narrower definition of acute services which excludes psychiatry and obstetrics. Chapter 2 and Appendix 2 of that working paper give a full explanation of its use of the term 'acute services' (Boyle and Smaje, 1992a).

Primary health care

In this report, the terms 'primary health care' and 'primary care' refer to the range of preventive, rehabilitative, diagnostic, treatment-oriented, respite and support services which are currently provided by NHS community and family health services and local authority social services departments. Unlike acute services, which are overwhelmingly hospital-based, these services are delivered in a very wide variety

Map 2

The district health authorities of London by status category



of settings – including general practitioners' surgeries, health centres, residential care units, day centres and people's own homes – by a wide range of staff – including general medical and dental practitioners; community nurses; health visitors; practice nurses; therapists; and home care staff.

Introduction

The King's Fund Commission

In 1990, the King's Fund established a Commission on the Future of Acute Services in London. This followed growing concern about the state of health services in the capital and the implications of the NHS and Community Care Act 1990 for their future development. Appendix 1 to this report gives the Commission's membership.

The Commission's terms of reference, which are reproduced in Appendix 2, require it to 'develop a broad vision of the pattern of acute services that would make sense for London in the coming decade and the early years of the next century.' To do so, it has analysed current problems and trends. It has built on this understanding to arrive at a strategy and recommendations for the future direction of services in the capital over the next twenty years. Part of this process has involved a focus on the year 2010, which was chosen because it is close enough to concentrate the minds of many present-day decision makers, while being sufficiently distant to encourage imagination and creative thinking about the future.

Throughout this work, members of the Commission have been conscious of the King's Fund's own role in relation to London's health services. The Fund was founded by Edward VII in 1897 to support the capital's hospitals. In undertaking this work on the future of health care in London, the Fund has placed its full resources at the disposal of the Commission, which has used them to conduct a wide-ranging research and information programme. This is explained in Appendix 3 to this report.

London Health Care 2010, and the vision for London which it contains, represents the culmination of this programme. Its intention is to contribute new ideas and a fresh approach to a situation where both are badly needed. To do so, it frames a strategy and recommendations for the capital's health services that represent a fundamental change of direction for them, in line with the requirements of Londoners in the new century.

Guide to the Commission's report

Section I of the Commission's report considers the demographic, historical and policy context in which health and health services in London take place. Its first chapter looks at London as a city in which people live and work. Chapter 2 reviews the development of health

services in London, and summarises the policy context within which this has taken place.

Section II of the Commission's report concentrates on present-day health and health care in London. Chapter 3 discusses the health status of Londoners, and their views on health services. Chapter 4 examines the health and social services which they use, while the fifth chapter looks at medical education and research in the capital.

Section III centres on the future of health care in London. Chapter 6 analyses the dynamic forces in medical technology, health services development, medical education and clinical research which promise to be critical determinants of the future shape of health care. In the light of this, it goes on to give the Commission's strategy for the form that health services in the capital should take by the early twenty-first century. The seventh and final chapter gives the Commission's recommendations on the process needed to bring about a major reorientation of the capital's health services by 2010.

I The context

London health in context

Thinking about the future is only useful and interesting if it affects what we do and how we live today.

James Robertson

London is Europe's largest city. Nearly seven million people live in Greater London, and a further 4.3 million people across the south-east of England are supported by the economic activity it generates.

With New York and Tokyo, London is a leading world financial, business and cultural centre. As such, it plays an important part in Europe's economic life. It is also the seat of government in the United Kingdom, and the centre of the country's richest and most productive region. London makes a major contribution to the UK economy. In 1987, GDP per head in London was 29 per cent higher than the UK average (Department of Trade and Industry, 1991).

Like other major cities in the developed world, London has weathered large-scale changes in its industrial, occupational and demographic structure over the post-war period. Between 1950 and 1990, London's share of total UK employment fell rapidly, as manufacturing declined in the city at a faster rate than in the country as a whole. Between 1961 and 1981, London lost at least 750,000 jobs, some 700,000 of them in manufacturing. This decline continued in the 1980s, although job losses over this period were compensated for by increases in service sector employment. Today, more than 80 per cent of London's employment is in services, compared to the British average of 22 per cent.

This fundamental restructuring of the city's economy has been accompanied by important technological changes in communications, informatics and production processes. Overall, these were marked by an increasing demand for skilled labour, and a decline in manual occupations.

As a result, and in common with other western cities, London's population shifted markedly over this period, with a sharp drop in the numbers of people living in the parts of the city traditionally devoted to manufacturing, and a related rise in the population of outer London and the rest of the south-east. Overall, the city's population declined. During the last decade, this decline has stabilised, and London is expected to grow again in the 1990s, along with the rest of the south-east. Over this period, the numbers of London's children and very old people are expected to rise relative to other groups in its population (London Research Centre, 1991).

However, the scars of the restructuring remain. Its legacy of unemployment and disadvantage have affected some of the city

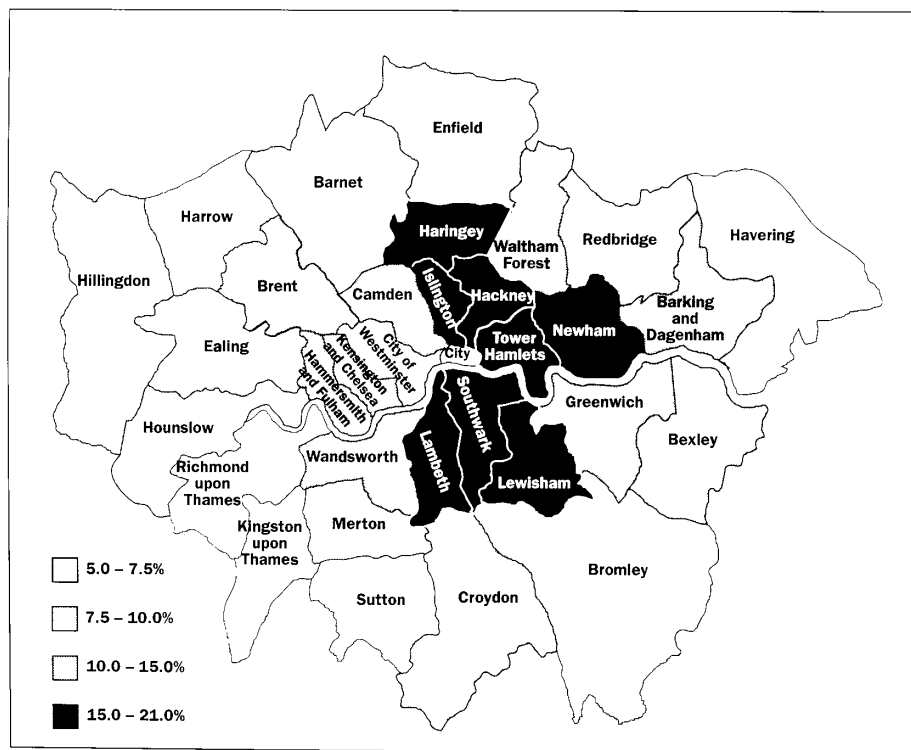
disproportionately, most notably inner London and the east end. Taken together, the inner London Boroughs of Greenwich, Hackney, Islington, Lambeth, Lewisham, Newham and Tower Hamlets have a higher unemployment rate than Merseyside (Department of Trade and Industry, 1991; and see Figure 1.1).

As a result, extremes of poverty and wealth have increased in London over the last decade, and are more marked than elsewhere in England (London Research Centre, 1991). People disadvantaged by poverty, poor education, and sub-standard living conditions are now more visible in the capital. They find it increasingly difficult to participate in the city's labour and housing markets, and its political and social system. People from immigrant and ethnic minority groups are disproportionately represented amongst them (Hall, 1989). Their health is poorer than that of other Londoners (Benzeval *et al.*, 1992). They can have difficulty accessing health services. Over the longer term their prospects are not good: within the south-east available jobs over the next twenty years are likely to be overwhelmingly managerial, professional, clerical or scientific and technical. Large-scale demand for unskilled manual workers is unlikely to be a feature of London's economy in the next century (Hall, 1989).

Health services and the future of London

To maintain its position as a dynamic international centre – with the benefits this brings to the whole of the British economy – London will

Figure 1.1
Estimated rate
of
unemployment
in the London
Boroughs,
February 1992



Source: London
Research Centre

need to attract and retain a large, diverse and well-balanced population with a very wide variety of skills. However, as the twentieth century ends, the city is clearly experiencing problems maintaining the quality of the services and amenities upon which the people who live and work in it depend. There are widely held perceptions that the city is a dirtier, more dangerous and less pleasant place to live and work in than formerly. Investment in the capital's transport and telecommunications system is needed, and attention must be paid to the quality and safety of the urban environment (London Planning Advisory Committee, 1991). The education, training and employment opportunities available to the poorest Londoners are an important policy problem (Hall, 1989). There are major questions, too, about the future form of London's government (Travers *et al.*, 1991).

To sum up, London faces many challenges in the twenty-first century. Internally, it must address problems relating to deprivation and a decaying urban fabric. Externally, a pole position for the city within the emerging single European market and as a world centre for business and finance cannot be assumed.

The future of health care in the capital cannot be separated from these broader considerations of London's future development. It must be an element in any comprehensive assessment of the infrastructure that the city will need if it is to remain dynamic and successful.

Three things are certain. If London is to retain its position as a world city, Londoners must have access to high-quality modern health services. At the same time, health care in the capital must develop in a way that reflects and complements the development of the health service, medical education and research in the country as a whole. In doing so, it should aspire to international excellence in which high quality of service reflects top-flight clinical and health services research. Above all, health services must be linked to the London communities which they serve.

The question of how to achieve these objectives is the subject of this report and strategy from the King's Fund Commission on the Future of Acute Services in London. Two assumptions underlie it. The first is that major changes in the form and direction of London's health services are inevitable, and long overdue. The second is that the primary goal for restructuring health services in the capital must be to secure the best possible health for Londoners, and access to high-quality health services for them all.

Health services in London: An historical and policy perspective

Health care in London has been shaped by changes in the city's population and the pattern of health and sickness within it. It has also been influenced by changes to the social context within which health and illness take place and by the evolution of health care itself. Transport systems, too, have added a dimension: London's position as the hub of the national railway network contributed to its status as a referral centre from the mid-nineteenth century. The city's role as a major centre of higher education has also influenced the part that it has played in medical education and research. In a very real sense, the form of London's health services has always been bound up with the city's history, its role as capital of the United Kingdom and its position as a world city, as well as with the particular needs of Londoners.

The development of London's hospital system

The modern form of the hospital, which centres on the diagnosis and treatment of the sick, is only slightly over a hundred years old (Abel-Smith, 1964). London was the world's largest city and the capital of its greatest empire during the period 1850 to 1930, when the emergence of bio-medical science prompted the construction of hospitals throughout the industrialised world. More than one hundred and sixty were built in London over this period, augmenting the fifty or more institutions founded between the twelfth and the mid-nineteenth centuries to care for London's poor. Many began as charitable foundations, established by wealthy families or individuals (Rivett, 1986).

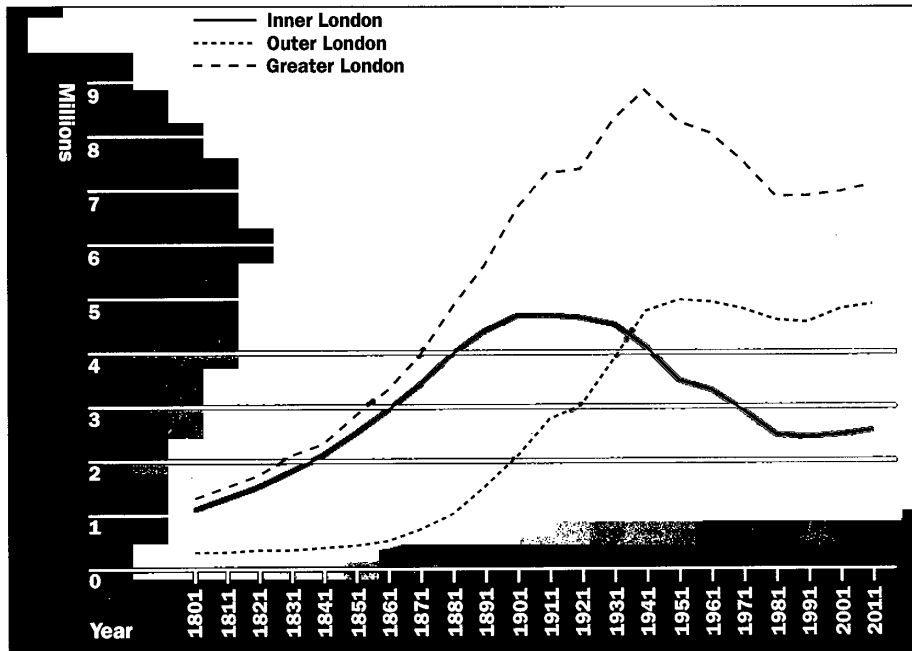
This increase directly reflected the growth of the city's population from 1.2 million people in 1801 to its historic peak of 8.1 million in the 1930s. The growth of London, and changes in the distribution of its population, are shown in Figure 2.1. The pattern of hospitals in London was largely established before modern transportation and communication systems encouraged a migration of the city's population from the inner city to the suburbs from the late nineteenth and early twentieth centuries.

This resulted in a fundamental problem which has persisted for nearly a hundred years: London's acute health services are concentrated where its people are not. Over the past thirty years the problem has intensified, with the decline of traditional manufacturing industries in the inner city and east end, the continued growth of commuting and a consequent movement out of inner London.

A related problem was that provision for Londoners who needed continuing care largely developed outside the city, where land was less costly. The great concentrations of psychiatric and mental handicap

Figure 2.1

London
population
trends,
1801–2011



Source: London
Research Centre

hospitals in Hertfordshire and places like Epsom were the result. As a consequence, London has never had adequate provision for people who need continuing help, like people with mental health problems, learning difficulties, and frail elderly people.

Origins of the system

Voluntary hospitals

A few of London's voluntary hospitals have their origins in medieval religious foundations. Most, however, were founded during the eighteenth and nineteenth centuries and endowed by wealthy Londoners for the care of the sick poor. Doctors gave their services free, relying on private practice for their personal incomes.

The city's wealth and size meant that this 'voluntary system' of hospital care developed strongly within it, so that by the mid-nineteenth century London had a greater concentration of hospitals than any other city in the UK. Once established, they individually generated powerful institutional loyalties and ambitions for growth.

Well before the establishment of London University, a number of the voluntary hospitals took responsibility for training doctors and nurses, so that by 1858 there were twelve hospitals in the capital with their own associated medical schools. Voluntary hospitals selected patients whom they considered would respond to treatment, and tended to concentrate on acute rather than chronic cases as a result. Originally, their choices were mediated through patronage, with the wealthy sponsors of voluntary hospitals able to nominate patients. By the mid-nineteenth century, however, the medical staff of the voluntary and specialist hospitals controlled access to treatment (Abel-Smith, 1964).

As medical science developed in the nineteenth and early twentieth centuries, advances in treatment came to be associated with the schools. The growth of a national railway network, with London at its centre, also encouraged the referral of complex medical and surgical cases to the capital's teaching hospitals. They acquired national reputations as centres of knowledge and expertise as a result. Academic research came as a relatively late addition to the London medical schools, and they continued to train doctors using an apprenticeship system well into the twentieth century (Smith, 1981).

Over the same period, a number of specialist hospitals related to particular conditions, organ systems or patient groups developed in the capital. These also provided facilities for teaching and research, and – in the immediate post-war period – a number developed associated institutes for postgraduate teaching and research. While the same medical staff often worked in both specialist and generalist teaching hospitals, the development of the different types of institution tended to be separate and competitive.

Municipal hospitals

London's network of municipal hospitals was originally linked to the pauper workhouses established under the poor law from the mid-eighteenth century. The nineteenth century saw the gradual growth of separate workhouse infirmaries, where the sick poor could be treated apart from those who were well. Over time, these developed into hospitals, and their stigmatising links with the workhouses began to be dissolved in the 1870s and 1880s by legislation that recognised the infirmaries' role in treating the sick (Abel-Smith, 1964). As a result of this, and of improvements in the standard of care given within them, a wider group of patients began to make use of the infirmaries, so that by the nineteenth and early twentieth centuries their clientele came to overlap with that of the voluntary and specialist hospitals, although their staffing and training levels tended to remain lower.

From the mid-1860s a major building programme meant that a system of municipal hospitals far in advance of the rest of the country developed in the capital. The infirmaries related to the London parishes, and, as such, were spread across the growing city. A network of fever hospitals designed to cope with London's epidemics was organised under a separate centralised Metropolitan Asylums Board from 1867. While they originally treated only infectious diseases and smallpox, their caseloads broadened subsequently as these conditions declined or disappeared.

London hospitals in the early twentieth century

When the Local Government Act of 1929 brought both the poor-law infirmaries and the fever hospitals under the direct control of the London County Council, the resulting grouping was responsible for some 75,000 beds – five times as many as London's voluntary hospitals. It was the largest municipal hospital system in the world. However, provision across the capital remained fragmented between different institutions and types of governance. In particular, cooperation be-

tween municipal and voluntary hospitals, and voluntary and specialist hospitals – though considered desirable by many of the interests involved – proved difficult to achieve.

In addition, London's voluntary and specialist hospitals, which remained dependent on charitable donations and fees, competed with each other for funds, fee-paying patients, personnel and prestige. Throughout the first half of the twentieth century their finances were the subject of repeated crises: a factor that intensified the rivalry between them and contributed to pressure for a system of state-supported health care.

The war-time Emergency Medical Service (EMS) did much to encourage cooperation between the disparate elements of London's hospital service, since it concentrated the management of the nation's hospitals within central government, and distributed clinical staff according to the needs of the time. Critically, in the south-east of England the EMS was organised in geographical sectors that radiated out from the centre of the city across the home counties. Nine of the ten sectors related to London teaching hospitals. As in the rest of the UK, this pattern established relationships between voluntary and municipal hospitals that endured after the war, and was itself a precursor of the radial pattern for London's health regions which was adopted by the National Health Service (NHS) in 1948.

However, it was only with the establishment of the NHS that the capital's hospitals began to be forged into a single system. Even then, individual hospitals and medical schools guarded their positions jealously, with teaching and specialist hospitals retaining a considerable degree of autonomy within the new national service. It was not until 1974, for example, that most of London's teaching hospitals accepted responsibility for providing a full range of hospital services to their local populations. In addition, family practitioner and community health services were administered separately from the hospital service, a situation that militated against a system-wide approach.

Conflict without change: the 'London problem'

In 1948, London's hospital services were unquestionably the most highly developed in the country, both in absolute numbers of beds and in terms of their staffing and levels of expertise. However, this concentration of resources had developed as a result of historical accretions: it was in no sense a coherent system. Indeed, recognition of the need to consider health care as a system of inter-related parts was stimulated by the poor coordination created by piecemeal development in cities like London. With this recognition came the notion of planning to ensure better coordination between the different parts, and improved service coverage and mix.

The diagnosis

Well before the foundation of the NHS, the deep-seated nature of the problems facing London's hospitals was recognised by policy makers and health care professionals. They were generally perceived as

stemming from the mismatch between London's population and the location of its hospitals, but other problems, such as the isolation of many London medical schools, their tenuous relationship with the University of London and their poor linkages with university-based biological science, were widely agreed upon as well (Smith, 1981). As a result, both before and after 1948, the difficulties associated with health services, medical education and research in London have been the focus of intense policy scrutiny. A series of reports, surveys, enquiries and Royal Commissions both at national and at local level have catalogued the difficulties involved (see Box 2.1).

Over a hundred years, a striking homogeneity has developed in the analysis of the issues confronting health services in the capital. Key problems which have been identified include:

- the concentration of acute hospitals in central London, with associated medical schools, research centres and postgraduate institutes all contributing to an expensive pattern of care for a declining population;
- inadequate primary, community and continuing care across the capital;
- poor linkages between London's medical schools and the rest of London University, resulting in an 'apprenticeship' model of medical education which isolated medical students from their peers in other disciplines;
- fragmented and inadequately supported specialist and clinical research units across the capital;
- ageing buildings and equipment, with a lack of capital for new developments; and
- a management and planning structure that failed both to counteract the ingrained parochialism of London's health care providers and to provide direction for the capital's health services overall.

However, over the years none of the reports has examined the options for health services and medical education together, and none has attempted a London-wide strategic view of future directions or developments.

The prescription

Many recommendations for improvements have persisted from enquiry to enquiry as well. In post-war times they have included:

- a series of proposals to amalgamate medical schools and to move them and their associated teaching hospitals out of central London;
- recommendations on the creation of closer associations or mergers between undergraduate and postgraduate teaching hospitals;
- proposals for better integration between the University of London and the London medical schools and postgraduate institutes;
- plans to reduce beds, and to consolidate specialty provision and research activity; and
- recommendations intended to strengthen primary care in the capital (see Box 2.1).

Box 2.1

ONE HUNDRED YEARS OF ENQUIRIES INTO HEALTH SERVICES IN LONDON

REPORT	ESTABLISHED BY	FINDINGS AND RECOMMENDATIONS
1892 Report of the Select Committee of the House of Lords on the Metropolitan Hospitals	Parliament	<ul style="list-style-type: none"> • Hospitals were too much in competition. • Special hospitals should be affiliated to general hospitals. • Hospitals were poorly distributed – fewer were needed in north London and a greater number in south London. • Doctors should be trained in infirmaries as well as voluntary teaching hospitals to improve their understanding of common and chronic conditions.
1913 Report of a Royal Commission on University Education in London (Chairman: Lord Haldane)	The Crown	<p>From the section of the report devoted to London:</p> <ul style="list-style-type: none"> • need to integrate medical teaching into the University and ensure University-based education for medical students; • professorial units in clinical subjects should be introduced into the medical schools with control of beds and laboratories; • academic staff should be introduced into hospitals; • three medical schools to be incorporated fully into the University.
1921 Report of the Committee on Postgraduate Medical Education (Chairman: Lord Athlone)	Minister of Health	<ul style="list-style-type: none"> • A separate institute for postgraduate education should be established. • The special hospitals should become closely associated with it, and – where possible – physically move onto its site.
1937 Commission on the Voluntary Hospitals (Chairman: Lord Sankey)	British Hospitals Association	<ul style="list-style-type: none"> • Regional councils should be formed to consider systematisation of the service. • Special hospitals should be brought into close association with – or incorporated into – general hospitals.
1944 Report of the Inter-Departmental Committee on Medical Schools (Chairman: Sir William Goodenough)	Ministry of Health	<ul style="list-style-type: none"> • Categorisation of units into regional university centres/local cottage hospitals/district hospitals was needed – the need for a coordinated system was underlined. • Teaching hospitals recommended to work with other hospitals to provide service for their districts. • Medical schools should be integral parts of universities. • The closure of the West London Medical School was recommended. • St George's, Charing Cross and the Royal Free should move out from Central London. • Amalgamation of specialist with general hospitals would be helpful to medical education.

Box 2.1 (continued)

ONE HUNDRED YEARS OF ENQUIRIES INTO HEALTH SERVICES IN LONDON

1945	Post-War Hospital Problems in London and the Home Counties (Chairman: Earl of Donoughmore)	King's Fund and the Voluntary Hospitals Committee for London	<ul style="list-style-type: none"> • University influence should be extended to postgraduate training. • Small hospitals in London should join with larger ones. • Need to expand provision in suburbs. • Treatment of the chronic sick to be reformed.
1945	Survey of London Hospitals (Dr A. Gray and Dr G. Topping)	Ministry of Health	<ul style="list-style-type: none"> • Recommendations on future use/redundancy of hospitals in the post-war period. • Reduction in the number of special hospitals was needed.
1955	Survey of London Hospitals	Ministry of Health	<ul style="list-style-type: none"> • Development of hospitals outside central London had not kept pace with population growth.
1962	Postgraduate Medical Education and the Specialities (with special reference to the problem in London) (Chairman: Sir George Pickering)	Ministry of Health and University Grants Committee	<ul style="list-style-type: none"> • Need to end the isolation of the specialist institutes and their associated hospitals. • Institutes should amalgamate with each other and share centralised supporting departments.
1967	Joint Working Group of the Thames Joint Consultative Committees (Chairman: Dame Albertine Winner)	Ministry of Health and Thames Regions	<ul style="list-style-type: none"> • Examined needs for services on a London-wide basis.
1968	Report of the Royal Commission on Medical Education (Chairman: Lord Todd)	The Crown	<p>In a special section on London, the report recommended:</p> <ul style="list-style-type: none"> • much closer links between the University and the medical schools, for pre-clinical and clinical undergraduate education; • an amalgamation of schools from 12 to 6 to consolidate and better support clinical research, which tended to be isolated and fragmented (St Bartholomew's with the London; UCH with the Royal Free; St Mary's with the Middlesex; Guy's with King's; Westminster with Charing Cross; St Thomas's with St George's); • each amalgamated school to become the faculty of medicine of a multi-faculty university institution; • an end to the separation of undergraduate and postgraduate medical education through close association and eventual integration of post-graduate institutes and their hospitals with undergraduate teaching hospitals; • integration of London teaching hospitals with the regional hospital system.
1975	London Co-ordinating Committee	Thames Regions, Department of Health, Greater London Council, University Grants Committee	<ul style="list-style-type: none"> • Recommendations for rationalisation of London hospitals.

Box 2.1 (continued)

ONE HUNDRED YEARS OF ENQUIRIES INTO HEALTH SERVICES IN LONDON

1980	London Health Planning Consortium (Chairman: Mr J.C.C. Smith)	Thames Regions, University of London, University Grants Committee, Postgraduate Hospitals, Department of Health	<ul style="list-style-type: none"> • Recommendations for bed reductions of 6,200 overall (or 20–25 per cent of bed stock in central London); linkages between medical schools and hospitals in outer London. • Rationalisation of acute specialty services. • Profile of acute services. • In 'Primary Health Care in Inner London' (1981) made detailed recommendations for the improvement of primary care.
1980	London Medical Education - A new framework (Chairman: Lord Flowers)	University of London	<ul style="list-style-type: none"> • Thirty-four undergraduate and postgraduate schools of medicine and dentistry to be grouped together to form six schools of medicine and dentistry. • Postgraduate institutes to be phased out, and their activities to be integrated with the merged general medical schools.
1981	Reports of the London Advisory Group (Chairman: Sir John Habakkuk) 1 Acute Hospital Services in London 2 District Health Authorities in London 3 Management Arrangements for the Post Graduate Specialist Teaching Hospitals 4 The Development of Health Services in London	Secretary of State for Health	<ul style="list-style-type: none"> • Reduction in acute beds to free resources for the elderly, mentally ill, and community services. • Reductions to be made in smaller hospitals, with full use to be made of 23 designated major hospitals to free resources for use elsewhere.
1981	Primary Health Care for Inner London (Chairman: D. Acheson)	London Health Planning Consortium	<ul style="list-style-type: none"> • Chronicled the poor state of primary care in inner London. • Made detailed suggestions for its improvements.
1987	Planned Health Services for Inner London: Back to Back Planning - Report on the Regional Plans for Inner London's Health Authorities	King's Fund for the Inner London Health Authority Chairmen's Group	<ul style="list-style-type: none"> • Acute bed closures exceeding Thames Regions' strategic estimates. • Activity levels up. • Lack of convergence between Thames Regions' strategic plans for Inner London. • Need for a London-wide approach to strategic planning.
1989	The Best Medicine for London: Report of a Joint Planning Committee Working Party on an Academic Strategy for Medicine (Chairman: Professor T.J.H. Clark)	University of London	<ul style="list-style-type: none"> • 'Clusters' of medical schools should take place as a result of 'voluntary evolution'. • A strategic plan for research should be developed. • The science base for medical and dental education should be strengthened.

Sources: Rivett, 1986, and the original documents.

Box 2.2**CHANGE IN LONDON
STIMULATED BY
ENQUIRIES**

- 1971 The Board of Governors of the National Heart Hospital merged with the Board of Governors of the Hospitals for Diseases of the Chest.
- 1974 The Royal Free Hospital relocated from Gray's Inn Road to Hampstead.
- 1973 Charing Cross Hospital and Medical School relocated from the Strand to Hammersmith.
- 1979 St George's Hospital and Medical School relocated from Hyde Park Corner to Tooting.
- 1982 The Royal Free Hospital Medical School relocated from Gray's Inn Road to Hampstead.
- 1982 University College Medical and Dental Schools and Middlesex Hospital Medical School merged.
- 1982 The Medical and Dental Schools of St Thomas' and Guy's Hospital merged.
- 1989 St Mary's Hospital Medical School and Imperial College merged.
- 1990 The National Heart Hospital merged with the Royal Brompton Hospital to form the Royal Brompton National Heart and Lung Hospital.
- 1991 St John's Hospital for the Skin and the Institute of Dermatology relocated within St Thomas' Hospital.
- 1992 St Peter's Group of hospitals and the Institute of Urology relocated within the Middlesex Hospital.

Box 2.2 shows that over the years some mergers and moves have occurred, as have changes in service delivery, but most of the problems identified have remained substantially unaltered, in spite of the policy attention devoted to them (Smith, 1981).

This impasse notwithstanding, the NHS continued to develop. In particular, diffusion of specialist expertise to regional centres took place. This was supported by developments in medical education outside London. Expansion in higher education during the 1960s and 1970s resulted in the establishment of a number of new medical schools and associated provincial teaching hospitals. A number of these adopted innovative approaches to medical teaching and curricula. Over the same period, postgraduate medical centres for general practitioner training expanded rapidly, with more than 200 established by 1975 – the majority outside London (Wellman and Palmer, 1975). The 1962 hospital plan also had an effect, with the building of a large number of district general hospitals in provincial centres as well as considerable capital investment in the redevelopment of London teaching hospitals (Rivett, 1986).

By the late 1970s, the expansion of services outside London had had a clear impact on referrals to the capital, with only 15 per cent of all cases treated in inner London's regional specialty services originating from outside greater London (London Health Planning Consortium, 1981).

The Resource Allocation Working Party

In 1976, the longstanding difficulties created by the concentration of services in London were reflected in central government's decision, on grounds of equity, to move funds away from the four Thames Regional Health Authorities (RHAs) responsible for allocating resources to London in favour of parts of England historically less well endowed where, as a consequence, health care was comparatively less well developed (DHSS, 1976; and see Figure 2.2). Within the Thames regions themselves, this shift was reflected in strategic plans, and there were corresponding efforts to move resources from central London to outer London and the home counties.

This two-pronged attempt to redistribute resources away from the capital resulted in a squeeze on health services in London, and contributed to the closure of a number of smaller local hospitals, as Box 2.3 shows. Between 1982 and 1989, for example, NHS hospitals in inner London shed some 3,700 beds providing acute services – a faster rate of decline than that experienced nationally (see Figure 2.3). Similarly, between 1983 and 1988 spending on London's hospital services increased more slowly than it did elsewhere in England.

The 1983/4–1993/4 strategic plans for the four Thames regions envisaged a total revenue loss of £109 million from the twelve inner London health authorities, or 12.9 per cent of 1984–5 revenue levels. Of this, 24.7 million, or 23 per cent, was intended for reallocation within the Thames regions, with the remainder – £84 million – to be redistributed nationally (ILHA, 1987). Over the same period, hospital throughput rates rose in inner and outer London by 15 and 12 per cent

Figure 2.2

Distance of
Thames
Regions from
RAWP targets,
1977-78 -
1988-89

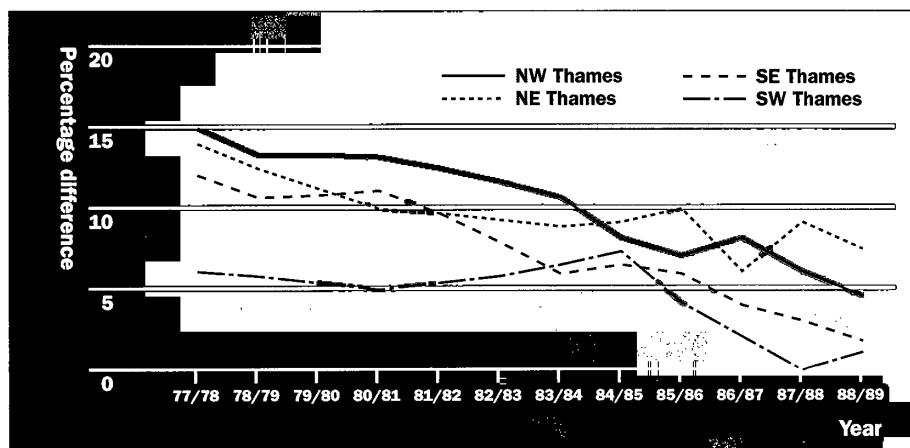
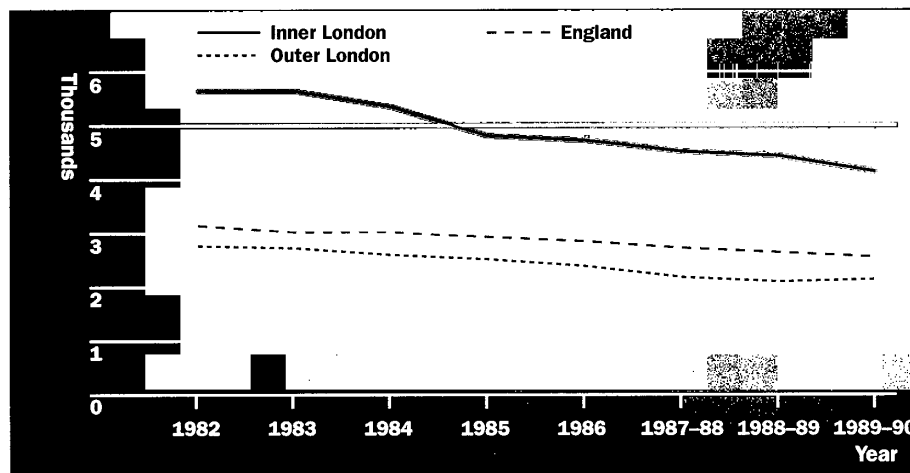


Figure 2.3

Average
available acute
beds per 1,000
resident popu-
lation, NHS
hospitals,
1982-90



respectively, a faster increase than that experienced nationally, although London rates remained below national levels.

At this time, 65 per cent of inner London hospitals' acute patients were local residents, with a further 23 per cent from outer London and the remainder - 12 per cent - from the home counties and non-Thames regions (DHSS, 1988). From the same period, there is evidence that despite the decline in bed numbers, the concentration of specialist provision in the capital's NHS hospitals remained unaltered and that medical staffing levels in London's teaching hospitals remained unaffected by falls in bed numbers and other resource levels (DHSS, 1988).

Expansion of the independent sector

The mid-1970s saw the beginning of a rapid expansion of independent health care in London, which was part of its wider growth throughout the UK. It was influenced by a short-lived influx of oil-rich patients from the Gulf states and by the efforts of the 1974-79 Labour

Box 2.3
HOSPITAL CLOSURES IN LONDON 1979-87

NORTH WEST THAMES RHA

St Helena's Recovery Home	Ealing, Hammersmith and Hounslow	1979
Paddington Green (Children's)	Kensington, Chelsea and Westminster	1979
St Elizabeth's	Barnet	1979
Orme Lodge	Barnet	1979
Stanmore Cottage	Barnet	1979
St Columba's	Kensington, Chelsea and Westminster	1980
Temple Hill Ealing	Hammersmith and Hounslow	1981
Leamington Park	Brent	1983
West Hendon	Barnet	1983
All Saints	Victoria	1983
Chepstow Lodge	Paddington and North Kensington	1984
Hereford Lodge	Paddington and North Kensington	1984
St John's	Hounslow and Spelthorne	1984
St John's	Hillingdon	1984
Hendon District	Barnet	1986
St Mary's (Harrow Road)	Paddington and North Kensington	1986
Neasden	Brent	1986
Highfield	North West Hertfordshire	1987

NORTH EAST THAMES RHA

Thomas Barlow	Camden and Islington	1980
Cromwell Lodge	Camden and Islington	1980
London Jewish	City and East London	1980
Bearstead Memorial	Enfield and Haringey	1980
St Faith's	Barking and Havering	1981
Aldersbrook	City and East London	1981
Queen Mary's (Newham)	City and East London	1981
St Mary's (Newham)	City and East London	1981
City of London Maternity	Camden and Islington	1982
Whittington Home	Camden and Islington	1982
Enfield War Memorial	Enfield	1982
Royal National Orthopaedic (Great Portland Street)	Bloomsbury	1983
Prince of Wales	Haringey	1983
Essex Hall	North East Essex	1983

administration to phase out pay beds from NHS hospitals. As a direct result, a considerable programme of private, for-profit hospital building began in the UK. By 1991, independent hospital provision was almost twice what it was in 1977, as Table 2.1 (p. 34) shows.

Growth was aided by the introduction of a new consultant contract which allowed full-time NHS consultants to practise privately up to a limit of 10 per cent of their NHS salary – a proportion that is in practice unverifiable. Consultants with part-time contracts have no restrictions on their private work. The new contract in effect removed all practical constraints on the supply of consultant labour in what had become the rapidly growing independent sector. Throughout the 1980s independent health care continued to grow in London and

Box 2.3 (continued)
HOSPITAL CLOSURES IN LONDON 1979-87

NORTH EAST THAMES RHA (continued)

The Mother's	City and Hackney	1984
The German	City and Hackney	1984
St Matthew's	City and Hackney	1984
Mildmay Mission	Tower Hamlets	1984
Hart's	Waltham Forest	1984
Royal Throat Nose and Ear	Bloomsbury	1985
Brunswick House	North East Essex	1986
Dagenham Hospital	Redbridge	1986
Bethnal Green	Tower Hamlets	1986
Athlone House	Bloomsbury	1986

SOUTH EAST THAMES RHA

Holmhurst	West Lambeth	1979
St Giles	Camberwell	1983
St John's	Lewisham and Southwark	1983
Dreadnought Seaman's	Greenwich	1985
New Cross	Lewisham and North Southwark	1986
Lennard	Bromley	1986
Beckenham	Bromley	1986
St Nichola's	Greenwich	1986
Farnborough	Bromley	1987
Goldie Leigh	Greenwich	1987

SOUTH WEST THAMES RHA

St George's (Hyde Park Corner)	Merton, Sutton and Wandsworth	1979
Queen Elizabeth House	Merton, Sutton and Wandsworth	1980
St Benedicts	Merton, Sutton and Wandsworth	1980
Wimbledon	Merton and Sutton	1981
Waddon	Croydon	1983
South London Hospital for Women	Wandsworth	1983
Cheam	Merton and Sutton	1984
Westmoor House	Richmond, Twickenham and Roehampton	1985
Queen's	Croydon	1986
Southwide Home	Merton and Sutton	1987

Source: House of Commons Library

elsewhere in the UK. Present estimates suggest that as much as one-third of all elective surgery in London now takes place privately, and that consultants as a group collectively double their NHS salaries with fee income from private patients (Laing, 1992).

Growth in private nursing home care in London has been markedly less strong, with such homes now providing 46 per cent of all long-stay and elderly mentally ill (EMI) care in the capital compared to 66 per cent in the UK as a whole. In practice, the high costs of establishing a nursing home in London mean that growth in this sector has been inhibited, and that the NHS continues to provide a higher proportion of long-stay geriatric and EMI care in the capital than elsewhere in the country (Laing, 1992; and see Table 2.2).

Table 2.1

Growth in independent medical/surgical¹ hospital capacity, 1977-91

¹ Excluding independent psychiatric hospitals and NHS pay beds.

Source: Laing (1992)

	London		UK	
	Hospital	Beds	Hospital	Beds
1977	25	1,605	154 ²	7,035 ²
1991	42	3,054	216	10,911

² Relates to 1980.

Primary and community health services

During the 1970s and 1980s, primary and community health services in the capital remained under-developed and poorly structured. A major review of London's primary health care in 1981 identified a number of problems with the delivery of primary health care services, including large numbers of single-handed general practitioners (GPs); large numbers of GPs with small list sizes; unsuitable premises; lack of support staff; problems of accessibility and availability of GPs; lack of coordination with hospital services; and poor medical education in general practice. This analysis made it clear that London's general practitioners had not moved into group practices with support from nurses, health visitors and social workers to the same extent as their colleagues in other parts of England (London Health Planning Consortium, 1981).

These problems, too, have proved persistent: a recent re-examination suggests that all of them remain a feature of the London scene, as Chapter 4 explains. Although there are important exceptions, primary care in London overall remains under-developed when compared to other parts of the country. London has a considerably higher proportion of single-handed practitioners poorly supported by nurses and ancillary staff. In addition, there is evidence that vulnerable groups like homeless people and transient populations within London are ill-served by primary care services organised along traditional family practice lines. While there have been some developments designed to use primary care more effectively in the capital, there has been no concerted effort to build on them (Hughes and Gordon, 1992).

Table 2.2

Independent and public sector care home capacity for elderly, chronically ill, and physically disabled people, 1991

	London		UK	
	Beds	%	Beds	%
Independent nursing homes of which:	6,300	46	149,300	66
Private nursing homes	(4,600)	(34)	(137,000)	(61)
Voluntary nursing homes	(1,400)	(10)	(10,200)	(5)
Religious nursing homes	(300)	(2)	(2,100)	(1)
NHS geriatric/EMI long-stay ¹	7,300	54	76,000	34
Total nursing care sector	13,600	100	225,300	100

¹ Estimated from RHA data on long-stay beds provided by the Department of Health.

Source: Laing (1992)

Impact of the NHS reforms on London

At the present time, London's health authorities are implementing the National Health Service and Community Care Act 1990. This has important implications for health services in the capital. Critically, hospitals and other acute service providers across the UK will be competing for contracts from health authorities and general practice fund holders. In addition, as the reforms are implemented, health authority purchasing revenues will begin to be allocated on a per capita basis ('weighted capitation funding'), instead of being related to authorities' historic revenue requirements, as in the past.

In essence, the move to contracting and the introduction of a new system of capitation funding presents a new set of challenges to hospitals in the capital. They will have to attract contracts for their services at the same time as the funds available to inner London purchasers fall to reflect the numbers of people living locally.

At the same time, new charges for capital assets such as land and equipment will mean that London hospitals' costs – which have historically been higher than elsewhere in the UK because of factors such as higher staffing costs and longer than average lengths of stay – will rise further. Clearly, this will create strong incentives for purchasers to place contracts elsewhere, where possible.

Accordingly, the prospect of reversing traditional patterns of patient flow from relatively low-cost locations in outer London and the home counties to relatively high-cost locations in the centre is very real. This carries with it the possibility that – if costs per case in inner London increase still further as a result of carrying a higher proportion of fixed costs when volumes fall – the ability of inner London purchasers to secure local services for London's population may be jeopardised.

Summary and conclusions

The problems created by the historic concentration of hospitals, medical schools and clinical research facilities in inner London are persistent, and pre-date the foundation of the NHS. Together with poor primary and community services in the capital, and the absence of adequate locally based services for people with long-term disabilities, they constitute the 'London problem'. Key elements of the problem have remained entrenched for a hundred years: a tribute to the power of the many interests involved.

From the late 1970s, efforts to change historic patterns of NHS funding in favour of the relatively under-resourced regions in the north and north-west of England have contributed to a more rapid rate of decline in hospital bed numbers than that experienced nationally. Shifts in funding allocations were, however, the only mechanism for encouraging change employed: specialist provision in London was not reduced comparably. A concentration of specialty provision continued during the 1980s. Hospital costs remained high, and primary care continued to be underdeveloped in the capital.

Within London's hospitals, the financial pressures of the 1980s have been unrelenting. As a result, many smaller local hospitals have closed. The larger hospitals have survived, but with fewer beds and – in real terms – smaller budgets. Nursing staff have reduced in line with budget reductions but medical staff have not. Moreover, the innate trend towards specialisation that exists within hospital medicine has continued to operate.

Should there be a substantial reduction of patient flows from outer London and elsewhere into the inner London hospitals – and should that be translated into further reductions in service across the board – the situation in the capital would quickly become unsustainable. In practice, as Chapter 4 will demonstrate, the high cost of London's services suggests that flows of patients from outside the capital will continue their inexorable decline, with the risk that costs per case in the city's hospitals will rise further, to the detriment of the services that Londoners depend on.

II The present

Londoners: Their health and attitudes to health care

London's population

In 1989, 6.7 million people lived in London. One-third of them lived in the ten inner London boroughs, with the remaining two-thirds in the twenty outer London boroughs. Thirty-nine per cent of the population of the south-east region and 14 per cent of the total English population live in the city.

Age structure in the capital parallels that of the country as a whole: in 1989, 19 per cent of Londoners were under 15; 64 per cent were of working age; and 17 per cent were over pensionable age. Household sizes are also closely similar: there was an average of 2.4 people per household in London, compared with 2.53 in England as a whole.

However, there are important differences between London's population and the rest of England. London has a different class structure from the rest of the country: in 1981, there were equal numbers of Londoners in manual and non-manual occupations, whereas there were 27 per cent more manual than non-manual workers in the country generally. In 1988, London had an estimated 308,500 single-parent households, of which approximately half were in inner London. London accounted for 47.6 per cent of single-parent households in the south-east, and 7.7 per cent of all such households in England.

Single-parent households made up 11.2 per cent of all households in London in 1988 – a higher proportion than the national figure of 9.4 per cent. Approximately 113,800 of London's single parents claim income support. In 1981, 15 per cent of households in London were headed by someone born in the New Commonwealth or Pakistan – twice the proportion of the rest of the south-east, and three times the average proportion in the country as a whole.

Predictably, population density is markedly higher in London than in the rest of England, and overcrowding is more than twice as prevalent. In terms of housing, 57 per cent of Londoners are owner-occupiers – a lower proportion than the national rate of 66 per cent. Fifteen per cent of Londoners rent their housing privately – a higher proportion than the national figure of 10 per cent. In 1988–9 there were an estimated 26,698 homeless households in London.

In addition to its settled population, the capital is host to a number of transient groups, among them 75,000 students in higher education, 8.4 million tourists annually, and 1.3 million commuters daily. London has also always exerted a magnetic attraction on young people at the beginning of their working lives: many are highly mobile, and

contribute to extremely high population turnover rates. In certain parts of the city these can be as high as between 30 and 40 per cent of the population annually.

London's economic life

London's strength, and the principal source of its relative prosperity, is the city's concentration of financial and business services. More than 80 per cent of the capital's employment is in the service sector, compared to an average of 67 per cent for the rest of the country. Only 13 per cent of the city's employment is in manufacturing, compared with 23 per cent for England as a whole.

As mentioned earlier, London's GDP is considerably higher than that of other English regions. However, it is important to note that only a relatively small part of this difference went directly to individuals living in the capital. In 1987, London had a household disposable income per head that was only 8 per cent higher than the English average. One reason for this difference is that the GDP generated by commuters is allocated to the area in which it is earned rather than to their area of residence.

In summary, then, and taking into account some of the information on the economic life of the city presented in this report's first chapter, Londoners exhibit extremes of wealth not replicated in other parts of England. In common with major cities the world over, the capital has large groups of the country's most affluent people, along with contrasting communities who experience appreciable material and social disadvantage. Wealth is concentrated in outer London, with deprivation centred on the inner city, although the intricate mosaic of London neighbourhoods means that wealth and poverty often exist side-by-side.

Health of Londoners

In its work for the Commission, the King's Fund Institute investigated how the health of Londoners compared with that of other similar communities (Benzeval *et al.*, 1992). To do so, it grouped London and comparable areas of England into three categories: inner deprived, urban and high-status, in order to provide a sound basis for like-with-like comparisons of mortality and morbidity (see Definitions section for an explanation of these terms). This work drew on the public health common data set and recent surveys of national health and lifestyles and of deprivation.

This comparative analysis found that the experience of mortality due to all causes within the capital is better than elsewhere in England, and that the different types of London area have a better record of avoidable and premature mortality than comparable districts. In particular, London districts have consistently and significantly lower levels of mortality due to circulatory diseases, lung cancer, cervical cancer and road traffic accidents, although rates of mortality from breast cancer in women and suicide are higher than elsewhere.

Table 3.1

Area variations
in all-cause
mortality, all
ages, 1985-89
(SMRs)

Area categories	London	Non-London comparators	England
Inner deprived	100	113	105
Urban	96	106	105
High-status	90	95	93
Weighted sum	94	103	101
Other			99
England			100

Source: Benzeval *et al.* (1992)

Table 3.1 demonstrates the relationship between deprivation, location and all-cause, all-age mortality. It shows that districts in London have consistently and significantly lower standardised mortality ratios (SMRs) than England as a whole and than comparable non-London districts. In both London and non-London districts SMRs are lowest in high-status districts and highest in inner deprived ones. The strikingly higher SMRs in inner deprived areas outside the capital are due to consistent absolute differences between London and provincial rates, rather than different distribution or outliers. While SMRs in London range from 90 in Hampstead to 111 in Tower Hamlets, outside London the extremes are 101 for central Birmingham and 132 for north Manchester (Benzeval *et al.*, 1992).

In terms of morbidity, Londoners as a whole appear to experience significantly fewer illness symptoms than residents in comparable areas, with the result that people in high-status areas of London experience significantly better average psycho-social health than people in comparable parts of other English cities. Overall, these findings combine with the comparative mortality data to suggest that the health of Londoners as a group is no worse and may even be better than that of people in similar parts of the country (Benzeval *et al.*, 1992).

When considering why London residents have better mortality rates than their peers in comparable areas, the Institute concluded that it was unlikely to be because of better access to health care. If this was the case:

One would expect to see relatively better indicators of avoidable than overall mortality in the capital. It should be in relation to those kinds of deaths thought to be most preventable by medical intervention that Londoners should experience the greatest relative advantage.

(Benzeval *et al.*, 1992, p. 121)

In fact, quite the opposite is true: Table 3.1 shows that the overall mortality record for London is 8.7 per cent better than comparable areas elsewhere, but the avoidable mortality rate shown in Table 3.2 is only 3.8 per cent better. This is the reverse of what would be expected if health services were offering Londoners protective effects (Benzeval *et al.*, 1992, p. 56). Accordingly, the Institute suggests that Londoners' better comparative health status relates to the relative prosperity of London and the south-east, when compared to other parts of the country during the post-war era.

Table 3.2

Area variations
in avoidable
mortality,
1985-89
(SMRs)

Area categories	London	Non-London comparators	England
Inner deprived	116	131	122
Urban	104	107	107
High-status	88	89	89
Weighted sum	100	104	103
Other			96
England			99

Source: Benzeval *et al.* (1992)

This analysis highlights the importance of material and social deprivation as a determinant of poor health – a finding that is, of course, substantiated nationally and which has considerable relevance for London's inner-city population. The Institute found that material deprivation – as measured by a summary index of variables such as low income, inadequate diet, poor housing, not having a car, and environmental factors – related significantly and consistently to a range of measures of poor health. In addition, most measures of poor health also related to social deprivation, as assessed by lack of social support, a lack of social roles, social isolation and discrimination.

These findings suggest that – while it would be difficult to argue that Londoners as a whole can claim to have excessively poor health linked to deprivation – what poor health there is in London is strongly associated with the deprivation in its inner city.

Londoners' attitudes to health care

Although Londoners appear to have relatively good health, preliminary results from research being conducted by the King's Fund Institute and the London Research Centre suggest that the capital's residents are more likely to be dissatisfied with health services than people in the rest of the country.

Table 3.3

Public dissatisfaction with
the NHS,
1991

Service	London	Non-London comparators
	% of respondents reporting dissatisfaction	
NHS as a whole	27.3	21.3
GPs	8.3	7.3
Hospital outpatients	30.4	22.6
Hospital inpatients	17.1	11.5
N=	457	3744

Source: OPCS
Omnibus Surveys,
August and
November 1991

Table 3.4

Public perceptions of need for improvement in health services, 1991

Source: OPCS Omnibus Surveys, August and November 1991

Service	London	Non-London
	% of respondents perceiving need for improvement	
GP patient time	44.0	34.8
Hospital casualty	69.0	50.3
Hospital building conditions	72.5	56.7
Hospital medical treatment	46.1	36.0
N=	457	3744

Table 3.3 shows that, in response to questions asked in national surveys about a range of health services, Londoners express higher levels of dissatisfaction than people living elsewhere in England. For example, 30.4 per cent of Londoners are dissatisfied with hospital outpatient care compared with 22.6 per cent of survey respondents in other parts of England. Moreover, Table 3.4 – which gives responses when people are asked for their perceptions about the need for improvement in health services – shows some striking differences between the capital and elsewhere. Hospital building conditions and casualty departments are thought to be particularly in need of improvement in London, but there is also a substantial difference in the perceived need for improvement in medical care (Judge and Solomon, forthcoming).

From a related but different perspective, the London Research Centre (LRC) has conducted a series of discussion groups to elicit the detailed views of users of various health services in the capital. It found that:

...the overwhelming majority of views recorded in group discussions were critical of services, but the criticisms were made in the context of support for NHS-provided services.

(London Research Centre, forthcoming)

One of the LRC's key findings relates to the need for a more integrated pattern of health care provision in London:

...participants want policy-makers and service providers to give greater recognition to the inter-relationship between primary care and secondary care, between health and social care and between various specialist health services, so that patients can receive a 'seamless' or 'holistic' service. Participants commented on the need for closer liaison and better cooperation between hospital specialists, GPs and support services, and discharge from hospital was identified as a particular instance where coordination of services needs to be improved.

(London Research Centre, forthcoming)

Summary and conclusions

London's population exhibits some significant differences when compared to England as a whole. It has a more mobile population, with relatively fewer home owners and a higher proportion of single-parent families and people from black and ethnic minority groups. However, while poor health and premature death are inextricably associated with deprivation in London, as elsewhere, Londoners' overall health status is as good as or better than that of people living in comparable parts of England. Despite this, Londoners demonstrate higher levels of dissatisfaction with health services than people living in other parts of England, across a range of measures.

London's health services today

This chapter of the Commission's report surveys the current level of health care resources available in London. In doing so, it examines the cost, efficiency and quality of health services in the capital, with a particular emphasis on acute hospital care. It draws on a number of the working papers commissioned as part of our research and information programme. These were designed to give as comprehensive as possible a picture of the workings of the capital's health services, from a number of points of view (Boyle and Smaje, 1992a; Martin *et al.*, 1992; Hogg, 1992; Laing, 1992; Murphy, 1992).

The chapter begins by discussing the level of acute hospital resources in the capital, when measured in terms of expenditure per London resident. It then examines how these resources are used, in order to illuminate some of the underlying differences in costs per case in London when compared to other parts of the country. Flows of patients within London, and between London and the rest of the country, are examined next. Since it is impossible to discuss the provision of hospital care without considering how it relates to primary and community services, the chapter lays out some of the salient features of primary and community provision in the capital and considers how this is linked to the provision of continuing care in London and to the independent sector.

Expenditure on London

More than £17.7 billion was spent on hospital and community health services (HCHS) and family health services (FHS) in England in 1989–90, of which approximately £3.3 billion was devoted to London. The breakdown between HCHS and FHS expenditure is shown in Table 4.1. Overall, spending on hospital services accounts for 58 per cent of the total nationally, and 64 per cent in London.

Acute hospital services in London had 20,000 beds, employed 125,000 whole-time equivalent (WTE) staff and cost £1.2 billion in 1989–90. Approximately one million episodes of inpatient and day cases took place in London over this period. An additional £266 million was spent on London's Special Health Authorities (SHAs), which had 1,925 available beds and employed 10,970 staff in 1989–90. Although the SHAs have national responsibilities for postgraduate education, research and specialist referrals, they are also an important health care resource for Londoners, who made up 68 per cent of their 1989–90 case load.

Overall, some £2.9 billion – or around 20 per cent – of all English

Table 4.1

Health care
expenditure,
1989-90
(£ billion)

	London	England
HCHS		
Hospital	2.1	10.2
Community	0.30	1.6
Other	0.25	1.3
HCHS Total	2.6	13.1
FHS		
General Medical Services	0.24	1.6
Pharmaceutical Services	0.31	2.3
Other	0.12	0.7
FHS Total	0.67	4.6
Total	3.3	17.7

Note: SHA expenditure is not included in the London total as this expenditure is not controlled by London DHAs.

Sources: Boyle and
Smaje (1992a);
Boyle and Smaje
(forthcoming)

HCHS expenditure is spent in London, although London health districts contain only 15 per cent of the population of England (Boyle and Smaje, 1992a).

Resource use in London

In a detailed comparative analysis of HCHS resourcing and utilisation in English health districts, the King's Fund Institute has grouped together inner deprived districts, urban districts and high-status districts in order to make valid like-with-like comparisons between London and the rest of England (Boyle and Smaje, 1992a).

This innovative work makes it clear that while both resource use and spending on hospital and community health services is high in London when compared to the rest of England – and, most particularly, when inner London is compared with the rest of the country – there is a general concentration of services in inner deprived districts. Thus, throughout England, more HCHS resources are spent in inner deprived areas than in more socially mixed urban settings, or in the affluent suburbs.

This pattern reflects both the higher needs of inner-city populations and the historic concentration of hospital resources and associated medical education in major urban centres like London, Liverpool, Manchester, and Birmingham. As a result, spending per capita on the resident populations of these areas is higher than elsewhere.

However, care in London is very expensive. HCHS expenditures are 27 per cent higher per head of resident population in inner deprived London districts than in their non-London equivalents, and 16 per cent higher for acute hospital services. Looking at the city as a whole,

Table 4.2

Available NHS
beds per 10,000
resident
population by
status category,
all acute
specialties
group, 1989-90

Area category	London DHAs	London inc. SHAs	Non-London comparators
Inner deprived	38.8	43.6	41.6
Urban	24.5	28.9	29.0
High-status	21.4	21.9	19.0
Total	28.5	31.3	29.2
England	25.0	25.4	

Note: SHA beds are included in this table according to geographic location. The majority are in inner deprived London. The second England total includes SHA beds.

In this table, and in subsequent ones, unless otherwise stated, it should be noted that the London and non-London comparator groups do not cover every district in England; often both total figures will be higher than the overall England average.

Source: Boyle and
Smaje (1992a)

London districts spend 14 per cent more on acute services than their counterparts in the rest of the country. However, despite the generally held view that London is 'over-bedded', Table 4.2 shows that when inner deprived London is compared with equivalent areas elsewhere in England, it is found to have slightly fewer beds per thousand resident population than comparable districts elsewhere. Even when acute SHA beds are added, the overall number of beds in London is just four per cent higher than similar areas elsewhere.

Spending on HCHS staff

Expenditure on staff amounts to 72 per cent of the NHS budget nationally. As a result, it is clearly of prime importance when considering the cost structure of health care in London relative to the rest of the country.

Overall, expenditure on staff in London districts is 30 per cent more than the weighted average of their non-London equivalents. This differential relates both to higher wage costs in London and to higher staffing levels. Other private and public sector organisations generally allow for a mark-up of around 20 per cent for wages in the capital, to cover both London weighting and the cost of attracting staff with skills that are in short supply (Boyle and Smaje, 1992a, p. 37).

The King's Fund Institute has shown that higher staff levels alone account for over two-thirds of the difference between spending on staff in inner deprived London and staff spending nationally. Table 4.3 compares staff levels per resident population in inner deprived London and equivalent non-London districts with the England average. Levels of medical and dental staffing per capita resident population in inner deprived London – where the capital's teaching hospitals are concentrated – are 17 per cent higher than in non-London inner deprived districts, many of which also contain teaching hospitals.

In addition, medical and dental staffing patterns in inner deprived London are unusual. There is a higher ratio of non-consultant medical staff to consultants than in comparable districts elsewhere, resulting in

Table 4.3

WTE staff
numbers per
100,000
residents by
staff group,
1989-90

	Inner deprived		
	London	Non-London comparators	England
Medical and Dental	200	172	90
Nursing and Midwifery	1229	1202	833
Administration and Clerical	414	341	206
Ancillary	334	338	209
Professions Allied to Medicine	126	78	76
Scientific and Professional	62	42	23
Professional and Technical	113	104	62
Work	10	9	7
Building and Maintenance	55	38	34
Total	2543	2324	1540

Source: Boyle and Smaje (1992a)

a lower average WTE cost of medical and dental staff in London than is the case nationally.

Inner deprived London districts employ 22 per cent more administrative and clerical staff per capita resident population than their comparator inner deprived districts. Inner deprived areas generally employ fewer nurses as a percentage of total staff than the English average. Inner London in fact employs even fewer than its non-London equivalents – a pattern that results in a relatively expensive package of care in the capital.

Efficient use of resources

It is clear that London uses more resources relative to its resident population than would be expected, both when compared to the national average and to equivalent areas in other parts of England. When considering the relative efficiency of London's acute care, the King's Fund Institute found that London performed slightly less well than non-London comparator districts in terms of patient throughput – an efficiency measure which depends upon the length of time each patient occupies a bed during a single episode of care and the interval during which that bed remains empty before being used by the next case. Tables 4.4 and 4.5 show the relationship between throughput and average length of stay.

London districts have longer average lengths of stay both than comparator districts elsewhere, and the national average. Overall, average length of stay in London is 12 per cent greater than in comparator districts. Average length of stay in inner deprived London is 16 per cent greater than equivalent non-London districts. This is reflected in lower throughput levels in London relative to the rest of the country.

Conventional wisdom has it that teaching hospitals will tend to have lower annual throughput rates than non-teaching ones. In

Table 4.4

Annual
throughput by
status category,
all acute
specialties
group, 1989-90

Source: Boyle and
Smaje (1992a)

Area category	London	Non-London comparators
Inner deprived	49.0	52.0
Urban	49.0	50.7
High-status	47.4	52.2
Total	48.4	51.9
England	50.2	

Table 4.5

Average length
of stay by status
category, all
acute specialties
group, 1989-90
(days)

Source: Boyle and
Smaje (1992a)

Area category	London	Non-London comparators
Inner deprived	5.8	5.0
Urban	5.6	4.8
High-status	5.3	5.1
Total	5.6	5.0
England	5.0	

London, length of stay in teaching districts is indeed longer than in its non-teaching districts. This is true even when differences in case-mix complexity are taken into account. However, it is noticeable that teaching districts outside the capital have average lengths of stay which are eight per cent less than non-teaching districts outside London – a finding that appears to contradict accepted wisdom.

The most plausible explanation for lower London throughput rates is the concentration of teaching hospitals in the capital and the availability – or otherwise – of community-based care to facilitate the discharge of patients at clinically appropriate times (Boyle and Smaje, 1992a, pp. 44–49). Some evidence for this last point is suggested later in this chapter, in the section on primary and community services in London.

Issues of comparative efficiency can also be addressed by considering the productivity of particular staff groups. Table 4.6 compares the productivity of medical and dental staff and nursing and midwifery staff between London and non-London comparator groups and with the England average. Inner deprived London has some 40 per cent more consultants per 10,000 episodes of acute care than the England average. When compared to equivalent districts outside the capital, inner deprived London has 20 per cent more – with other London districts close to the national average (Boyle and Smaje, 1992a). Although consultants' teaching commitments are allowed for in this calculation, other aspects of teaching hospital work – notably clinical research – may contribute to the higher London figure. Relative to both the national average and equivalent inner-city areas, inner deprived London also has a higher proportion of non-consultant medical and dental staff per

Table 4.6

WTE staff per
10,000
episodes, all
acute
specialties
group

Area category	London		
	Consultant	Non-consultant	Acute nurses
	M & D	M & D	
Inner deprived	17	43	155
Urban	12	28	148
High-status	12	29	139
Total	15	36	149
Non-London comparators			
Inner deprived	14	33	156
Urban	12	26	141
High-status	12	27	132
Total	13	30	146
England	12	27	147

Source: Boyle and
Smaje (1992a)

episode – even higher, in fact, than is the case for consultants.

However, inner deprived London uses only 5 per cent more acute nurses per 10,000 cases than the national average, and – comparing like with like – inner deprived London districts have the same usage rate as their comparators outside the capital. Again, these figures give clear evidence of a different mix of staff in inner deprived London.

The impact on costs

Relative both to the national average and to comparator districts, inner deprived London has a disproportionate input of resources relative to activity. This is, of course, directly reflected in the cost of care: as Table 4.7 demonstrates, a case treated anywhere in London costs about twenty per cent more than equivalent districts elsewhere, and there is a strong trend towards increased costs per episode from high-status areas – where the average cost is quite close to the national average – to the inner deprived – where the average cost is 45 per cent higher.

The King's Fund Institute examined the difference in costs between teaching and non-teaching hospitals in the capital. On

Table 4.7

Average cost
per episode by
status category,
all acute
specialties
group, 1989–90

Area category	London	Non-London comparators
	£	£
Inner deprived	790	630
Urban	628	532
High-status	565	509
Total	693	576
England	546	

Source: Boyle and
Smaje (1992a)

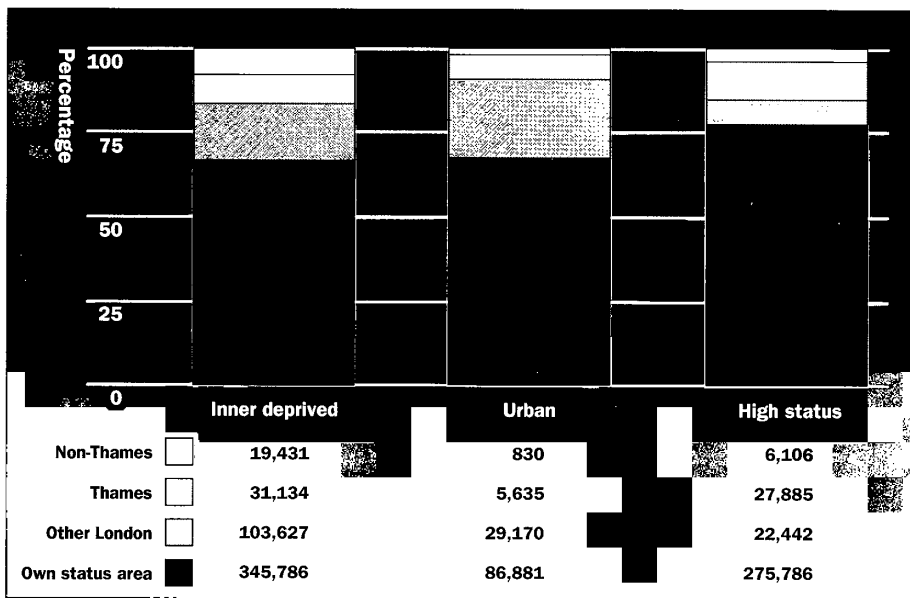
average, an episode of care in a London teaching hospital – at £1,052 – costs almost twice as much as one in a non-teaching hospital – at £531. Although teaching hospital costs outside the capital are higher than non-teaching hospital costs, the difference is nowhere near as marked as in London (Boyle and Smaje, 1992a, pp. 51–54).

Who uses London's hospitals?

London is a relatively expensive provider of acute care, and it seems to have more than its share of resources in terms of its own resident population. London is also, however, a net exporter of care.

Figure 4.1

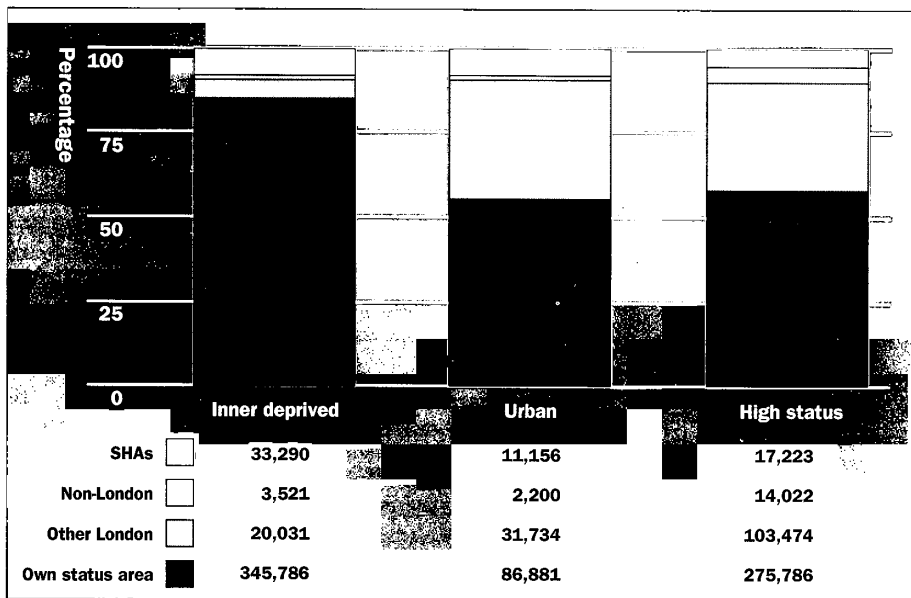
Who is treated in London status areas, patient flows, 1988–89



Source: Boyle and Smaje (1992a)

Figure 4.2

Where Londoners are treated, patient flows, 1988–89



Source: Boyle and Smaje (1992a)

Figure 4.1 shows who is being treated in London hospitals, which are grouped into those in inner deprived, urban and high-status areas. By far the largest proportion for each area are residents of the type of area in which the hospital is located, which is designated as 'own status area' in the figure.

Nearly 21 per cent of patients treated in inner deprived London hospitals come from either urban or high-status London areas. When flows from outside the capital are added there is a total flow of about 30 per cent of all cases treated in inner deprived London – about 154,000 cases.

Figure 4.2 shows where Londoners are treated. In the case of inner deprived London residents, only 24,000 flow out of the area. SHAs are included in this diagram, which demonstrates that London residents make up some 62,000 of the cases treated in SHAs, or approximately two-thirds of all SHA patients.

In cost terms, inner deprived London hospitals use 2,500 beds, 15,000 staff and £150 million on treating non-residents, of which 80,000 cases come from elsewhere in London. It is clear, therefore, that the historic underprovision of hospitals in the London suburbs and the home counties continues to have a very direct effect on health services in the capital today. Residents of outer London still depend to an appreciable extent on hospitals in inner deprived London – many of them teaching hospitals with extremely high costs. The extent to which London now acts as a *national* referral centre is, however, limited, with only some 3 per cent of London hospital cases and 17.3 per cent of SHA cases originating from outside the Thames regions.

Pattern of services

The location of so many teaching hospitals and special health authorities in London has meant a concentration of specialty services in the capital. Historically, each of London's teaching hospitals has striven to support a full complement of medical and surgical specialties as a base for teaching and research. In many instances, this means that their work has overlapped with that of the more specialised SHAs. The result is an intense concentration of specialist units in inner London, which – despite numerous attempts – has successfully resisted change (Hogg, 1992).

Indeed, the rapid decline in London's bed numbers during the 1980s appears to have affected general medical and surgical beds disproportionately – with closures concentrated in the smaller local hospitals (see Box 2.3). This has left specialty provision relatively unaffected within inner London teaching hospitals and SHAs (Hogg, 1992). In south-east London, for example, there were four cardiothoracic surgery services; three renal units; three plastic surgery centres and a three site radiotherapy service operating within three miles of each other in 1990, despite a marked overall reduction in acute beds in the districts concerned over the preceding decade (Murphy, 1992). Thus, general medical and surgical provision has been concentrated in fewer beds than the absolute numbers imply. This concentration of specialty services may also go some way to explaining why the ratio of elective

to emergency inpatient admissions in inner deprived London districts is 57:43, compared to a 50:50 ratio nationally (Boyle, 1992).

This pattern of care may be at the root of the apparent paradox in London's health services today. In present-day inner London, where bed numbers per thousand population are comparable to equivalent inner-city districts outside the capital, significant numbers of patients from outer London and elsewhere use services in which specialty provision is powerfully represented. Perhaps as a result, there is an apparent dearth of provision for local people – particularly elderly people – with common acute conditions (Murphy, 1992; Martin *et al.*, 1992).

In addition, the concentration of analogous – and competitive – specialty departments in inner London means that there is duplication of expensive equipment and laboratory costs, problems of recruitment of staff with scarce skills, as well as difficulties of disseminating research findings, clinical protocols and other 'best practice' between centres (Murphy, 1992). 'Hidden' specialties, whose costs are not covered by national or regional funding, also act as a drain on the resources available to treat local people in London's teaching hospitals.

Quality of acute services

In their evidence to the Commission, the Greater London Association of Community Health Councils (GLACHC) raised a number of important concerns about the quality of NHS acute services in London. These ranged from the poor physical environment of many London hospitals to the persistent problems created when hospital staff fail to involve patients sufficiently in their treatment, and to give them adequate information about their condition and care.

The Association also pointed out that particularly vulnerable groups like homeless people, people with disabilities and people from black and ethnic minority groups frequently experience discrimination from London's acute services, which are – in addition – not always sensitive to the needs of people from different cultural and racial backgrounds (Martin *et al.*, 1992).

GLACHC also reported that there were particular difficulties associated with admissions and discharge planning in London hospitals, and that communication between hospital and primary, community and social services was often less than ideal, to the detriment of patients and their families. Waiting lists in London were amongst the longest in the country, and cancellation rates for elective surgery are high (Martin *et al.*, 1992).

Primary and community health services

It is often claimed that spending on community services relates closely to spending on hospital services. In London, this holds true: spending on community health services follows a similar gradient to that of hospital services, with inner deprived London districts spending nearly twice the national average of £34 per head of population, and some 40 per cent more than their non-London counterparts. Urban London spends 17 per cent more than equivalent non-London districts. High-

Table 4.8

A comparative profile of district nursing services in London, 1989-90

Area category	London		
	Nurses per 100,000 residents	Contacts per 1,000 residents	Cost per contact £
Inner deprived	22	526	18.8
Urban	25	859	12.1
High-status	21	644	12.9
Total	22	630	14.6
Non-London comparators			
Inner deprived	32	996	8.9
Urban	31	774	10.5
High-status	29	655	11.8
Total	31	809	11.3
England	27	722	11.2

Source: Boyle and Smaje (forthcoming)

status areas both in London and in the provinces are close to the national average (Boyle and Smaje, 1992a).

Interestingly, however, there are some community services where spending in London is close to or less than non-London equivalent districts. An example is community midwifery, where London spends less than non-London equivalent districts. In inner deprived districts outside London there are 40 per cent more community midwives per delivery than in equivalent parts of London.

Table 4.8 takes district nursing as a particular example of community health services and demonstrates some of the pertinent facts for London and its comparator areas. While London districts spend 11 per cent more on district nursing services than their non-London equivalents, far fewer district nurses are employed per head of population in the capital. Non-London inner deprived districts employ nearly 50 per cent more district nurses than their London equivalents, with the national average some 23 per cent higher. This lower level of staffing in London is reflected in terms of district nurses' patient contacts. In inner deprived districts outside the capital there are 90 per cent more district nurse contacts per head of population than in inner deprived London. Average costs per district nurse contact are extremely high in London. Health visitor deployment shows essentially the same pattern (Boyle and Smaje, forthcoming).

Family health services

Overall, London spends just over three per cent less on family health services than equivalent non-London districts, and approximately the same as the national average. For inner deprived districts, spending is some four per cent less in London than in equivalent non-London areas. This is particularly surprising when related to the higher costs

Table 4.9

FHS expenditure per capita resident population, 1989-90

Type of area	GMS £	PS £	FHS £
London			
Inner deprived	37	46	102
Urban	34	45	94
High-status	33	43	91
Total	35	45	96
Non-London comparators			
Inner deprived	32	56	106
Urban	32	51	97
High-status	34	46	94
Total	33	50	99
England	33	49	96

Note: The FHS total also includes GOS and GDS expenditures.

Source: Boyle and Smaje (forthcoming)

associated with London, and even more so given the higher levels of spending on acute services.

As Table 4.9 indicates, London does in fact spend slightly more on general medical services than equivalent parts of the country, but this is balanced by markedly lower levels of drug dispensing and expenditure from the FHS budget. Drug-related spending is 17 per cent lower in inner deprived parts of the capital than it is in comparable areas elsewhere. There are 30 per cent fewer prescriptions dispensed per head in inner deprived London, and London areas use fewer drugs, although the net ingredient cost of drugs in the capital is five per cent higher than in equivalent districts elsewhere (Boyle and Smaje, forthcoming).

These low levels of expenditure are reflected in the marked under-development of primary care services in the capital, using a variety of measures. Table 4.10 provides a comparison of London with comparable areas elsewhere in the country for a number of variables which are generally agreed to act as a proxy for the quality of GP service.

In each case, London appears to be in a worse position not just when compared with England as a whole, but also relative to comparable areas elsewhere in the country. In terms of GP services, London has a much higher proportion of GPs over the age of 65 than elsewhere – some 130 per cent higher than the English average. When compared with equivalent non-London districts the figure is still almost 80 per cent more.

London also has considerably more GPs with list sizes of more than 2,500 people, and more single-handed GPs under the age of 65. Turnover of patients in London is higher than the national average by some 25 per cent. There are fewer practice nurses per GP than the

Table 4.10

A comparative profile of GP services in London, 1989-90

	% single-handed per 100 GPs	Practice nurses per 100 GPs	Ancillary staff per 100 GPs	% of GPs > 65 years	% of GPs' list size > 2,500
London					
Type of area					
Inner deprived	20	15	121	9	20
Urban	19	13	127	8	19
High-status	17	16	135	6	17
Total	19	15	128	7	19
Non-London comparators					
Inner deprived	20	12	140	6	11
Urban	12	16	144	3	9
High-status	9	19	159	2	9
Total	14	16	149	4	10
England	11	18	148	3	10

Source: Boyle and Smaje (forthcoming)

national average, and 13 per cent fewer ancillary staff (Boyle and Smaje, forthcoming). Minor surgery has failed to develop within general practice to the same extent as it has elsewhere: only 40 per cent of London GPs are on minor surgery lists, compared with 72 per cent nationally (Boyle and Smaje, 1992b).

All in all, it seems clear that London retains much less comprehensively developed primary and community health services than other parts of the country. Although there are, of course, exceptions to it – and many examples of new initiatives and promising innovations in the capital – the pattern holds true even when like-with-like comparisons are made between London and other English cities (Hughes and Gordon, 1992; Boyle and Smaje, forthcoming).

In her report to the Commission, Professor Elaine Murphy – writing of care of the elderly services in the capital – comments:

It is...a salutary exercise to visit Nottingham, Bristol, Oxford, Manchester and indeed many districts in suburban London such as Bexley and as far afield as Cornwall to see how far behind most London services have slipped in terms of innovation and developments in community oriented services... The services in London have mostly remained firmly wedded to the acute hospital model of care, with many physicians playing a role in acute general medicine alongside their responsibilities to develop a service for elderly people.

(p. 12)

Her comments on psychiatric services in the capital make similar points about the persistence of an acute-hospital-dominated model of care, as well as highlighting the absence of community supports for people with long-term mental health problems in the capital (Murphy, 1992).

The same arguments were made by the Greater London Association of Community Health Councils in their report to us on provision for older people (Martin *et al.*, 1992). Reporting on primary and community health services in London, the King's Fund Centre comments on a general failure to build on service innovation and experiment in the capital, and points to a number of significant obstacles to progress, including the absence of capital planning and development and poor understanding among senior health services managers of the potential of these services (Hughes and Gordon, 1992).

Continuing care in London

Historically, as Chapter 2 explains, long-term care has been poorly developed in London, with provision for people with learning disabilities and long-term mental health problems concentrated in large institutions on the city's rim. This pattern still holds true today, for although the old hospitals are slowly being closed it is proving difficult to establish a range of local health and social services for people with long-term needs.

There is also a relative undersupply of independent sector residential and nursing home beds in London when compared to elsewhere in the UK. In London, the independent sector supplied an estimated 41 per cent of London's long-term nursing care bed capacity for elderly people, and 46 per cent of residential care places. The remaining 59 per cent of nursing care beds were provided in long-stay NHS geriatric and psychogeriatric wards. In the UK as a whole, the equivalent proportions are 61 per cent and 60 per cent (Laing, 1992).

In her evidence to us on health services for elderly people in London, Professor Murphy maintains that growth in the independent sector has been insufficient to compensate for the overall loss of NHS long-stay geriatric beds and local authority residential home places in London over the last ten years. The loss of local authority residential home accommodation is estimated at approximately 20 per cent of total places since 1979. As a result, Professor Murphy maintains that some elderly people are occupying acute hospital beds in London for longer than necessary, for want of adequate sheltered housing or domiciliary, nursing home and equivalent care. Convalescence and rehabilitation are also poorly catered for (Murphy, 1992).

Independent health care in London

In 1991, there were 3054 independent hospital beds in 42 independent medical and/or surgical hospitals in greater London. This constituted just under a third of all UK private and voluntary acute sector provision.

In terms of activity, by 1986 25 per cent of elective surgery carried out on British residents in the four Thames regions took place privately (a separate figure for Londoners is not available). While there is no comparable information for the early 1990s, increases in private medical insurance and claims rates suggest that it is likely that the

proportion today is as much as one-third of all elective surgery conducted in the London area (Laing, 1992).

Summary and conclusions

In 1980 the London Health Planning Consortium highlighted the problems of the heavy concentration of acute specialty medicine and surgery in the capital, its fragmentation, and the inadequacy of primary care in London. Despite traumatic changes in the intervening twelve years, this remains the position today. Indeed, in some ways the situation has deteriorated.

In primary care there have been some improvements, but there is still a very long way to go. Moreover, developments in London have largely mirrored trends more strongly established elsewhere. The contrast between the capital and the rest of the country remains as sharp as ever. While there are some well-trained and motivated younger primary health care practitioners, there is also a preponderance of small, isolated GP practices. Premises remain a major problem, as does the cost of living in the capital. Both factors mean that London is unattractive financially for many GPs.

Moreover, there are also groups of Londoners – and London communities – for which the conventional British model of general practice simply does not work. This is true for homeless people, including those living in bed-and-breakfast accommodation and in squats. It can also be true of a wider group of people who are not rooted in the city, for example young people and students.

Turning to the acute sector, what has happened to the capital's hospitals since 1980 has been almost the worst of all possible worlds: acute specialties have retained their grip on the capital's hospitals; there has been virtually no redistribution of medical manpower away from central London despite the decline in bed numbers; and little progress has been made in concentrating specialist resources into fewer, stronger centres.

Continuing care for chronic conditions and care of elderly people also remain problematic in the capital. While there are some outstanding examples of community health services, they are thin on the ground as well as being expensive. Against a background of continuing resource constraint it has been hard to establish new community-based initiatives. A compounding problem is the fact that the capital largely lacks the private sector nursing and residential places that increased so dramatically in much of the rest of the country during the 1980s.

In many important respects, London's health services appear stuck in a time warp, having been shaped a century ago. To date, forces for change have been largely negative and budgetary. They have not tackled the structural issues in any constructive way. As a result, the capital's hospital services continue to operate at extremely high cost, and to do things which in many instances could be done better and less expensively in other settings, and by other means.

London is not alone in facing interlocking – and seemingly intractable – problems of this kind. To a greater or lesser extent these

difficulties are shared by many major cities across the developed world as they attempt to reshape the legacy of the past to meet present and future requirements. Prospects for medical education and research in the capital are inextricably bound up with health service issues, and we examine these in the next chapter of the Commission's report.

Medical education and clinical research in London

Medical education: national role and expenditure

Approximately one-third of all medical students in the UK are trained in London. A total of 1350 doctors qualify each year from the capital's eight medical schools, which are incorporated into the University of London (Table 5.1). Medical and dental students make up 20 per cent of the University's UK-national student population. There are many opportunities for young doctors to obtain further training within these medical schools and in the various postgraduate institutions of the University. Most of these are grouped within the British Postgraduate Medical Federation, with the exception of the Royal Postgraduate Medical School and the London School of Hygiene and Tropical Medicine (Table 5.2).

The medical schools and postgraduate institutes are each linked to teaching hospitals or hospitals run by Special Health Authorities

Table 5.1

The medical schools of London University

Group		Annual student intakes ¹	
		Preclinical	Clinical
A	1 University College and Middlesex	195	215
	2 King's College and King's College Hospital Medical School	105	115
	3 St Bartholomew's and The London Medical Colleges and Queen Mary College	200	250
	4 St Mary's/Imperial College	100	110
B	1 Charing Cross and Westminster	155	175
	2 Guy's and St Thomas's (United Medical and Dental Schools)	195	225
	3 Royal Free	100	100
	4 St George's	150	160
Total		1200	1350
A Four schools have merged with multi-faculty colleges. The relationship of St Bartholomew's and The London with Queen Mary College is in the form of a confederation (City and East London Confederation) rather than a complete merger.			
B Four schools remain freestanding.			
1 The difference between preclinical and clinical intake figures reflects the addition of students who have completed their preclinical training at the Universities of Oxford and Cambridge to London medical schools' numbers at the clinical stage.			

Source: Towle (1992)

Table 5.2

Postgraduate institutes of
London University

**British Postgraduate
Medical Federation**

Institute of Cancer
Research
Institute of Child Health
Institute of Dental Surgery
National Heart and Lung
Institute
Institute of Neurology
Institute of Ophthalmology
Institute of Psychiatry
Hunterian Institute

**Royal Postgraduate
Medical School**

**London School of Hygiene
and Tropical Medicine**

(Tables 5.3 and 5.4). Clinical academic staff employed by the schools and institutes have honorary health service appointments and contribute substantially to patient care in inner London.

The medical schools spend £200 million and the institutes £98 million. These funds derive from the Universities Funding Council (UFC), research grants from statutory and charitable sources, and – in some schools – from trust funds. In addition, the service increment for teaching and research (SIFTR) given to London health authorities with teaching hospitals by the Department of Health is approximately £130 million a year on top of their district health authority subventions. The Special Health Authorities do not receive SIFTR, but are instead directly financed by the Department of Health at approximately £300 million a year.

Undergraduate education

It has been many years since any London teaching hospital could provide comprehensive training in all disciplines for all its students. The rapid decline in bed numbers in London during the last decade has made it increasingly difficult to sustain the traditional pattern of bedside medical teaching in the capital. These problems are exacerbated by national changes in the pattern of care: shorter lengths of inpatient stay; a shift of clinical work to day case, outpatient clinic or primary care; and to the private sector for elective surgery (Towle, 1992; Laing, 1992).

London medical schools have compensated for these difficulties by negotiating access to hospitals outside the centre with a more general case mix. These arrangements have the disadvantage of separating students from a university environment early in their clinical courses. Although some London medical schools have located academic units in district general hospitals, for the most part there is little university surveillance of the nature of the clinical training or experience.

In addition, many schools have made increasing use of a wider range of medical and surgical specialties than is traditional for undergraduate teaching, to make up for the relative absence of general medical and surgical cases (Towle, 1992). Moving in the opposite direction, some clinical teaching traditionally given in hospital has transferred into primary care. The NHS reforms are likely to further reduce the number of patients with routine conditions in London teaching hospitals as their high costs inspire health authorities in outer London and the home counties to use lower-cost providers.

The UFC has recently commented on this by saying:

... The situation of the main teaching hospitals associated with some of the medical schools in inner London is sufficiently serious as to raise doubts about their future ability to deliver a viable educational programme, unless corrective action is taken. The problems are of such magnitude that it is doubtful whether they can be solved locally.

(1991)

Pressures on university funding have subjected medical education in London to additional strain. As in the rest of the country, numbers of academic staff in London have declined. Although in numerical terms

Table 5.3

London's
teaching
hospitals

	Bed numbers
1 University College and Middlesex Hospital (University College and Middlesex School of Medicine)	856
2 King's College Hospital (King's College and King's College Hospital Medical School)	568
3 St Bartholomew's Hospital (St Bartholomew's Medical College)	588
4 The London Hospital (The London Medical College)	893
5 St Mary's Hospital (St Mary's Hospital Medical School/Imperial College)	566
6 Charing Cross Hospital (Charing Cross and Westminster Medical School)	732
7 Guy's Hospital St Thomas' Hospital (United Medical Schools of Guy's and St Thomas' Hospitals)	836 789
8 Royal Free Hospital (Royal Free Medical School)	869
9 St George's Hospital (St George's Hospital Medical School)	1050
Total	7747

Table 5.4

London's
postgraduate
teaching
hospitals

	Beds	Revenue budget 1989-90 £000s
British Postgraduate Medical Federation		
1 Bethlem Royal and Maudsley Hospital (Institute of Psychiatry)	522	21,748
2 Eastman Dental Hospital (Institute of Dental Surgery)	- ¹	5,650
3 Hospital for Sick Children (Institute of Child Health)	460	36,910
4 Moorfields Eye Hospital (Institute of Ophthalmology)	242	14,660
5 National Heart and Chest Hospital (National Heart and Lung Institute)	514	32,644
6 National Hospitals for Nervous Diseases (Institute of Neurology)	354	19,561
7 Royal Marsden Hospital (Institute of Cancer Research)	370	27,000
Sub-total	2,462	158,173
8 Hammersmith and Queen Charlotte's Special Health Authority (Royal Postgraduate Medical Institute)	915	47,000
Total	3,377	205,173

Source: British
Postgraduate
Medical Federation
(1989)¹ The Eastman Dental Hospital is an outpatient service.

this has been offset by increased numbers of staff on short-term contracts, these new posts have been funded for research – not teaching – by the Medical Research Council (MRC), medical charities and the pharmaceutical industry. Given these difficulties, it might seem odd that no undergraduate teaching is given in the postgraduate institutes and their associated hospitals, but this is the case.

These changes will certainly compound the central and longstanding problem facing London medical schools: the concentration of specialty units in the hospitals of inner London (Hogg, 1992). Even given this concentration, advances in medical knowledge and technology mean that no hospital in London can attempt to provide the most up-to-date teaching in clinical care in all specialities, or even to keep up a presence in every major sub-specialty. Individually, they are quite simply too small. Nevertheless, high-cost specialities have continued to develop across the capital. In some cases, this has led to a remarkable concentration of units: for example, renal units exist within four miles of each other at Guy's, St Thomas' and Dulwich hospitals (Hogg, 1992; Murphy, 1992). In other instances, major specialist units in Special Health Authorities have prevented specialty developments in neighbouring teaching hospitals.

Student perceptions

Medical students in London have a hard time. Their course is long and accommodation is often remote from teaching centres. Life in the capital is expensive. Students spend a great deal of time travelling between different units, their teaching is fragmented and their clinical experience is dominated by the difficulties of health service provision in London. Because there is very little interchange of students between medical schools in the UK, students may not wholly perceive the magnitude of the educational disadvantage they experience, although there is evidence of concern amongst them about the future of medical education in the capital (University of London Union Medical Group, 1991).

Proposals for change

The Education Committee of the General Medical Council is now recommending fundamental changes in medical education. In essence, it is advocating:

- the integration of medical teaching with the broad stream of university education in order that medical students benefit from the rapid developments in biomedical and social sciences;
- earlier introduction to clinical work and the development of interpersonal skills;
- a core curriculum in the clinical years with a range of options studied in depth;
- continuation of formal education through the pre-registration year.

The intention of these changes is to reduce the factual overload which characterises medical training at present, and to produce a medical

graduate who is receptive to new ideas and able to evaluate them critically. Greater attention will also be paid to fostering good interpersonal skills. The aim is to produce a doctor capable of entering any branch of medicine and prepared for career-long learning.

Postgraduate education

London has been an international centre for postgraduate medical education, where young doctors obtained specialist training and undertook clinical research under supervision. Higher medical training leading to accreditation as a specialist – the gateway to a consultant post in the NHS – is dominated by the requirements and the examinations of the medical Royal Colleges. These Colleges are located in London, yet they contribute little to postgraduate education in the capital. Indeed, formal postgraduate training programmes in all specialties are poorly developed in the United Kingdom, and in London – where they should be easiest to mount – are conspicuously absent (Weatherall, 1991a). Most training is obtained 'on the job' in approved posts. The number of these posts is being sharply cut back, especially in London. Just as the capital no longer acts as a national referral centre for patients, so it is declining as a national centre through which aspiring consultants must pass.

A period in clinical research is widely perceived to be an important part of the postgraduate training of a specialist. There have been, and are, great opportunities in London for young doctors to do research, but equivalent opportunities now exist in medical schools outside the capital. Furthermore, many of the best young British doctors and their European and Commonwealth contemporaries look to North America for such experience, and interchange with France and Germany is growing (Smith, 1991).

Clinical research

A recent policy statement from the Academic Medicine Group has stated that:

...the quality of research in British clinical medicine is probably not increasing as fast as in other countries. The reasons include not only lack of funding, but also insufficiently imaginative and flexible policies for organising medical research within the universities.

(1989)

This relative failure is linked with the problems of allying clinical research to advances in basic science. In particular, developments within molecular and cellular biology which have occurred since the mid-1970s have amounted to a revolution in the biological sciences, and one which clinical academic departments in Britain have found it hard to come to terms with (Weatherall, 1991b).

Problems identified as contributing to this failure include lack of opportunities for training young doctors in the 'new' biological sciences, diminishing numbers of career academic posts, small clinical departments, and attempts by medical schools and postgraduate institutes to excel in too many areas at once: 'clearly, no medical school can

mount internationally competitive research in more than a handful of topics' (Academic Medicine Group, 1989). Further, multidisciplinary teamwork which permits free interaction between basic and clinical scientists is essential to progress. Although there are problems with this throughout the United Kingdom, the structure and distribution of academic establishments in London have created particular difficulties.

The need for a strong association between clinical research and basic science is certain to increase in the next century (Weatherall, 1991a). With the possible exception of University College, no one London medical school or postgraduate institute currently has a sufficient foundation in basic biomedical science to ensure future international status for the institution. This lack has been recognised even at the most prestigious – the Royal Postgraduate Medical School – and is being addressed with concern by the Medical Research Council through its Clinical Research Initiative (Smith, 1991).

Distant relationships between the science faculties of the University of London, its medical schools and the postgraduate institutes are a present and potential future weakness for clinical research in the capital. Indeed, despite a succession of policy recommendations urging closer association between the medical schools and the multi-faculty colleges of London University, three undergraduate schools and the postgraduate institutes do not have such a relationship at present (Haldane, 1913; Goodenough, 1944; Todd, 1968; Flowers, 1981).

With the exception of University College, none of the London medical schools received more than an average rating for research from the University Grants Committee in 1989, and only two postgraduate institutions were thought to be internationally outstanding. As national policy on research funding moves to concentrate resources on institutions of proven capacity there is a real likelihood that some medical schools in London may become impoverished teaching-only institutions. Even if this does not happen, the fragmentation of clinical research activity across London will hamper the development of international centres of excellence.

Summary and conclusions

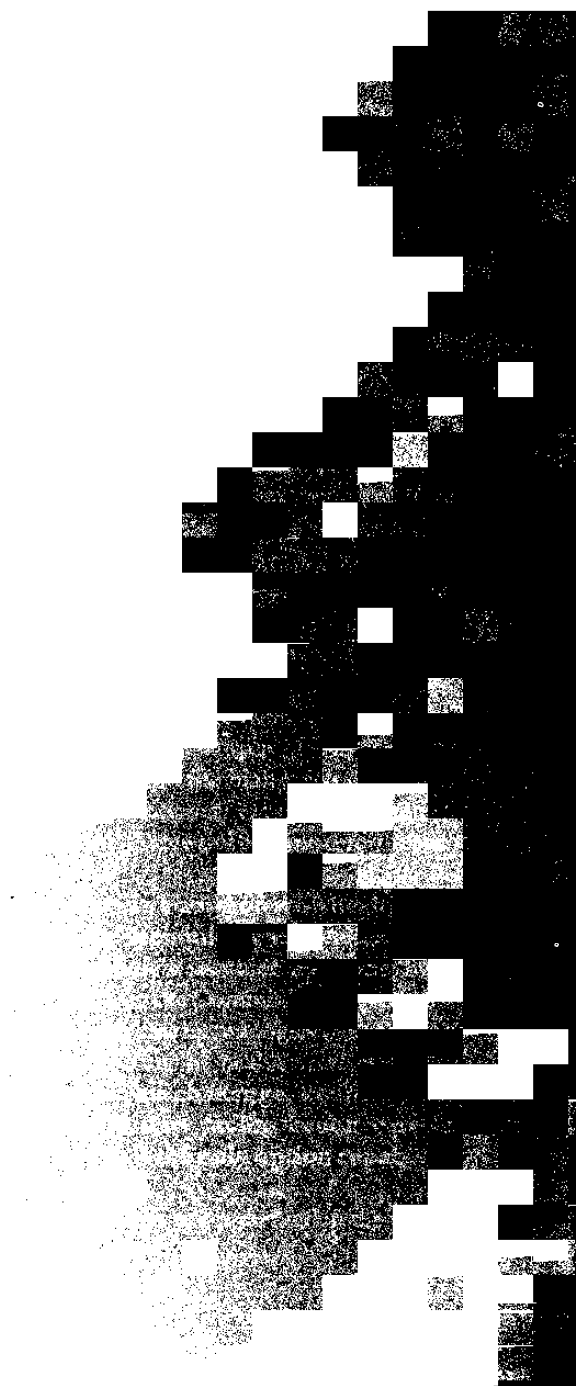
This section of the Commission's report has demonstrated the very considerable national investment in medical education and research in the capital. At the same time, the evidence available to us suggests that changes in NHS service patterns – particularly as they have evolved over the last ten years – have meant growing disadvantages to the use of inner London hospitals for a third of the country's undergraduate medical education. Their small departments and limited links with undergraduate education in other disciplines are disadvantages that have been noted for some years. The further reduction of routine caseloads that will occur as a result of the NHS reforms looks set to seriously exacerbate these problems. Moreover, the poor development of primary care in London does not permit the transfer of a substantial amount of clinical teaching into the community. Future changes in the process of medical education foreseen by the General Medical Council

will require a continuing and close association with other faculties of the University. If the quality of medical education in London is not to be impoverished, two conclusions are inescapable: medical schools, postgraduate institutes and basic science faculties must coalesce and be subsumed into bigger groupings, and the number of clinical students must be substantially reduced.

The fragmentation of clinical research between eight medical schools and ten postgraduate institutes, which are all divorced from the medical science departments of the separate parts of the University of London, undermines the potential achievement of medical education and research in the capital. Currently, it is questionable whether any London medical school or research institute is sufficiently strong in the 'new' biomedical sciences to assure it a position of international renown into the next century. There is therefore an overwhelming case for a radical reorganisation of medical schools and institutes. This should link these institutions to the constituent colleges of the University in order to generate a flourishing environment for research.

During much of the twentieth century, the capital's hospital services, medical education and clinical research have been fixed in a gridlock imposed by history, buildings, institutions and the fierce loyalties each has engendered. If London is to regain and sustain its former international excellence in clinical teaching and research, new and broader institutional alliances must be created, forged to a common purpose.

III The future



Twenty-first century health care in London: The Commission's strategy

Need for a strategic approach

The 'London problem' has been more than a hundred years in the making. The need to find a solution to it is now urgent.

In the short term, the high cost of treating people in central London promises a sharp decline in the numbers of cases referred to the inner city from outer London, the home counties and elsewhere. This will increase the already severe financial and management pressures upon London hospitals. **There is a real risk of attrition in which both the excellent and the mediocre would be lost indiscriminately, and basic services would be jeopardised.**

Londoners and the quality of UK health care more generally would lose from this. Indeed, research activity and medical education in London have already been damaged by fragmentation of resources and the lack of a coherent strategy.

Londoners get a poor deal from services as they are presently organised. Many experience problems with access to services, despite the significantly greater than average proportion of resources spent in the capital. This is particularly true for people living in outer London, who have to travel for many types of specialty care. Equally, vulnerable groups of Londoners in the inner city often have difficulty gaining access to standard acute hospital services because of the emphasis on specialty provision within many teaching hospitals. Frail elderly and homeless people, and those with mental health problems, receive a distinctly poor service (Murphy, 1992; Martin *et al.*, 1992). These problems help to explain the high levels of dissatisfaction about health services which Londoners express compared to people living in other parts of England (Judge and Solomon, forthcoming).

It is also becoming clear that – in common with health care across Europe – demographic and technological developments pose a major challenge to London's services over the next twenty years. The evidence available to the Commission suggests that changes in user expectations and health care technologies will combine to stimulate a fundamental restructuring of health services in the twenty-first century. **The extent of this challenge, coupled with the magnitude of the difficulties now facing health care in London, mean that radical change is the only option capable of resolving the London problem.**

Our analysis of the London problem was presented in the earlier

part of this report. This chapter discusses the nature of the changes that will confront health services over the next twenty years. Together, these form the basis for the Commission's strategy for London health care in 2010, with which this chapter concludes.

Forces for change

Health in context

Health and health care cannot be divorced from the social, environmental, technological and political influences which shape them. As the twentieth century ends, new forces are impinging on health services in Britain. The social and demographic context in which care takes place is changing, and the system must adapt to take account of these new conditions.

At the same time, developments in medical technology are blurring traditional distinctions between primary and secondary care and between established professional roles and specialties. Health care needs to be considered as an integrated unitary system, whether it takes place at home, or in primary, secondary, tertiary or continuing care settings. It will look substantially different by the year 2010.

Changing attitudes to health and health care

Health is both individual and collective: we commonly speak about the health of individual people and of populations. The principal determinants of health are economic, environmental, social, psychological and biological. They include environmental quality, income levels, housing, social support, and working conditions as well as genetic inheritance and personal behaviour.

The interdependence of all these factors has become clearer as this century has progressed. For example, we now know that improvements in housing and diet in the late nineteenth and early twentieth centuries caused a decline in tuberculosis death rates well before the introduction of antibiotic treatment and screening in the 1950s all but eliminated the disease in the UK.

Public attitudes to health and health care are changing. This is the result of major social trends, including improvements in education, the changing position of women in society and the increasing availability of information on health matters. Paradoxically, at a time when medical technology appears to be expanding the possibilities for effective care and treatment, people are becoming more discriminating about what health care offers. They are also more exacting about the quality of the care that they are given. Many wish to be actively involved in decisions about their treatment. Increasingly, this will be true of elderly people, who are the largest users of health care.

People are beginning to request improvements in the information they receive about their health, and involvement in the choices made about their care. Professional judgements are no longer accepted as uncritically as they once were. Hierarchies of all kinds – for example, between health professionals and the people they treat or between members of multidisciplinary clinical teams – are questioned.

The dehumanising quality of much medical care is being challenged by patients, and by some clinicians (Martin *et al.*, 1992; Bennet, 1988; Pembrey and Punton, 1990). Changes in professional education are beginning to reflect the contribution of social and psychological factors to health status (UKCC, 1986; Towle, 1992). Recognition of the economic and environmental determinants of health has stimulated new approaches to public health which emphasise the interaction of local government, community, environmental and health interests to enhance the health of local populations. A new emphasis on the rights and preferences of health service users means that waiting times for operations and for expert opinions, and the quality of patient care more generally, are subject to new scrutiny.

Demographic changes

The 'ageing' of the populations of advanced industrialised societies is well recognised, as is its corollary: the existence of increasing numbers of frail elderly people in need of care, and the decline in numbers of the young people who have traditionally supplied it within the NHS. This problem is particularly acute in urban centres like London which have relied on a younger workforce than elsewhere, and where social and kinship networks to support people at home are less strong (Seccombe and Buchan, 1992; Murphy, 1992).

Labour shortages may be an important influence encouraging the development of day-case treatments and home care instead of inpatient treatment in acute hospitals, but the pressures on carers and on people who live alone will have to be considered. Since older people are the principal users of health services, their slower physiological and psychological rate of recovery from medical and surgical interventions must be taken into account when short-stay and day-case facilities are planned. Follow-up by community health and social services needs to be closely calibrated to the new pattern of care (Stocking, 1992; Marks, 1992).

Changes in the pattern of disease and treatment

Increased life expectancy has resulted in changes to the pattern of disease across the developed world. Chronic degenerative diseases and cancers have replaced acute infectious diseases as the primary causes of disability and death in Britain. Since many of these conditions demand a variety of treatments over long periods, these changes have contributed to the increased spending on health services which has been a feature of western industrialised countries during the last twenty-five years. This has in turn resulted in moves to contain health-related expenditures (Jacobson *et al.*, 1991).

For many conditions, the management of disability has become as relevant as treatment. This is increasingly taking place in the community (Towle, 1992). In addition, advances in the care of both infectious and chronic conditions have shifted their treatment away from the hospital and into general practice.

In a number of important respects, however, health care delivery has failed to adapt to these changes, and remains overly committed to acute hospital care. One result of this is that, although there have been

many worthwhile innovations in community-based services, these have largely remained outside the mainstream of health care delivery.

Technology and the decentralisation of health care

A number of different technological developments within health care could move services away from traditional-style acute hospitals, or could further decrease inpatient stays. The greatly increased possibilities for short-stay, day-case and ambulatory care created by the rapid development of minimally invasive methods of diagnosis and treatment and less toxic anaesthesia are probably the most important (Audit Commission, 1992). The effects of these changes on service development are likely to be profound. They need to be actively managed (Stocking, 1992).

Pertinent developments include a whole range of innovations such as sophisticated diagnostic imaging, endoscopy, laparoscopy, and laser treatments. These have already moved certain types of surgery into outpatient or day-case settings. Developments in pharmaceuticals have shifted the management of certain conditions – for example, peptic ulcer treatment – from surgery into primary care, and are set to do so in other areas.

These advances are already having considerable impact on the way care is organised and delivered in acute settings. They, and the successor technologies which are emerging to supersede them, will continue to diminish the role of open surgery as we know it today, and blur the distinctions between surgery, medicine and radiology as well between primary and secondary care (Audit Commission, 1992; Devlin, 1991). Inpatient hospital stays will be progressively reduced for many categories of patient, leaving longer stays in acute hospital beds increasingly the sphere of cases presenting with complex multiple pathologies.

Technological changes promise to make greatly enhanced diagnostic and monitoring capabilities available in primary care settings, and to patients themselves, in their own homes. The same is true for a range of treatments. The possibilities for moving care outside hospital have already been demonstrated through techniques like home dialysis for people with renal failure, home-based parenteral nutrition and self-monitoring by diabetics, who adjust their insulin treatment as a result of tests that they carry out on themselves (Stocking, 1992).

Related developments in information technology and telecommunications could make expert opinions and monitoring available in primary care settings, or to patients direct. They can be used to transmit diagnostic and other information between centres. Videos and interactive computer systems could also be used to enhance patients' understanding of particular conditions and the treatment options available to them.

These developments, coupled with greater understanding about the natural history of disease, should make it possible to predict and manage chronic conditions in a way that minimises acute treatment episodes in hospitals in the twenty-first century. They also hold out the opportunity for much greater involvement of patients in the manage-

ment of their own health and health care (Banta, 1990; Stocking, 1992).

Recent experiments with hospital-at-home schemes, 'patient hotels' for people recovering from surgery, and nursing beds for convalescence and rehabilitation, are beginning to indicate new approaches to care outside conventional hospital settings. These are welcome, since acute hospital beds provide patients who do not need acute medical interventions with less than optimal care at a very high cost (Stocking, 1992).

Centralisation of specialist services

While much of what is now acute hospital-based investigation, treatment, monitoring and care may move into ambulatory and primary care settings, there are simultaneous moves to centralise certain types of intervention into more specialised centres. There are a number of reasons for this. In some cases, a variety of expensive advanced treatments will be needed for one condition – for example, trauma. In others, concentration of equipment and expertise will be required because treatments, and the skills needed to carry them out, are expensive and relatively rare – as for transplants and cardiac surgery.

In either instance, it is likely that evaluative research will continue to strengthen the case for the centralisation of certain kinds of treatment in specialist centres by making it clear that the best patient outcomes result from expert clinical teams treating a given volume of cases. The relationship between volume and outcome has been clearly demonstrated for conditions like hip replacement and prostatectomy. At the same time, the amount of clinical teamwork needed to deliver optimal care for complex conditions is set to increase, along with the cost of the diagnostic and treatment technologies used. This will mean a much greater degree of specialisation within and between acute care centres.

Implications for health services, medical education and research

The district general hospital of the 1960s and 70s which did all but the most specialised treatments across the whole range of medicine and surgery is becoming outdated: the hospital of the future is likely to be smaller and to concentrate on larger volumes of a more limited range of specialities and complex, high-cost treatments. General medicine as we now know it will probably cease to exist, with much of the role that it currently performs becoming combined with general practice outside acute hospitals (Banta, 1990).

Evidence of this changing pattern is already emerging. General surgery is being phased out, and physicians' work is becoming ever more specialised. Team work across clinical specialities is increasingly necessary. More and more interventions are being carried out on a short-stay or day-case basis (Audit Commission, 1992).

While there are many uncertainties and paradoxes in the information available to us, certain trends that are likely profoundly to affect the development of health services are clear. Together, they could bring important changes for the health care system by 2010, along the following broad lines:

- Advances in information and health care technology and changes in public expectations and education will enable people to be much more actively involved in decisions affecting their well-being and health care.
- A considerable proportion of the diagnostic and investigative work that currently takes place in outpatient and other acute hospital settings will be moved to primary and community health care settings, or to patients' own homes.
- Hospitals which centre on acute care are likely to become smaller; more specialised; and to focus on the care of people receiving complex, rare and/or expensive treatments and/or those suffering from trauma and multiple pathologies.
- The majority of planned surgical interventions and much investigative work currently done in hospital will take place on a day-case basis.
- As a result of these trends, arrangements for rehabilitation, convalescence, respite care and care of people who are dying will need to be made in appropriate care settings or in people's homes. If these are to be effective, good co-ordination within and between health services and other agencies is imperative.
- Certain specialties – for example psychiatry, dermatology and the clinical care of elderly people – may become almost entirely primary and community-based.

In inner London, the specific problems of securing appropriately skilled nurses and of handling the very considerable maintenance backlog on the city's acute hospitals make these fundamental changes to the pattern of health care delivery both urgent and necessary (Seccombe and Buchan, 1992; Meara, 1992). However, in London – as elsewhere – the critical problem for reshaping health care delivery will be to spread good practice and expert management throughout the service, to ensure high-calibre care for patients at every level.

The education of health professionals in 2010

This more varied form of clinical practice promises to break the historic dominance of the hospital as the primary location for the education of health professionals. Inevitably, training will move to the settings in which the majority of patients are treated (Towle, 1992). In 2010, this will be in primary, community and day-case care. As hospitals become more specialised, and concentrate ever more intensively on patients with multiple pathologies or those requiring complex and expensive therapies, they will become increasingly unsatisfactory centres in which to offer students the bulk of their clinical experience.

This implies a fundamental reorientation of health professionals' education around the new pattern of service delivery. Students will, however, have still to be closely linked with higher education to achieve the grounding in the basic, behavioural, demographic and clinical sciences upon which their clinical practice will depend.

Nursing has already made appreciable strides in reorganising its basic education to meet the challenges of providing more holistic, user-centred care – and more critical, enquiring practitioners – in the next century (UKCC, 1986). Undergraduate medical education is about to begin a period of curriculum restructuring, which will bring major changes in the way that medical students are taught in order to achieve similar ends (General Medical Council, 1991).

London Health Care 2010: A strategy for London

By 2010, the King's Fund Commission believes that the effects of major social and technological trends will have combined to reshape the health care system as we know it today. These changes will be fundamental. They will create major problems of transition. Damaging dislocations are particularly likely in major centres like London, where key building blocks of the future system, such as primary care, remain poorly developed.

2010 is less than twenty years away. Many of the developments discussed here are already apparent in different parts of the country. We are convinced that they will have a profound effect on health and health care across Europe.

We are also convinced that changes of the scale and depth sketched above will require strategic guidance and co-ordinated development at national, regional and local level. Success will depend on coherent, system-wide implementation. In London, it will not be sufficient to tinker at the edges, or to concoct the sticking-plaster solutions that have been a feature of the city's health policy for too long. A radical structural approach is needed. It is with this in mind that we have framed our strategy for health care in the capital.

Principles for change

Four basic principles should underpin the reshaping of health services in London:

- **London's health services must be planned and managed to serve the population rather than to perpetuate institutions.** This means starting from the health care requirements of the city's population, and the need to reduce health inequalities within the capital. Patients from outside the city should be served when the extra costs of treatment in London are justified by its clinical value.

Health authorities will need to form alliances with other agencies and organisations with the capacity to improve health and health care within London.

- **Londoners should be much more actively involved in their own health and health care.** Health services should recognise and respect Londoners' autonomy and individuality. They should be designed to help them make informed choices about their health and treatment. Health care delivery should be organised to meet pa-

tients' emotional and social needs, and those of their families. Styles of prevention, care and treatment should be geared to patients' preferences and circumstances, and those of the families and communities to which they belong.

- **Health care in London must become primary health care-led.** Secondary and tertiary care should become resources explicitly organised to enhance the capacity and support the work of primary health care practitioners. This will permit more health care to be given in settings close to where patients live, as well as a much stronger integration between primary and secondary care. Clinicians currently based in hospital settings will need to work much more closely with their colleagues in primary care if this is to be achieved.
- **Medical education and research in London should achieve international excellence, and a leading position within Europe.**

The remainder of this section of the Commission's report sketches what health services organised according to these principles could be like in the London of the next century. The vision that it represents is achievable by 2010. Many elements within it already inform present-day services in London, or elsewhere in Britain.

However, the changes outlined here are more profound than a simple reorganisation of the facilities for delivering health care in present-day London. The new system implies a major transformation: the type of care delivered in present-day health services will need to undergo fundamental changes. At each level in the health service system, people who provide health care will both be doing different things and doing those things in a different way.

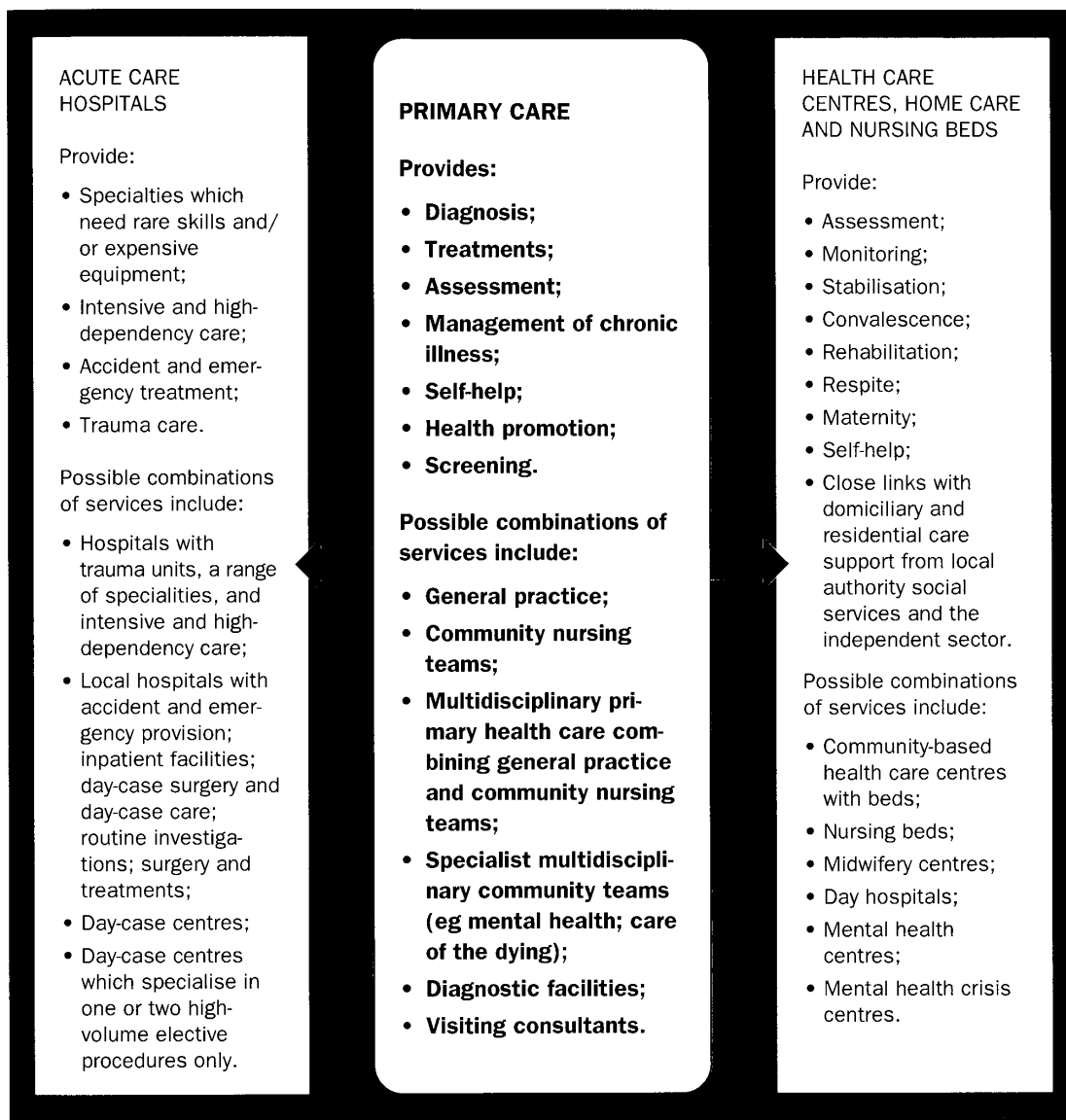
The continuum of care

Figure 6.1 outlines the pattern of health services which the Commission expects to see in 2010.

We consider that London's primary health care practitioners should have the main responsibility for health promotion, care and treatment in the capital in the twenty-first century. They will promote health and carry out and co-ordinate care and treatment in partnership with patients and their families.

To do so, these practitioners will need to call upon a range of other services as they are required. However, this should not involve a handover of responsibility as happens now – with the all too frequent discontinuities in treatment and care that result. Primary health care practitioners will guide people through services in a way that best meets their individual needs, and that maximises the choices available to them. The hope is that advances in our understanding of disease and our ability to treat it effectively in its early stages will, in any case, mean that we can better predict and manage acute episodes of chronic illness from primary care, and thereby minimise hospital admissions.

Figure 6.1 Health services 2010



The aim will be to locate many diagnostic and investigative procedures, and much treatment and care, in primary and community health settings close to where Londoners live, where this can be reconciled with quality and cost criteria. For this major shift in service style to benefit patients, it will be vital to have a much wider range of high-quality specialist advice immediately available to primary health care practitioners.

Primary health care teams will themselves have to evolve to meet the new challenges of community-based, patient-centred care. In particular, there will be a need to fuse the work of today's family practitioners with that of the community health services and to achieve

closer links with local authority social services and residential and nursing home care. New financial, managerial and accountability mechanisms for primary care must be developed.

Primary health care

The expanded role for primary care which the Commission has in mind encompasses the network of services provided by family practitioners and community health services in present-day London. It will require close alliance with social care services. If there is to be a successful shift of acute health services from the capital's hospitals into primary care, we must build systematically on today's good practice, and apply the learning acquired from a wide range of service innovations designed to meet Londoners' health needs where they live and work (Hughes and Gordon, 1992).

In 2010, investigations, diagnosis, treatments, monitoring, management of long-term conditions, prevention, health promotion, information, advice, and counselling would be provided by primary health care practitioners in people's own homes and in primary health care premises. These premises could range from a base for one or two practitioners to health centres where entire primary health care teams – including home support – are located and a range of equipment and more specialised advice is available. Many health centres could take responsibility for minor surgery and some accident and emergency work. In other places, primary health care practitioners could provide the primary health care component of a local 24-hour emergency service from hospital-based accident and emergency premises. Practitioners operating from smaller-scale premises would need to draw on a wider range of facilities for more specialised advice, diagnosis, investigation and therapy, including minor surgery and the treatment of minor injuries. These could be located in health centres, as above, or in specially designated centres, which also could act as a base for teams to provide support, treatment at home and rehabilitation for people with a range of ill health and disability.

These teams could be both generic and specialist, in the sense that some would have expertise across a range of clinical conditions – for example, rehabilitation or care of the dying – while others would have special skills applicable to particular clinical categories – for example, diabetes, asthma, and mental health.

Community-based centres for health care

Primary health care practitioners will need to draw on services which provide care for people with a wide range of needs for whom specialist acute hospital provision is inappropriate. This will include convalescence and respite care, rehabilitation, care for people who are dying and for people experiencing mental health problems. The aim will be to provide this care and treatment in a way that best meets the particular physical and emotional needs of individuals and of their families.

Community-based treatment of this kind will often be provided in people's own homes through hospital-at-home and similar schemes, with support from primary health clinicians, as well as more specialised support

in some instances (Marks, 1990). It will also be necessary to provide care from nursing beds and care centres which are convenient and accessible to London communities. Nurses can manage much of the care at this level, with contributions from medical and therapy staff when required.

These different types of care will not, of course, all take place in the same settings, although certain of them could productively be grouped together, as local needs and circumstances permit. In particular, some types of mental health services may be best provided in specialist premises. In certain parts of London, community-based health care centres and nursing bed units could be designed to provide a base for hospital-at-home teams and other home-based services, such as rehabilitation.

Places like the Lambeth Community Care Centre, London Lighthouse and the nursing beds at St Pancras Hospital already provide models for a new form of caring, respite and rehabilitation in the capital. The hospice movement has provided alternative approaches to the care of the dying for many years. These pioneering examples will need to be built on in order to forge new approaches to care across London. Groups for whom this type of provision would be particularly appropriate include elderly people, severely physically disabled people and people with mental health problems. Others, such as people convalescing from surgical or medical interventions and people needing rehabilitation, would benefit from care centres, nursing beds or home support as well. Close links between the new community-based health care centres and continuing care and sheltered housing would be essential.

Treatment in hospital

In the twenty-first century, diagnosis, investigations, treatment and care which require the use of expensive equipment and a range of highly skilled personnel will take place in acute care hospitals and day-case centres. The primary health care team will need to draw on this kind of specialist help for people for whom outcomes are better when treated by teams with special skills – such as major trauma or certain cancers or when treatments or investigations use expensive equipment.

- **Acute hospitals and day-case facilities** will undertake diagnosis, investigation and treatment for patients with complex needs, or who require expensive equipment and/or rare skills. In some parts of the capital, inpatient hospitals and day-case facilities will be linked. Elsewhere they may develop on separate sites.
- **Accident and emergency facilities** will be linked to acute hospitals. Many will include a primary care component, guaranteeing 24-hour access to emergency treatment for Londoners who need it.
- **Trauma units** will serve patients with major and multiple injuries using skilled teams of clinicians expert in this type of emergency work. They will be located within certain of the capital's acute hospitals.

Acute hospitals will become more intensive and more costly as they begin to concentrate on acute medical and surgical investigations and interventions, and as recovery, convalescence, rehabilitation, care of the dying and outpatient clinics transfer into the sphere of primary care, and the new community-based health care centres. New relationships between health staff will be needed to ensure that patients receive well organised and integrated care, with expertise diffused out from hospital settings to permeate the whole system.

However, as the new forms of primary and community services and day-case care are developing there will probably be a transitional need for some local hospitals to continue to handle routine surgery, investigations and care of common conditions like coronary heart disease. These would also provide local accident and emergency cover, but not trauma or intensive care.

Meeting special requirements

While this expanded form of primary health care could cater for the majority of Londoners, there would inevitably be people for whom the standard approach would be inadequate. The needs of transient populations – students, commuters, single homeless people and many homeless families – and people for whom English is not a first language fall into this category.

Instead of ignoring the special needs of these groups – or expecting them to conform to standard services – the provision of primary health care in the twenty-first century must be shaped to meet their special requirements. This may be done through ‘one-stop’ health shops in central London for commuters or students, walk-in centres for homeless families or by providing some primary health care services for certain people in non-NHS premises.

A wealth of experimentation currently takes place in the primary care field. Much of it is aimed at securing better services for people disadvantaged under the current system, but initiatives remain fragile, and dependent on individuals (Hughes and Gordon, 1992). In the twenty-first century, the critical point will be for the system to be flexible enough to support and learn from the variation needed to provide high-quality, cost-effective health care for groups of people who have difficulty accessing standard services. There will be no one right way: a multiplicity of approaches is needed.

New roles and relationships

To be successful, these service developments will need to coincide with major changes to the way health professionals work and interact. These will include new roles for general practitioners, practice and community nurses and other primary health care practitioners. There will need to be a new emphasis on communication and facilitation skills to ensure that patients and their families receive information to make choices about their care and treatment, and are well supported emotionally.

Consultant doctors, nurses with skills with particular patient groups or types of treatment, and therapists of all kinds will need to change their practice so that it more genuinely supports the work of

primary health care practitioners. More specifically, it will probably be desirable for many of the outpatient consultations that currently take place in hospital to be relocated into primary care. These consultations should be organised so that clinical specialists genuinely inform, support and enhance the work of their colleagues in primary care. It is likely that certain clinical specialists will develop an almost entirely community-based form of practice in the twenty-first century.

General practitioners, practice nurses, community nurses and other members of the primary health care team will need to familiarise themselves with a range of diagnostic and investigative procedures, new treatments and new ways of accessing expert advice and information so as to forge new relationships with consultant colleagues. New relationships between primary health care practitioners and their patients and families will also be required, along with other agencies and organisations with a capacity to enhance the health of local people – such as education and social services departments, self-help groups and voluntary organisations.

2010: The pattern of care

We do not think that there is any one right way to array and house the services that will constitute London's health care system by 2010. Figure 6.1 outlines the range of services which will be needed, but it is clear that the form that they take in different parts of the city will be shaped by the requirements of particular localities and the communities that live within them, as well as by existing investment in buildings and equipment.

To illustrate how the system might work, Box 6.1 sketches the services that could be available for women with breast cancer in the twenty-first century, Box 6.2 outlines how an orthopaedics service might operate in the next century, Box 6.3 gives an account of services for a London child with asthma, and Box 6.4 shows how a dermatology service could be organised. These examples are intended to be illustrative only – not prescriptive – and to stimulate imaginative thinking about the future of health services in the capital.

Implications for medical education and research

In 2010, medical education will continue to be grounded in the basic biological and behavioural sciences and in current medical practice. This implies strong links between university education and the realities of twenty-first century health services. Medical education in the capital will require a firm base within London University, but will need to have a great deal of flexibility to adapt students' clinical education to changing service patterns. This will be true across undergraduate and postgraduate medical education. Some clinical research will need to adapt to the changing location of care and become more community-based.

Costing the vision

The Commission is well aware that we cannot start with a clean sheet of paper in London: as in the past, the challenge will be to transform existing resources to meet the demands of the future. Inevitably, this will mean

Box 6.1

TWO LONDON WOMEN WITH BREAST CANCER IN 2010

Diagnosis

Giti Gupta and Sandra Doyle both have breast cancer. When a lump began to worry Giti, she went to discuss it with the doctor at the weekly well-woman clinic held in her neighbourhood Bengali centre. With the help of a Bengali-speaking advocate, the doctor listened to Giti's fears and explained the range of possibilities to her. She arranged for Giti to have tests done at the local health centre, and – knowing that the Guptas had young children – was careful to specify a mid-morning appointment which Giti could attend after dropping her three children at their primary school. Giti was glad that her advocate could come too, because she found talking about any of this in English a great strain.

Sandra had breast screening, which took place during a routine visit of the screening facility to Sandra's neighbourhood health centre. Sandra was surprised and pleased by the trouble that the nurses took to explain the procedures to her. When they reported the first worrying results, she was given time to talk about her feelings, and a clearly written leaflet which explained about breast cancer screening and the disease itself helped her explain things to her husband Frank when she got home.

When Sandra and Giti's tests were found to be abnormal, their GPs arranged appointments for them at one of London's cancer specialty centres for assessment and further investigation by breast cancer specialists. Giti asked to see a woman doctor, which she prefers, and to bring her advocate along. Her GP found this easy to arrange. She also organised travel vouchers for

Giti, because the cancer centre is a forty-five-minute journey from where she lives.

Agreeing a treatment plan

When cancer was confirmed, both women had an opportunity to discuss what this meant and to begin to consider options for treatment. Counsellors at the cancer centre listened to them attentively, answered their questions and encouraged them to take away information about different treatments, which made their possible risks, benefits and side-effects very clear. Giti found the cassette in Bengali particularly helpful, both for the information it gave her and because it helped explain things to her husband Anwar – something that she had been dreading.

Once they had absorbed this information and discussed it with their families, the two women agreed individual treatment plans with their GPs, with some additional help from the oncologist who advises their practices from the cancer centre.

Undergoing treatment

Surgery for both women took place at the cancer centre. Sandra went home after two days, and her recovery was supervised by Frank and her health centre's home care team. Giti was discharged after a short stay in the cancer centre to a nursing bed unit close to her home. She stayed there for three more days to convalesce: she felt very ill after the operation, and unable to deal with life in her crowded flat straightaway.

Sandra went for a three-month course of radiotherapy at the cancer centre. She found the journeys on top of the treatment very tiring, but put up with things because she was reassured by the fact that she was receiving

the most up-to-date treatment in an internationally famous centre. Her chemotherapy was organised by her GP, who arranged for her to have it at the local care centre as a day case using a clinical protocol agreed with the cancer centre.

Sandra found her health centre's cancer self-help group an enormous help during this very difficult time: the fact that she could ring group members when she was feeling low was a real antidote to depression for her.

Giti had follow-up drug treatment only. This was organised by the GP at the Bengali centre.

Living with cancer

Giti is feeling stronger now. She still tires easily, and needs more help from Anwar to care for the children than she did in the past. She sometimes feels lonely and frightened, too, but the women's group at the Bengali centre has been a help in keeping her spirits up most of the time. She and her GP are beginning to feel cautiously optimistic about the future, although Giti knows that nothing can be certain.

However, Sandra knows she is dying. She's glad of the care she gets from the health centre's home care team, and the practical help the nurses give Frank in looking after her. Together, they have agreed a care plan that has proved very effective at dealing with her pain, and the other troublesome symptoms she has had to learn to live with. Sandra wants to be at home for the time being, but she's not sure she wants to die there. It reassures her a great deal to know that there will be a bed for her at the local care centre if she and Frank decide that this would be best for them.

Box 6.2

ORTHOPAEDICS IN THE TWENTY-FIRST CENTURY

Patient diagnosis, assessments and advice sessions: would take place in GPs' surgeries or health centre clinics, where consultants would work with GPs in advising patients. Giving people clear advice about the benefits, risks and possible side-effects of surgical and other interventions would become a standard part of orthopaedic practice, as would the management of disability, with orthopaedic footwear and other aids available through community-based resource centres. For this, primary health care professionals would be closely linked to local social care provision, voluntary organisations and self-help groups.

Planned interventions: Operations like hip and knee replacements and other elective surgery would take place in dedicated day-case or short-stay facilities. Some of these specialise entirely in one or two common types of orthopaedic intervention. Podiatry and hand surgery would be covered at designated centres.

Some of these facilities would be organised as operating theatres linked to patient hotels catering for post-operative care, or to hospital-at-home recovery schemes. Longer-term convalescence and rehabilitation would take place at home, with home nursing and therapist support, or in community care centres or nursing beds. All these different

types of health care would work closely with local social care providers and self-help groups.

Accident and Emergency Departments: Orthopaedic surgeons would be available on call to treat fractures and deal with other aspects of orthopaedic accident and emergency work.

Trauma units: Well supported teams of orthopaedic surgeons trained in trauma care would be available on 24-hour standby at trauma centres. Intensive care and other back-up facilities for people with complex multiple injuries would be available on site, along with beds geared for their medical and surgical management.

Box 6.3

A LONDON CHILD WITH ASTHMA IN 2010

Tom Simmonds was always a chesty child. His wheezing got much worse when his father left, following the family's move into a bed-and-breakfast hotel. Sue, Tom's mother, gets desperate about it sometimes.

It helps that she can rely on Usha, the nurse attached to the homeless families centre. She's available from 9 to 5 at the centre, and Sue just has to walk in to see her. Usha has been great about advising Sue on Tom's diet, and about telling her how important it is to keep the dust in their room at a minimum. She is in the process of giving Tom a course of acupuncture, which Sue thinks may improve things. The videos the local self-help group sent her about living with asthma have been a help, too – Sue found it really useful to have information that she could take home and absorb at her own pace.

Even so, there have been some very difficult moments. During one recent attack, Sue was certain that Tom was dying: his breathing was so bad that he had to be rushed into hospital, where both of them stayed overnight until he improved. After this, Tom's paediatrician and Usha talked things over with her and changed Tom's drugs. Sue feels that the new ones are definitely more effective.

Sue worries terribly when she thinks about the future, and sometimes gets very depressed. It helps that Usha has spoken to the local authority's housing department about Tom's asthma, and is putting pressure on them to rehouse her. She's also arranged a place for Tom on the play scheme at the homeless families centre, which gives Sue some time on her

own two mornings a week. Sue finds that getting out of their hotel and playing with other children is great for Tom, and she's made friends with a few of the other mothers whose children go there. They sometimes do things together at the weekends now, which means that the time doesn't drag quite so much for Sue. Usha has explained that if the wheezing gets really bad again there will be a bed for both of them in the local health care centre, where a GP will keep an eye on Tom and try to prevent another hospital admission.

It is definitely still very hard to live in bed-and-breakfast accommodation with a child with asthma, but Sue knows where she can go for help when things get bad, and she finds that reassuring in itself.

Box 6.4**DERMATOLOGY IN 2010**

Patient diagnosis, assessment and advice would take place in primary care, where GPs and other members of the primary health care team would be well equipped to diagnose patients and advise them on the management of common skin conditions. Where necessary, consultant dermatologists would support the team's work by providing diagnoses, opinions and advice on treatment and management. Some of this could be done using information technology link-ups with health centres and other primary health care settings. Consultants would also hold clinics in GP premises and other local centres, where they would work in active partnership with primary health care practitioners. Many diagnostic tests and much minor surgery would take place in primary care settings.

Where central laboratory facilities were needed, results would be easily accessed in primary care settings using information technology – as could consultant advice.

For long-term skin diseases like eczema and psoriasis, the emphasis would be on helping patients and their families live as well as possible with their condition. Particular members of the primary health care team would acquire expertise in the management of chronic skin conditions of this kind. Sometimes this would be a GP, but the job could equally fall to a nurse practitioner. Where 'alternative' therapies and treatments were of proven value they would be incorporated into the team's repertoire. Part of their work would be to keep in close touch with self-help organisations and support

networks, in order to learn from and share information with them, as well as to put individual patients in touch with each other. In addition, occupational health nurses would provide advice on preventive strategies and the management of skin conditions to individuals in high-risk jobs.

A small part of consultant dermatologists' work would remain hospital-based, when this involved the use of cumbersome equipment. Much of this would be organised on a day-case basis. Dermatologists would also have to be available as part of multidisciplinary clinical teams managing hospital patients with complex multiple pathologies and other conditions in which the skin was involved.

continuing experimentation, service innovation, and evaluation.

It will also require a major reshaping of the city's health services. We have tested the feasibility of our vision for health care in London in 2010 against the likely availability of resources, and believe that the figures stand up.

In this section we indicate the order of magnitude of the capital and revenue money likely to be required. We suggest possible sources for these and sketch out a potential pattern for services across London, with its funding consequences. Appendix 4, which was prepared for the Commission by the York Health Economics Consortium, gives the statistical basis for our arguments in full.

The purpose of the analysis was to identify the financial consequences of a major shift in the balance of provision from secondary to primary care, with much greater use of day surgery and more intensive use of acute hospital beds. Table 6.1 gives an estimate of projected acute workload for the seven core specialties of general medicine, general surgery, paediatrics, trauma and orthopaedics, ear nose and throat, ophthalmology and gynaecology in 2010. This demonstrates dramatic overall differences between current requirements and projected future ones.

On the assumption that London hospitals can achieve the levels of throughput and day-case work being achieved today in the best-

Table 6.1

Estimated
reductions in
bed needs for
seven acute
specialties by
2010
(50th Percentile
Hospitalisation
Rate, 75th
Percentile Day
Cases and
Throughput)

Source: York Health
Economics
Consortium

Specialty	Beds in 1989-90 ¹	Beds in 2010-11	Differences
General Medicine	5,670	3,015	2,655
General Surgery	4,080	3,155	925
Paediatrics	2,545	1,840	705
Trauma and Orthopaedics	2,683	2,199	484
ENT	531	469	62
Ophthalmology	339	338	1
Gynaecology	1,185	1,032	153
Total	17,033	12,048	4,985

¹ These figures reflect acute beds in general hospitals in London *apart from* those beds in the SHAs. To come to the total of NHS acute beds available in London the total of SHA beds would have to be added to the above, plus those beds in acute specialties other than those listed here.

performing English districts, we estimate that a 5,000-bed reduction to London's current stock would leave sufficient capacity to meet Londoners' needs for acute care in 2010. This represents a 25-per-cent fall in beds over 18 years.

This reduction could release resources for a far-reaching community-based health care development programme, provided that it is linked to hospital closures and site sales. Appendix 4 demonstrates clearly that release of revenue resources is relatively insensitive to improvements in hospitalisation and throughput rates. Real savings can only be made when hospitals are closed and sites are sold. Any major development of community-based services in London is therefore critically dependent on a programme of closures, although we believe that investment to change services must precede it.

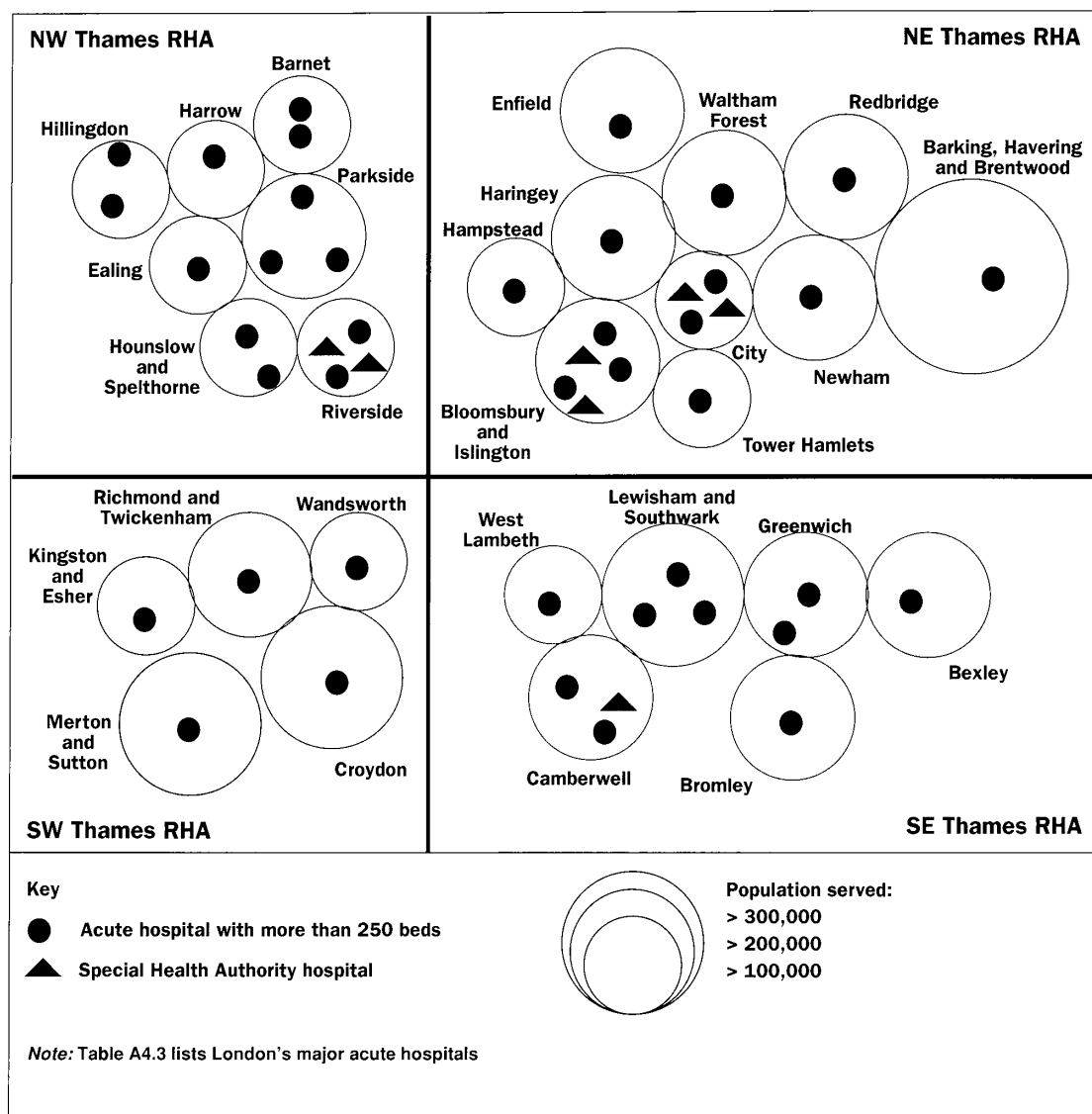
Figures 6.2 and 6.3 give illustrative examples of what the new service pattern might look like across the city. The first figure gives the current disposition of major hospitals within London health districts in schematic form. The second is a stylised representation of how local acute hospitals, specialty centres and the new community-based health care centres might be arranged in 2010, given projected needs for beds. The example works on the assumption that no one living or working in greater London should be further than 30 minutes' 'blue light' travelling time from a hospital with accident and emergency facilities.

Currently London has 41 acute hospitals with more than 250 acute beds. In our illustration, no more than 30 units will be required and retained.

This example would also involve a rationalisation of tertiary specialist units and the development of four or five trauma centres. In addition, up to four SHAs could be relocated within retained hospitals, making their sites available for disposal.

Using conservative assumptions, £80 million in revenue resources could be released on a recurring basis if a restructuring programme of this order were implemented, and more than £900 million in capital. If the estimated £1.5 billion available under the

Figure 6.2 Current provision of major acute hospitals in London

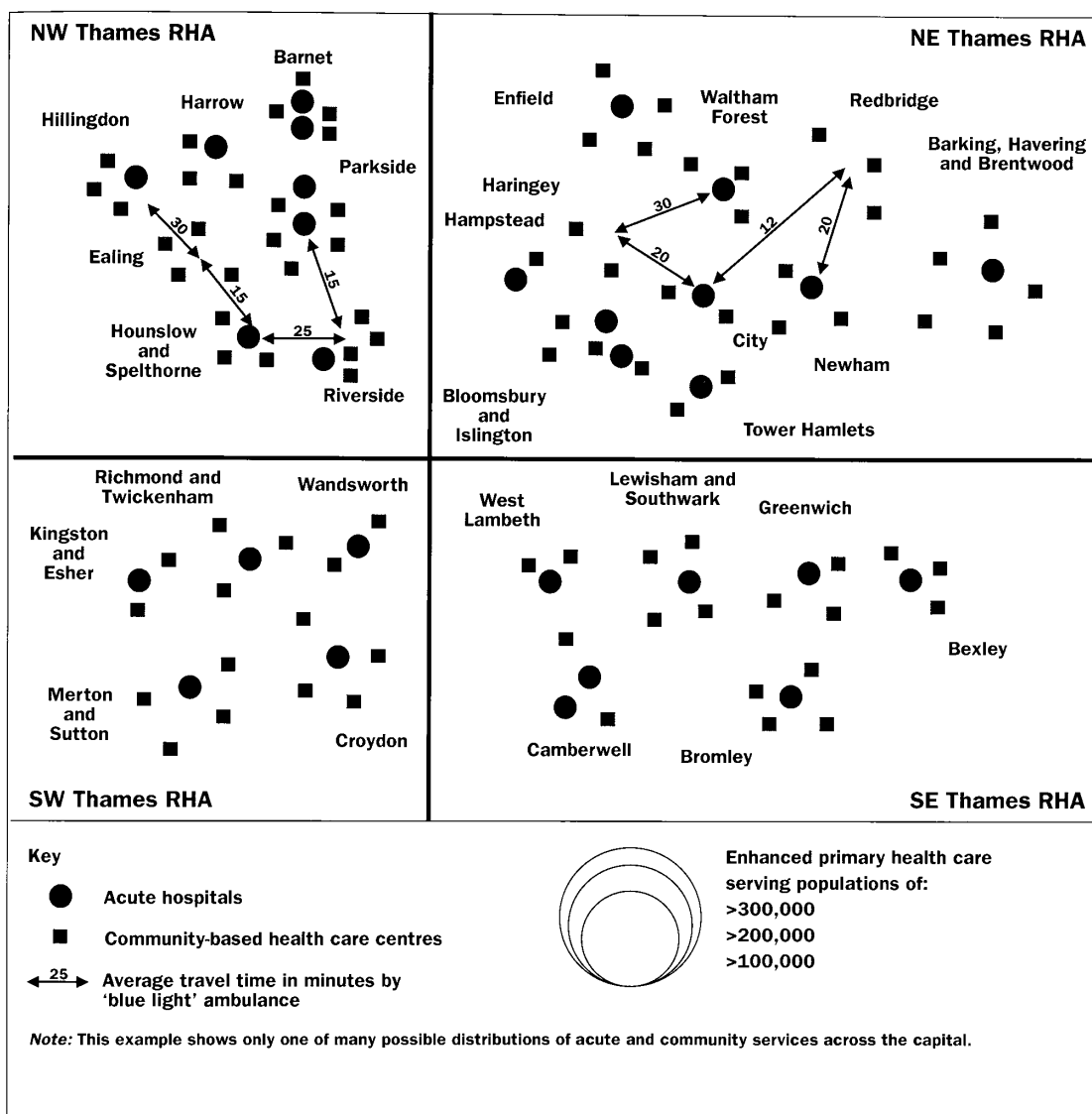


NHS capital programme for developments to London's hospitals over a twenty-year period are added to this figure, we think that the capital implications of our vision are realistically based.

About £1.2 billion would be needed to achieve the service rationalisation we propose, with an additional £220 million to develop community health care premises. This is well within the sum potentially available. Some of London's smaller hospitals – of which there are more than 100 – might also be redeveloped.

There are, of course, many imponderables. These include the workings of the new capitation funding formula, which is discussed in more detail in Appendix 4. However, the Commission believes that

Figure 6.3 An illustrative example of a possible future pattern of health services in London



there is sufficient scope within the capital's existing resources to achieve a significant transfer from acute to primary care without requiring additional funding for the NHS over the whole period, providing there is the initial investment to make it possible. In the longer term, health services in London should be funded on the basis of its population and the inevitably higher costs of provision for them, plus whatever regional and national work is better done in London than anywhere else. The capital's services should not be funded on the basis of protecting existing institutions and budgets.

Conclusion

The King's Fund Commission is confident that the shift from hospital to community-based care is necessary and inescapable. London's health services must address this with urgency as part of a general reorientation of services to meet Londoners' needs in the next century. Indeed, given the pace and scale of change within health care over the past fifteen years, the likelihood is that the Commission's strategy for London will appear overly conservative by the time 2010 is reached.

Our vision for London is achievable – indeed, the future is already being shaped along these lines in many parts of the UK outside the capital. London's rich legacy of health service buildings and land holds the key to a reinvestment programme which could provide Londoners with health services of real excellence in the new century.

To achieve this objective, our recommendations for the future of health care in London frame a process which would change the capital's health services in line with the vision that we have outlined here.

Changing the future of health care in London: The Commission's recommendations

Over the last century, successive administrations have failed to address the problems of health care in London, despite a considerable degree of agreement on the key issues.

Three things have stymied progress. The first has been the lack of any agreed direction for the capital's health services. The second is the absence of any means of bringing about London-wide change. The third, and most important, has been a failure of political will to tackle the Gordian knot of inter-related issues and intransigent interests that contribute to the 'London problem'.

Our recommendations are designed to create a process powerful enough to slice through the interwoven strands of the 'London problem' in order to modernise London's health services.

Essentials for change

Two things will be essential to bring about change. The first is sustained political will to back major structural changes to health care delivery in London. Only this will provide the impetus to unite and direct the very many different bodies with responsibility for health care, medical education and research in the city.

The second is the need to involve Londoners and those working within the capital's health services in their transformation. Their imagination, enthusiasm, energy and commitment must underpin any successful reshaping of services. Accordingly, change must build on their ideas for the regeneration of health care. We have framed our recommendations with both these key requirements in mind.

Throughout our work we have never doubted that the National Health Service will – and should – remain the provider of health services to the majority of Londoners in 2010, and that London must stand out as a leading international centre for medical care.

The Commission's recommendations

Our recommendations consist of three closely inter-related components:

- a primary and community health care development programme for the capital;
- the reshaping of hospital-based acute services in London;

- the consolidation and reorganisation of medical education and research in London.

A Task Force should be established to carry out this programme within a defined time period, with clear terms of reference and powers.

Each of these elements is explained in more detail below.

1 The Task Force

- 1.1 A Task Force should be established, to assume strategic responsibility for a major primary health care development programme in London; for the reshaping and renewal of acute services; and for the reorganisation of the city's medical education and research. It should be accountable to the Secretary of State for Health and the Secretary of State for Education, and to the Chancellor of the Duchy of Lancaster on questions of research.**
- 1.2 The Task Force should be given powers to work with and direct NHS commissioning consortia, health authorities, health services providers, local authorities and other agencies to reshape the pattern of health services in the capital.**
- 1.3 It should be given powers to work closely with and co-ordinate the University of London and the Universities Funding Council to align the requirements of medical education, research and the health service in the next century.**
- 1.4 The Task Force's programme should be completed in five years.**

The Task Force should ensure that the development of primary and community services and the reshaping of the acute hospital sector becomes embedded in the purchasing and planning strategies of London's health authorities, consortia and providers. It should work with these bodies rather than act in their stead. Doing so will create a positive force for the evolution of health services in the capital, which would continue well beyond its five-year life.

The King's Fund Commission has considered the possibility of recommending a single London health authority, and has rejected it. Even if such an authority were to be introduced, we consider that a special task force would be required to reshape services in the capital. The problems of health care in London are pressing and the Task Force would constitute an appropriate and flexible agent for change. Any pan-London authority would take time to establish. Moreover, there is the danger that a pan-London authority might become a powerful defender of the status quo, instead of an instrument for effecting the fundamental changes which are required to renew services in the city. A Task Force accountable to the relevant Secretaries of State is therefore a dynamic method of dealing with the broad strategy, while leaving tactical decisions to the existing authorities.

2 A primary and community health care development programme for London

2.1 Investment in primary and community services

The quality of London's primary and community health services has long been inadequate. While progress has been made over the past decade, much remains to be done. The Commission is convinced that we must now implement a planned programme of action based around preferential investment in and development of the capital's primary and community health service infrastructure.

This is an essential first step to any reorientation of health care in the capital, given the importance that primary care will assume in the next century.

We recommend that the London Task Force should undertake a £250 million primary and community health care development programme for London, in conjunction with London health authorities.

The Programme would have three goals. The first is to address the deficit in primary and community services that currently exists across London, especially for health care designed to support people with chronic disease.

The second is to encourage primary health care practitioners to undertake aspects of treatment that currently take place within acute hospitals and their associated outpatient departments. Here the objective is to improve the efficiency, accessibility and acceptability of Londoners' health care without compromising its clinical effectiveness. This will include the establishment of a range of community-based health care centres.

The Programme's third goal is to involve Londoners in designing services to meet the needs that they have helped identify. No one model of primary and community health services will be appropriate for London, and the city's communities must have an active part in shaping the new services.

2.2 Analysis

The Task Force should begin by joining with the Thames Regions and London's health and local authorities, commissioning consortia and health service users and their representatives to analyse the services available, and existing capital investment in primary and community services. The Task Force will be guided by regions as to the appropriate geographical groupings on which to base this exercise. It might be that a good 'map' of the resources and services available across the city could be built up using family health service authority areas as the basic unit of assessment in some places; in others a different approach might be necessary.

This process would identify strengths and weaknesses in services to local people, and answer the question: 'which services would it be appropriate to move into primary and community-based settings in the short and medium term in this part of London?' It would consider the

linkages between primary and secondary health care, and between the NHS and local authority social services.

2.3 Investment strategy and development plan

Once the analysis is completed, area investment strategies and a phased development plan would be developed between all the interests involved. The area plans would form the basis for bids for development money from Programme funds. The service 'map' and the area development plans should be completed and bids awarded in the Programme's first year.

One of the major criteria for attracting Programme funding would be the extent to which plans devolved services from acute hospital to community and primary health care settings and involved local people in their design and evaluation.

The Programme will be guided by the Commission's principles for health care in the capital, and priority would be given to services which address problems of unequal access to health care by disadvantaged groups within London.

2.4 Service development

The Programme would then work with the relevant authorities to develop and learn from the diverse set of developments in primary and community-based health care across London which it was supporting. Service innovations would be carefully monitored and evaluated. The Programme would take active steps to diffuse lessons from its work throughout the service system, to stimulate further innovation in a 'snowball effect' across the city.

2.5 Ensuring clinical quality

The Programme will work with the appropriate authorities and patient groups to develop care plans for particular conditions and groups of people in order to optimise outcomes for patients and to manage transfers between primary care and other service sectors appropriately. The object is to make certain that patient care is managed by expert primary health care teams who can draw on secondary and community-based health care when required.

The primary health care development Programme will stimulate the capital's health authorities to forge links with local authority social services, environmental health, education, and leisure departments in an effort to develop joint or complementary approaches to service delivery. These linkages will be particularly important for child health care and for services to people who need continuing help and support – for example, people with long-term mental health problems, and other disabilities.

2.6 An incentive and training strategy for primary and community-based staff

The Programme will work with the capital's health authorities to develop incentive and training strategies to enable their staff to undertake new roles and develop new relationships with colleagues and with their patients.

2.7 An information technology investment strategy for primary and community-based care

If high-quality services are to move into primary care from their present-day hospital settings, a major development of information technology in primary care will be required. This will cover access to diagnostics and imaging facilities from primary care, along with access to expert opinions, appropriate clinical information and treatment protocols. The development Programme will need to inform, guide and, in some instances, fund investments in information technology.

Here the emphasis will be on applying existing technology and diffusing best practice, rather than on research. Examples of useful areas for investment might include transmission of electrocardiographs or ultrasound images 'on line', or by facsimile, and the transmission of X-rays between primary and secondary centres.

2.8 A technology assessment and investment strategy for primary and community-based care

The Programme will experiment and undertake pump-priming projects to develop guidance for appropriate investment by providers, commissioners and health authorities. To do so, it will use efficiency and effectiveness criteria to determine which technologies can appropriately move into primary care settings, and which should remain in hospitals. This will not, of course, be a static picture, but will change as technologies emerge and evolve.

2.9 User involvement

The Programme will consult and involve Londoners and their representatives from the statutory and voluntary sectors. This process will start with a major public education programme about the range of possibilities for the future of health care. Health authorities and provider organisations will need help to enable users and user representatives to play an active part in all stages of service development and monitoring. Evidence of genuine community involvement in service development proposals will be an important criterion for assessing bids made to the Programme for local service development.

3 Reshaping and modernising London's acute hospitals

3.1 If Londoners are to receive high-calibre hospital services and if London is to be a European and international centre of excellence in the next century, the King's Fund Commission is convinced that a fundamental reshaping of secondary and tertiary health services in the capital is urgently required. Currently, these services do not serve Londoners adequately, and their ability to compete with the best clinical and research efforts internationally is being steadily eroded.

Accordingly, the Task Force should work with London's regional, district and special health authorities, commissioning consortia, providers, local authorities and the University of London to agree and implement a process of consolidation and modernisation for the city's acute services.

The task

The objective is to produce a better pattern of service for the capital, and one which will be a sound basis for the future evolution of health services in the city.

In the first phase of this work, the Task Force should concentrate on services which cater for large populations – particularly trauma, burns, transplants, neonatal intensive care, paediatric intensive care, specialised cancer treatments, and cardiac and neurosurgery. At a second level of planning are the specialties which can be properly planned and managed for fewer people, including orthopaedics, standard cancer services, cardiology, neurology, gastroenterology, paediatrics, psychiatry, obstetrics and gynaecology, general surgery, urology and genito-urinary medicine.

The Task Force will work to determine the optimal catchment populations, volumes of care, organisation, staffing and the support from other clinical services and specialties that these services require, in the light of best practice internationally. This analysis must take account of the likely future development of the specialty, using ten- and fifteen-year time horizons, and consider how each can be shaped to deliver an effective and efficient service. Estimates of the number and type of centres which each specialty would require in London could be based on this, as well as a view on the other services with which it would need to be linked. The Task Force will consult closely with clinical leaders in each specialty to do this, as well as with the Thames Regions and key London stakeholders.

In parallel, intensive work is needed on the rationalisation of sites. London has more general hospital sites than it needs or can afford. They are unevenly distributed – particularly between inner and outer London. Sites will be required for three main purposes: as bases for local community-based health care centres; for acute general hospitals with an increasing shift from inpatient to outpatient services; and for tertiary referral centres. Choosing which sites to retain and develop involves criteria of access, distance from other hospitals, site and building characteristics, and value.

The process

People at the appropriate levels of leadership in London should undertake the transformation of services, within guidelines established by the Task Force and backed up by Ministers. It is up to the Task Force to facilitate the changes and ensure that they actually happen. In the last resort the Task Force must have the power to knock heads together and insist on action, but we hope that this sanction would rarely have to be used.

Throughout the consolidation process, the Task Force should use the distribution of London's population as the principal basis for reshaping acute service provision in the capital, on the assumption that the decline of referrals from outside the capital will accelerate as the full effects of the NHS reforms are felt. Taking into account increased activity levels and day-case work, this would mean that some fifteen major acute and SHA hospitals in London would need to close over the period 1992–2010.

The precise timing of the programme is a matter for the Task Force to judge. Within twelve months, however, we believe that service patterns for the principal specialties should have been defined and the process of devising the new acute health service patterns in each quadrant of London should have begun. These should include a new emphasis on devolving services to primary and community-based care, and on developing day-case work.

3.3 In addition to its work to consolidate services we recommend that the Task Force set targets – which it should then monitor – to increase the efficiency of health care providers in London.

London's health care providers should aim to match the throughputs and costs-per-case achieved by health authorities in other major English cities, while allowing for the higher salary, capital and other costs of operating in the capital. The Task Force should work with London purchasers and providers to achieve this.

3.4 The Task Force will address the high levels of medical staffing in parts of London and devise schemes for relocating, retraining or retiring medical and dental staff in line with the capital's present and future requirements.

This will mean a reduction of some 30 per cent of current medical staffing levels in London's hospital service. Change of this order will be needed in order to permit London services to reach levels of efficiency comparable to other English cities and to release the necessary funds for investment in primary and community-based services.

4 Consolidation and reorganisation of medical education and research in London

4.1 The King's Fund Commission believes that the quality of medical education and research in the capital will decline unless radical steps are taken to strengthen the links between medical education and other forms of higher education. The cross-fertilisation between research in the basic biological sciences and in medicine must be greatly improved.

Therefore, we recommend that the University of London take steps to consolidate undergraduate and postgraduate medical teaching in new Faculties of Medicine located within four main centres of the University of London: Imperial College; King's College; Queen Mary College/Westfield; and University College.

Our aim is to create powerful multidisciplinary academic centres for undergraduate and postgraduate medical education and clinical research, with the strong associations between clinical medicine and the basic biological and social sciences that medical education and research will depend upon in the twenty-first century. In undertaking this major restructuring, the University of London will need to work closely with the Task Force as it consolidates acute services. Table 7.1 shows the Commission's proposals for the grouping of medical schools and postgraduate institutes to form the new Faculties of Medicine within London University.

Table 7.1

The Commission's recommendations for the future organisation of medical education in London

College/university	Medical school	Postgraduate institute
1 Imperial College	St Mary's Medical School	Royal Postgraduate Medical School
	Charing Cross and Westminster Medical School	Institute of Cancer Research
		National Heart and Lung Institute
2 University College	University College Hospital and Middlesex School of Medicine	Institute of Neurology
	Royal Free	Institute of Child Health
		London School of Hygiene and Tropical Medicine
3 Queen Mary College/Westfield	St Bartholomew's Medical College	Institute of Ophthalmology
	The London Medical College	
4 King's College	United Medical and Dental Schools of St Thomas' and Guy's Hospitals	Institute of Psychiatry
	King's College Hospital Medical School	
5 University of Surrey	St George's Medical School	

The one exception to this pattern is St George's Hospital Medical School, for which there is no obvious multi-faculty partner in London. Incorporation with the University of Surrey at Guildford would avoid the isolation of St George's from the mainstream of higher education.

4.2 We recommend that the Task Force works with London University and the other institutions involved to plan these changes in two years, with implementation of the restructuring programme to take place over the subsequent three.

4.3 These new Faculties of Medicine would take responsibility for undergraduate and postgraduate medical education in the capital. However, we recommend that they should not be linked to particular teaching hospitals, as in the past. Instead they should contract with health care providers in primary, community-based and hospital-based care throughout the Thames Regions to undertake different aspects of clinical medical education at undergraduate and postgraduate level.

Creation of the new Faculties will facilitate the rationalisation of specialty services within the capital's existing teaching hospitals and SHAs. Clinical research would be conducted collaboratively between the Faculties of Medicine, other university scientists, and clinicians operating at appropriate levels of the new service system. It would necessarily follow the move of acute health services into primary and community-based care.

4.4 As part of this London-wide consolidation of medical education, we further recommend that the number of undergraduate medical students be fixed at an annual intake of no more than 200 clinical students in each of the four multi-faculty schools and 160 students at St George's – or a total of no more than some 960, compared with 1350 today.

If the present deliberations on future national medical manpower requirements determine that student numbers remain at their current level, we consider that this reduction in student numbers should be absorbed by UK medical schools located outside the capital. Should an increase in student numbers be decided upon nationally, we would continue to recommend the same overall decrease in student numbers in London. Medical schools outside London – or, alternatively, the creation of new medical schools in provincial universities – could take up any further increase in student numbers if this becomes national policy.

Conclusion

London has a proud tradition of health care and medical education, which dates back to medieval times. Many of its hospitals have altered both their form and function repeatedly, to keep pace with the changing needs of its citizens. Action is needed to safeguard this tradition, and to forge new patterns of health care, medical education and research to meet Londoners' requirements in a new century. The King's Fund Commission is confident that health care in the capital will prove equal to the challenge of renewal which confronts it now.

The analysis of the history of London health services given in this report shows how the present untenable situation arose. It demonstrates beyond doubt that urgent action is now needed to correct it. This will not be possible without political will.

The restructuring of London's health services is one piece of a wider process of renewal for the city as a whole. Health care cannot – and should not – be considered separately from the wider issues facing London as a major European and international centre.

We consider that our strategy and recommendations will harness the energy and commitment of people across the capital to reshape services in line with the city's demanding and exciting future. We recommend it to the Secretaries of State for Health and for Education, the National Health Service Management Executive, the Thames Regions, health and local authorities within London, and to Londoners themselves.

REFERENCES

- B. Abel-Smith (1964), *The Hospitals 1800-1948*, Heinemann, London.
- Academic Medicine Group (1989), 'Academic Medicine: Problems and Solutions', *British Medical Journal*, 298, 573-579.
- Audit Commission (1992), *Lying in Wait: The use of medical beds in acute hospitals*, HMSO, London.
- D. Banta (1990), 'Emerging and Future Health Care Technology and the Nature of the Hospital', unpublished paper prepared for the Welsh Health Planning Forum.
- R. Beech and J. Larkinson (1990), 'Estimating the Financial Savings from Maintaining the Level of Acute Services with Fewer Hospital Beds', *International Journal of Health Planning and Management*, 5, 89-103.
- G. Bennet (1988), *The Wound and the Doctor: Healing Technology and Power in Modern Medicine*, Secker and Warburg, London.
- M. Benzeval, K. Judge and B. New (1991), 'Health and Health Care in London', *Public Money and Management*, Spring.
- M. Benzeval, K. Judge and M. Solomon (1992), *The Health Status of Londoners: A comparative perspective*, Working Paper No. 1, King's Fund London Acute Services Initiative, London.
- M. Blaxter (1990), *Health and Lifestyle*, Tavistock/Routledge, London.
- S. Boyle (1992), Private communication.
- S. Boyle and C. Smaje (1992a), *Acute Health Services in London: An analysis*, Working Paper No. 2, King's Fund London Acute Services Initiative, London.
- S. Boyle and C. Smaje (1992b), 'Minor Surgery in General Practice; The Effect of the 1990 GP Contract', in A. Harrison (ed), *Health Care UK 1991*, King's Fund Institute, London.
- S. Boyle and C. Smaje (forthcoming), *After Acheson: Primary Health Services in London*, King's Fund Institute, London.
- British Postgraduate Medical Federation (1989), *The London Postgraduate Hospitals*, unpublished paper.
- T. J. H. Clark (Chairman) (1989b), *The Best Medicine for London, Report of a Joint Planning Committee Working Party on an Academic Strategy for Medicine*, University of London.
- Cmnd 3569 (1968), *Report of the Royal Commission on Medical Education*, (Chairman: Lord Todd), HMSO, London.
- Department of Health and Social Security (1976), *Sharing Resources for Health in England, Report of the Resource Allocation Working Party*, HMSO, London.
- Department of Health and Social Security (1988), *Acute Health Services in London*, unpublished paper.
- Department of Trade and Industry (1991), *London Employment*, unpublished paper.

- B. Devlin (1991), 'Trends in Healthcare', *NAHAT NHS Handbook*, 7th Edition, National Association of Health Authorities and Trusts and Macmillan, London.
- Lord Flowers (Chairman) (1981), *London Medical Education – A New Framework*, University of London.
- W. Goodenough (1944), *Report of the Inter-Departmental Committee on Medical Schools*, Ministry of Health, London.
- Lord Haldane (Chairman) (1913), *Report of a Royal Commission on University Education in London*, HMSO, London.
- P. Hall (1989), *London 2001*, Unwin Hyman, London.
- S. Halpern and J. Rowbottom (1992), *Managing London's Health Services – A preliminary analysis*, Working Paper Series No. 11, King's Fund London Acute Services Initiative, London.
- C. Hogg (1992), *Centering Excellence? National and regional health services in London*, Working Paper No. 3, King's Fund London Acute Services Initiative, London.
- J. Hughes and P. Gordon (1992), *An Optimal Balance? Primary health care and acute hospital services in London*, Working Paper No. 9, King's Fund London Acute Services Initiative, London.
- Inner London Health Authorities' Chairmen's Group (1987), *Planned Health Services for Inner London: Back to back planning – plans for inner London's health authorities*, ILHA, London.
- B. Jacobson, A. Smith and M. Whitehead (eds) (1991), *The Nation's Health – A Strategy for the 1990s, A report from an Independent Multidisciplinary Committee*, King Edward's Hospital Fund for London, London.
- K. Judge and M. Solomon (forthcoming), *Public Opinion, the NHS and the Media*, King's Fund Institute.
- W. Laing (1992), *Going Private: Independent health care in London*, Working Paper No. 4, King's Fund London Acute Services Initiative, London.
- London Health Planning Consortium (1979), *Acute Health Services in London*, HMSO, London.
- London Health Planning Consortium (1981), *Primary Health Care for Inner London* (Chairman, Sir D. Acheson), HMSO, London.
- London Planning Advisory Committee (1991), *London: World City Moving into the 21st Century*, HMSO, London.
- London Research Centre (1991), *London Needs*, London Research Centre, London.
- London Research Centre (forthcoming), *Londoners' Views on the Future of Health Care*, London Research Centre, London.
- L. Marks (1990), 'Hospital Care at Home: Prospects and Pitfalls' in A. Harrison (ed), *Health Care UK*, King's Fund Institute, London.
- L. Marks (1992), 'Discharging Patients or Responsibilities? Acute Hospital Discharge and Elderly People', in A. Harrison (ed), *Health Care UK 1991*, King's Fund Institute, London.
- P. Martin, R. Wiles, B. Pratten, S. Gorton and J. Green (1992), *London's Acute Health Services: A user perspective*, Working Paper No. 6, King's Fund London Acute Services Initiative, London.
- R. Maxwell (1984), 'Quality Assessment in Health', *British Medical Journal*, 295, 980–983.

REFERENCES

- R. Meara (1992), *Aspects of the NHS Estate in London*, Working Paper No. 10, King's Fund London Acute Services Initiative, London.
- Medical Research Council (1990), *Annual Report 1989-90*, Medical Research Council, London.
- E. Murphy (1992), *London Views: Three essays on health care in the capital*, Working Paper No. 5, King's Fund London Acute Services Initiative, London.
- S. Pembrey and S. Punton (1990), 'Nursing Beds', *Nursing Times*, 86:14, 44-45.
- G. Rivett (1986), *The Development of the London Hospital System 1823-1982*, King's Fund Historical Series No. 4, King Edward's Hospital Fund for London, London.
- M. A. Scheuer, M. Black, C. Victor, M. Benzeval, M. Gill and K. Judge (1991), *Homelessness and the Utilisation of Acute Hospital Services in London*, King's Fund Institute Occasional Paper 4, King's Fund Institute, London.
- I. Seccombe and J. Buchan (1992), *Healthcare Labour Markets in London*, Working Paper No. 5, King's Fund London Acute Services Initiative, London.
- J. Smith (1981), 'Conflict without Change: London's Health Services', *Political Quarterly*, 52:4, 426-440.
- R. Smith (1991), 'James Scott: Next Professor of Medicine at The Hammersmith', *Medical Profile*, *British Medical Journal*, 303, 153-4.
- B. Stocking (1992), *Medical Advances and the Future Shape of Acute Services*, Working Paper No. 8, King's Fund London Acute Services Initiative, London.
- A. Towle (1992), *Undergraduate Medical Education: London and the future*, Working Paper No. 10, King's Fund London Acute Services Initiative, London.
- T. Travers, George Jones, Michael Hebbert and June Burnham (1991), *The Government of London*, Joseph Rowntree Foundation, York.
- United Kingdom Central Council for Nursing, Midwifery and Health Visiting (1986), *Project 2000: A new preparation for practice*, UKCC, London.
- University of London Union Medical Group (1991), 'Medical Students' Views on Strategic Planning for Medical Education in London', unpublished paper.
- Universities Funding Council Medical Committee (1991), *First report on the effects of the NHS reforms on medical and dental education and research*, London.
- D. J. Weatherall (1991a), 'The Future of the Oxford Clinical School', unpublished paper.
- D. J. Weatherall (1991b), 'The Physician Scientist: An Endangered But Far From Extinct Species', *British Medical Journal*, 302, 1002-1005.
- F. Wellman and P. Palmer (1975), *The London Specialist Postgraduate Hospitals - a review and commentary on their future*, King Edward Hospital Fund for London for the Standing Postgraduate Committee of the former Teaching Hospitals Association, London.

APPENDIX 1

MEMBERSHIP OF THE KING'S FUND COMMISSION

Mr Marmaduke Hussey (Chairman)
Baroness Cumberlege (resigned 14 April 1992)
Mr Brendan Devlin
Professor Richard Himsworth
Baroness Hollis of Heigham
Dr Robert J. Maxwell
Mr Peter Westland

Secretary: Virginia Beardshaw

APPENDIX 2

TERMS OF REFERENCE FOR THE KING'S FUND COMMISSION ON THE FUTURE OF LONDON'S ACUTE HEALTH SERVICES

- 1 The Commission will develop a broad vision of the pattern of acute services that would make sense for London in the coming decade and the early years of the next century. To this end, the Commission will need to:
 - review the role of acute services including mental health services within the broader context of health and social care, including general practice, community health and provision for chronic illness and handicap;
 - take account of likely resource and personnel constraints;
 - appraise the local, regional and national roles of the special health authorities, district health authorities and NHS trusts;
 - consider scientific and technological trends and their implications.
- 2 The Commission's main focus will be on service requirements, but it will also take account of undergraduate and postgraduate education and research.
- 3 The Commission will identify key issues and explore the options that will determine how well London's acute services fulfil their various roles – which include meeting the health needs of Londoners – rather than trying to develop a single plan or blueprint.
- 4 The Commission will examine the gap between London's present pattern of acute services and its own vision, and suggest ways forward.
- 5 The Commission will report as its work proceeds, rather than aim to produce a single, definitive report at the end of its deliberations. The King's Fund hopes that it will conclude its work within about 12 months, although this timetable can be reconsidered as the Commission's work proceeds.

December 1990

APPENDIX 3

THE WORK OF THE KING'S FUND COMMISSION

Establishment of the Commission and the London Initiative

In December 1990 the King's Fund appointed a Commission to examine the future of acute health services in London in response to concerns expressed both within and outside the Fund about the future of health services in the capital. The Fund's London Initiative was created at the same time to conduct a research and information programme to support the work of the Commission.

Through the Commission and the London Initiative, the Fund has sought to stimulate and inform debate on the future of health services in the capital and to influence their future development. In doing so, it has been mindful of its original mission to support the work of London's hospitals, which it was given on its foundation in 1897 by Edward VII, then Prince of Wales.

Method of work

The London Initiative was designed to bring the full resources of the King's Fund to bear on the complex issues surrounding the future of London's health services, in order to inform the Commission's work and to guide the Fund's own approach on the future of health care in the capital. These resources include the Fund's capacity for health policy analysis through the King's Fund Institute; for health services development through the King's Fund Centre; and for health and social care management development through the King's Fund College and grant making. The budget for this programme was £500,000 over two years, with substantial additional contributions in kind from the Institute, College and Centre.

Where necessary, the Initiative has deployed its resources to permit outside researchers to submit evidence to the Commission. The Commission has also considered evidence and views submitted to it by outside bodies and individuals. It has held meetings with interested organisations and conducted a programme of visits. In addition, different parts of the King's Fund have held seminars and other activities designed to gauge opinion and to influence thinking among key health care stakeholders in the capital. Details of all of these strands of activity are given below.

In addition to the London Initiative's research programme, the

King's Fund Grants Committee is supporting a major study on acute admissions and discharges in a sample of London hospitals to inform the work of the Commission. The King's Fund's Management Committee is also funding a wide-reaching programme of research to gauge Londoners' views on the health services in the capital, and their future.

Meetings of the Commission

The Commission met 16 times between December 1990 and June 1992.

Working paper series

In February and March 1992 the London Initiative published twelve working papers designed to produce as comprehensive a picture as possible of health and health care in the capital, and the trends likely to shape its future. These were the product of its research and information programme, which was designed to support the Commission's work.

They were: *The Health Status of Londoners: A comparative perspective*, by Michaela Benzeval, Ken Judge and Mike Solomon, King's Fund Institute; *Acute Health Services in London: An analysis*, by Seán Boyle and Chris Smaje, King's Fund Institute; *Centering Excellence? National and regional health services in London*, by Christine Hogg; *Going Private: Independent health care in London*, by William Laing; *London Views: Three essays on health care in the capital*, by Elaine Murphy; *A User Perspective: Views on London's acute health services*, by Paul Martin, Richard Wiles, Belinda Pratten, Sarah Gorton and Jessy Green, Greater London Association of Community Health Councils; *Medical Advances and the Future Shape of Acute Services*, by Barbara Stocking, King's Fund Centre; *An Optimal Balance? Primary health care and acute hospital services in London*, by Jane Hughes and Pat Gordon, King's Fund Centre; *Undergraduate Medical Education: London and the future*, by Angela Towle, King's Fund Centre; *Healthcare Labour Markets: Supply and change in London*, by Ian Seccombe and James Buchan, Institute of Manpower Studies; *London's Legacy: Aspects of the NHS Estate in London*, by Richard Meara; *Managing London's Health Services – A preliminary analysis*, by Stephen Halpern and Joyce Rowbottom.

Additional evidence

The Commission considered evidence or correspondence submitted to it by the following individuals or organisations:

Mr Maurice Lessof, Deputy Chairman, Guy's and Lewisham Trust; Mr Alan W.F. Lettin, Consultant Orthopaedic Surgeon, St Bartholomew's Hospital; Professor F. Harris, Dean, University of Leicester School of Medicine; Ms Denise Platt, Director of Social Services, London Borough of Hammersmith and Fulham; Professor Nick Bosanquet, Health Policy Unit, University of London; Mr R.J. Marsh, Consultant Ophthalmic Surgeon, Moorfields Hospital; Dr P.L.

Chiodini, Chairman, Hospital for Tropical Diseases Medical Committee; the Chairmen of the Five Health Authorities in Hertfordshire; Ms Caroline Langridge, Department of Health; Professor A.H. Crisp, Department of Mental Health Sciences, St George's Hospital Medical School; Ms Christine Hancock, General Secretary, Royal College of Nursing; the Medical Research Council; Dr Malcolm Green, British Postgraduate Medical Federation; Ms Ros Hepplewaite, Director, MIND; Professor T.M. Barratt, Director of Clinical Services, The Hospitals for Sick Children; Dr Anthony Harrison, King's Fund Institute; Mr R.J. Crosbie, Principal Social Work Officer, City of London Social Services Department; the London Association of Directors of Social Services; Mr D.M. Woolley, Department of Health; Professor J.P.S. Thomson, Clinical Director, St Mark's Hospital; Professor A. Culyer, Department of Economics, University of York; Mr A.E. Young, Director of Clinical Services, St Thomas' Hospital.

Visits

During 1991 and 1992 the Commission visited the University of Nottingham School of Medicine, the University of Oxford School of Medicine and the Lambeth Community Care Centre.

Meetings

Members of the Commission met with the following bodies or individuals over the period 1991–1992:

Conference of the Presidents of the Medical Royal Colleges of the United Kingdom; the Pro Vice Chancellor for Medicine, University of London and Deans of the London Medical Schools; Professor Sir Bernard Tomlinson, Special Advisor on London to the Secretary of State for Health and his advisory group; Professor Michael Peckham, Director of Research and Development, Department of Health; Dr D. Evered, Second Secretary, Medical Research Council; the Vice Chancellor of the University of London; the General Managers of North East and South West Thames Regional Health Authorities and the Director of Public Health for North West Thames Region.

In addition, in the summer and autumn of 1991 the King's Fund College held two large meetings of senior London clinicians, managers and user representatives on behalf of the Commission and the London Initiative to discuss the future of health care in London. The King's Fund Centre organised two similar gatherings of primary and community services managers, clinicians and user representatives in the winter and spring of 1991–2. In order to compile its working paper for the Commission, the Greater London Association of Community Health Councils consulted with more than 100 user groups and voluntary organisations across the capital, and conducted five symposia on different aspects of health services which brought together a wide range of representatives from voluntary organisations and user groups as well as individual Londoners.

APPENDIX 4

FUNDING DEVELOPMENT OF PRIMARY AND COMMUNITY HEALTH CARE IN LONDON

Introduction

The Commission has made clear that its fundamental belief is that health care resources should be shifted away from the secondary sector to the primary sector. This will involve a reduction in the number of sites on which acute care will be delivered, and the retained sites will become much more active, treating a much bigger proportion of patients as day cases, and raising throughput per bed relative to current practice. The Commission does not have in mind a particular number and set of locations of acute sites, nor a unique configuration of non-acute facilities. Nevertheless, the Commission felt it to be important to put some rough figures to the potential for release of resources from the acute sector and an indication of what those resources might purchase.

The approach

If hospitals in London adopt modern, non-invasive surgical techniques and shift much more of their workload towards day surgery and outpatient investigations, then the number of beds (though probably not surgeons and theatre time) required to achieve a given workload will decrease. Already some English districts have started to change in this way and they show much higher rates of day surgery and throughput per bed than average. In medicine, the Audit Commission has argued that if all districts in England could achieve lengths of stay and turnover intervals at least as low as the current best 25 per cent of districts there would be potential to provide the present English level of activity in medicine with 58 thousand beds rather than the 85 thousand beds currently in use (Audit Commission, 1992, p. 24). The Audit Commission states that part of the reduction would result from the removal of organisational inefficiencies, benefiting patient care directly, while the rest of the reduction would have to be achieved over time in tandem with investment in community services.

The central calculations in this appendix assume that, over the next twenty years, London districts should be able to achieve levels of day-case work and rates of throughput per bed for each of the core acute specialties¹ which were achieved in 1989-90 by the best 25 per cent of English districts. These central calculations further assume that age-specific hospitalisation rates will become the same as the average

¹ The specialties chosen were: General Medicine; General Surgery; Gynaecology; Paediatrics; Trauma and Orthopaedics; ENT and Ophthalmology.

for England. The underlying assumption of change is quite modest, but to guard against over-optimism we examine alternative scenarios.

The results of the bed calculations have been used to assess the resources that might be redeployed both from reducing the number of acute beds and from reducing the number of sites on which those beds were housed. Very substantial sums are potentially releasable. Analysis of the sensitivity of the calculations shows that the broad size of the figures is much less affected by varying the assumptions made about hospitalisation rates or throughputs than the assumptions about the number of sites retained. In other words, it is particularly by taking the opportunity for site rationalisation offered by bed reductions that substantial resources can be released to be redeployed elsewhere.

Method

The estimates have been made in a number of steps. These are set out below.

Hospitalisation rates

A range of age-specific hospitalisation rates per 1,000 population were applied by specialty to OPCS projections of resident population to calculate a range of expected caseloads for the year 2010. The range chosen spanned the 1989–90 rates experienced by the 25th percentile district in England to the 75th percentile district, as indicated in the NHS Management Executive Health Services Indicators (HSIs).

The figure chosen for the central calculation reflected in the tables below took the 50th percentile hospitalisation rate for England.

Activity rates

The number of hospital episodes calculated was then divided between day-case and inpatient care. The central calculation reflected the proportions of day-case work in the districts in England that were on the 75th percentile for the proportion of patients treated as day patients for each specialty. For inpatients, the central calculation assumed that in each specialty a level of throughput per bed achieved by the 75th percentile district in England in 1989–90 would be achieved. These two assumptions allowed the calculation of the total number of beds required to meet the expected workload. This is shown in Table A4.1.

It will be noted that a reduction in beds of about 30 per cent should be possible. The reduction in general medicine beds is particularly marked at 47 per cent, being greater than the 32 per cent suggested nationally by the Audit Commission for the same specialty. This reflects the fact that throughput for general medicine is particularly low in London. We believe that this is partially caused by the greater presence of 'hidden' specialties within this specialty in London.

The sensitivity of these calculations to different levels of activity being achieved was also tested by assuming the effects of applying the experience of the 50th and 60th percentile districts in terms of day-case proportions and throughputs. These three calculations on hospitalisation rates yielded fifteen bed number estimates for each of the seven

Table A4.1

Estimated reductions in bed needs for seven acute specialities by 2010 (50th Percentile Hospitalisation Rate, 75th Percentile Day Cases and Throughput)

Specialty	Beds in 1989-90 ¹	Beds in 2010-11	Differences
General medicine	5,670	3,015	2,655
General surgery	4,080	3,155	925
Paediatrics	2,545	1,840	705
Trauma and orthopaedics	2,683	2,199	484
ENT	531	469	62
Ophthalmology	339	338	1
Gynaecology	1,185	1,032	153
Total	17,033	12,048	4,985

¹ These figures reflect acute beds in general hospitals in London apart from those beds in the SHAs. To come to the total of NHS acute beds available in London the total of SHA beds would have to be added to the above, plus those beds in acute specialties other than those listed here.

Table A4.2

Estimated levels of surplus beds in 2010 at varying hospitalisation rates and activity levels

		Day-case and throughput rates at percentile district rate		
		50	60	75
Hospitalisation rate at that of percentile district rate	25	5,310	5,739	6,560
	40	4,194	4,662	5,559
	50	2,599	3,406	4,985
	60	2,000	2,839	4,485
	75	271	1,303	3,047

core specialties. The effect of making these different assumptions is shown in Table A4.2.

The table shows what, if London were to experience given hospitalisation and activity rates, the number of surplus beds would be. Thus, at a hospitalisation rate which is that of the 50th percentile district in 1989-90 (the national average approximately) and with the 50th percentile day-case percentage and throughput being achieved, 2,599 beds would become surplus. As hospitalisation rates are decreased to those of the 25th percentile districts (i.e. fewer people are referred to hospital) so the number of surplus beds would increase. This would also be the case if higher rates of activity were achieved. Our central assumptions of 50th percentile for hospitalisation and 75th percentile for activity are shown as yielding 4,985 surplus beds. This figure is that shown in Table A4.1.

The important point to note from Table A4.2 is that only at the highest hospitalisation rate combined with either of the two lowest activity rates is it not possible to release substantial numbers of surplus beds. Over the next twenty years, with substantial development of community services, London should surely be able to achieve much better than that.

Rationalisation of acute beds around sites

The number of acute beds and other hospital facilities currently provided in London could certainly be accommodated on fewer sites. This would become even more true if the number of beds required were to be reduced. At present London has 41 hospitals which are classified as acute or mainly acute and which have more than 250 beds. (This is out of a total of hospital sites of all sorts nearer 150.) In addition, there are the eight Special Health Authorities (SHAs). It is the view of the Commission that about thirty acute hospital sites should be adequate to provide the

Table A4.3

Major acute hospitals and Special Health Authorities in London¹

North West Thames Region

Barnet	Edgware General Hospital Barnet General Hospital
Ealing	Ealing Hospital
Harrow	Northwick Park Hospital
Hillingdon	Mount Vernon Hospital Hillingdon Hospital
Hounslow and Spelthorne	West Middlesex University Hospital Ashford Hospital
Parkside	Central Middlesex Hospital St Charles' Hospital
Riverside	Westminster and Chelsea Hospital Charing Cross Hospital

North East Thames Region

Barking	Oldchurch Hospital
Bloomsbury	Middlesex Hospital University College Hospital
City and Hackney	Homerton Hospital St Bartholomew's Hospital
Enfield	Chase Farm Hospital
Hampstead	Royal Free Hospital
Haringey	North Middlesex Hospital
Islington	Whittington Hospital
Newham	Newham General Hospital
Redbridge	Barking Hospital
Tower Hamlets	The London Hospital
Waltham Forest	Whipps Cross Hospital

¹ This includes all acute or mainly acute units of over 250 beds.

necessary future services. Of these, five would provide a very full range of acute specialties, with four of the five being major trauma centres. Another four might be very highly specialised in one or two areas. The balance would be local acute hospitals providing primarily core acute specialties and accident and emergency facilities.

The existing hospitals are shown in Table A4.3. The Commission's vision would imply that this total should be reduced to about thirty hospitals. It recommends that a Task Force should guide the rationalisation of units and the simultaneous development of community-based health services.

South East Thames Region

Bexley	Queen Mary's Hospital
Bromley	Farnborough Hospital
Camberwell	King's College Hospital Dulwich Hospital
Greenwich	Greenwich District Hospital Brook Green Hospital
Lewisham and Southwark	Guy's Hospital Lewisham Hospital Hither Green Hospital
West Lambeth	St Thomas' Hospital

South West Thames Region

Croydon	Mayday Hospital
Kingston and Esher	Kingston Hospital
Merton and Sutton	St Helier Hospital
Wandsworth	St George's Hospital

Special Health Authority Hospitals

The Hospitals for Sick Children
 The National Hospital for Neurology and Neurosurgery
 The Moorfields Eye Hospital
 The Bethlem Royal Hospital and the Maudsley Hospital
 The Royal Brompton National Heart and Lung Hospital
 The Royal Marsden
 The Eastman Dental Hospital
 The Hammersmith and Queen Charlotte's Hospital

The present distribution of the hospitals listed in Table A4.3 is shown in a stylised map in Figure 6.2 of the main report. The size of the ring around each hospital dot shows the size of the population for which that hospital is the nearest unit.

For illustrative purposes only a set of 29 sites has been identified that could accommodate the beds needed to meet the acute needs of the London population in 2010. The sites were chosen to ensure that travel to hospital services would be as easy as possible. In particular, they were chosen so that all of the Greater London population would be no more than thirty minutes' 'blue light' travelling time from a local acute hospital with an accident and emergency department. The distribution of these future sites is shown, in stylised form, in Figure 6.3 of the main report, as dots. Where populations would lose their nearest acute hospital, the travelling time has been shown to the nearest retained acute hospital for the most adversely affected element of the population. The travel times were estimated using Department of Transport information on London. The set of sites chosen has sufficient potential capacity to cope with the number of beds expected under our central assumptions.

Special Health Authorities

So far discussion has concentrated only on the savings releasable from general acute hospitals. If some of the SHAs were to be amalgamated with acute hospitals, and if their acute beds showed improvements in throughput commensurate with those anticipated in other hospitals there would be scope for further release of resources. In the calculations shown below it has been assumed that four SHAs would remain on their existing sites while four would amalgamate with major acute units. The SHAs include about 1,925 acute beds in their total of 3,104 beds. About 70 per cent of the acute beds are occupied by London residents (Boyle and Smaje, 1992a, Appendix 3); therefore a total 1,347 SHA beds could be seen as potentially surplus. Alternatively, they may be seen as a 'bonus' for London which is a happy by-product of the need to pursue research. In the financial calculations set out below, the potential savings from reduction in SHA beds are included, but are shown separately.

Estimating potential release of resources

Reductions in the number of beds and the number of sites offer the scope for releasing resources. Calculations have been made separately on the effects of the bed reductions and the site reductions.

Bed reductions

It is well known that reducing beds in a particular hospital does not, of itself, yield financial savings proportionate to the scale of reduction. For example, Beech and Larkinson (1990) reported how a 16-per-cent reduction in bed numbers in a hospital yielded savings of less than half one per cent in the hospital budget. When reductions become large enough to allow whole ward closures the release of significant sums

does become more possible, but even in these circumstances the amount releasable is much smaller than the amount it would cost to open and run a new ward.

This is because the reduction in the number of wards is associated with higher throughput and higher average severity of sickness on those wards which are retained (if the overall workload is to be maintained). Maintaining the quality of patient care and avoiding oversteering nurses requires that some of the staff released from closed wards should be immediately redeployed to retained wards. Based on experience elsewhere, it is conservatively estimated that the closure of three wards should allow the release of £650 thousand per year of ward-related costs. Three wards has been taken to equate to 81 beds. Thus any figure for reduction in beds may be turned into an estimate of ward-related costs saved.

Site reductions

The main savings from site closures, if the overall level of activity is to be maintained, will arise from avoiding the fixed cost of maintaining and providing the site infrastructure, providing heat, light and power, and from the release of the capital tied up in the site. A conservative approach to estimating the resources releasable from surplus sites would take the purely estate-related revenue costs, backlog maintenance and the value of the site itself. The latter could be represented in the form of a capital sum or capital charges.

To allow an estimate to be made a set of base data was sought for all 41 major acute hospitals and for the SHAs. The data were the annual revenue budget, an estimate of the value of the site at disposal, the capital charge which applied to the hospital, and backlog maintenance costs. It is recognised that some figures, for example site valuation, are notoriously difficult to assess. The figures used assume that sites could be disposed of over twenty years and that on average neither the heady property values of the mid-eighties nor the depressed figures currently obtainable would prevail, but something in between.

The information for some hospitals was incomplete. Some has been estimated. For example, some site valuations have been estimated

Table A4.4

Estimated savings from reduction in sites and bed numbers – revenue estimates (50th Percentile Hospitalisation Rate and 75th Percentile Activity)

	Savings from (£ thousand)		
	Acute hospitals	SHAs	Total
Reduced number of beds	40,003	10,873	50,876
Site-related overheads	24,448	6,594	31,042
Sub-total	64,451	17,467	81,918
Capital charges	103,735	15,940	119,675
Annuitised backlog maintenance	13,831	584	14,415
Total	182,017	33,991	216,008

Table A4.5

Estimated savings from reduction in sites – capital estimates

	Savings from (£ million)		
	Acute hospitals	SHAs	Total
Backlog maintenance avoided	101.8	4.3	106.1
Land sales	772.3	93.6	865.9
Total	874.1	97.9	972.0

by using capital charge figures, knowledge of size of the hospital site and firm figures for hospitals nearby. Where backlog maintenance was not known the average figure (per bed) for the relevant region was used to give an approximation.

The resulting estimates of potential resources savings are crude, but serve to give an indication of the order of magnitude. They are set out for the central assumptions in Tables A4.4 and A4.5. Site-related revenue costs are estimated conservatively at 5 per cent of the total hospital budget. Table A4.4 combines estimates of savings in revenue expenditure with estimates of savings in capital charges and of backlog maintenance costs saved over 10 years (annuitised at 6 per cent) to put all savings on an annual flow basis. Table A4.5 shows backlog maintenance saved and income from sales of surplus sites as capital figures.

The figures suggest that it should be possible to release in excess of £200 million per year from the acute sector. Some of this may be lost to London altogether, because flows from outside London into the capital will reduce, as 'shire' purchasers turn to providers more local to themselves. This is discussed further below. However, this is a very substantial sum and should allow considerable improvements in primary and community care. Table A4.5 shows that a good deal of capital should be released. Avoiding backlog maintenance means that more of the Regions' and Trusts' annual capital allocations could be diverted into new developments. Land sales could make available the capital to fund developments – including new premises – in the community.

Robustness of the calculations

If the number of sites assumed to be retained remains constant, while the throughput and hospitalisation rates assumed vary, estimates of resources released range from about £178 million, in revenue terms, to about £230 million. Of the fifteen combinations of throughput and hospitalisation rate, eleven yield estimates in excess of £200 million.

It might reasonably be argued that some current beds and some sites would become surplus to requirements because inflows of routine acute caseload into London from outside would gradually cease. These inflows currently account for about 10 per cent of activity in London's beds. If they cease, so will the money to pay for them and none of it would be available to release to London purchasers.

At the extreme it would be possible to regard the closure of 1,700

beds and five sites as being necessary to meet the consequence of halted flows from outside London. This would reduce the estimate of resources released by some £60 million.

Against the elements of uncertainty that might lead to a downward revision of possible savings there are some in the opposite direction.

Firstly, the activity rates assumed are currently being achieved or exceeded by a quarter of English districts. In the future our assumptions about what London districts should achieve may come to be seen as unduly modest.

Secondly, the assumption that the closure of three wards will release £650 thousand may be too pessimistic. Certainly some London-based directors of finance have indicated that they think so. If the figure were £850 thousand per three wards a further £15 million would be added to potential savings on our central assumptions.

Thirdly, the assumption that only 5 per cent of hospital revenue costs are site-related and therefore releasable by site closure may be similarly pessimistic. Some elements of costs such as portering will also be site-related. Including these would push up the estimate of potential savings.

Fourthly, no assumption of savings has been made with respect to the 14 per cent of acute beds in London which are used for specialties other than the core seven acute specialties. If their activity rates were to increase in parallel with the core specialties, another £6 million would be added on the central assumptions.

Fifthly, no allowance has been made for possible gains from rationalisation of sites which are smaller than the major acute sites considered, although there should be scope for such gains.

On balance, the very least that it is reasonable to assume should be released is about £140 million per year and a figure of around £200 million is much more likely.

The costs of achieving the changes in acute care

Rationalising acute care will not be costless. Amalgamating services onto fewer sites will require capital investment to produce the modern, well equipped hospitals London requires.

The current annual allocation of capital to Greater London is about £190 million per year. Part of this should be earmarked to start the necessary rationalisation. Once a programme of redevelopment is in place it should be possible to use the capital released from freed sites to maintain the programme of acute development whilst concurrently developing community care. If 40 per cent of the total capital made available by the Treasury for NHS capital developments in London is spent on site rationalisation, this would make £1,500 million available over twenty years from that source. If the capital made available from land sales is added in, over twenty years a total of about £2,400 million would be available. An average rationalisation cost of £40 million for each retained site (some would require little or none, others a great deal) would take about £1,200 million, leaving the balance for other purposes.

Developing the community and primary care

In its report the Commission has made it clear that it would not expect every locality to develop its primary and community care in the same way. This makes estimating the likely cost of new community provision more speculative than estimating the scale of resources releasable from the acute sector. Nevertheless, some indication of what the sums released might bring is important. For illustrative purposes, we may consider the costs of reducing GP list sizes to the national average by appointing more GPs in London and the costs of providing community-based health care centres, each of which would serve a population of 70–80 thousand. A possible distribution of the latter is shown in Figure 6.3 in the main report. Each square on the map represents a new centre.

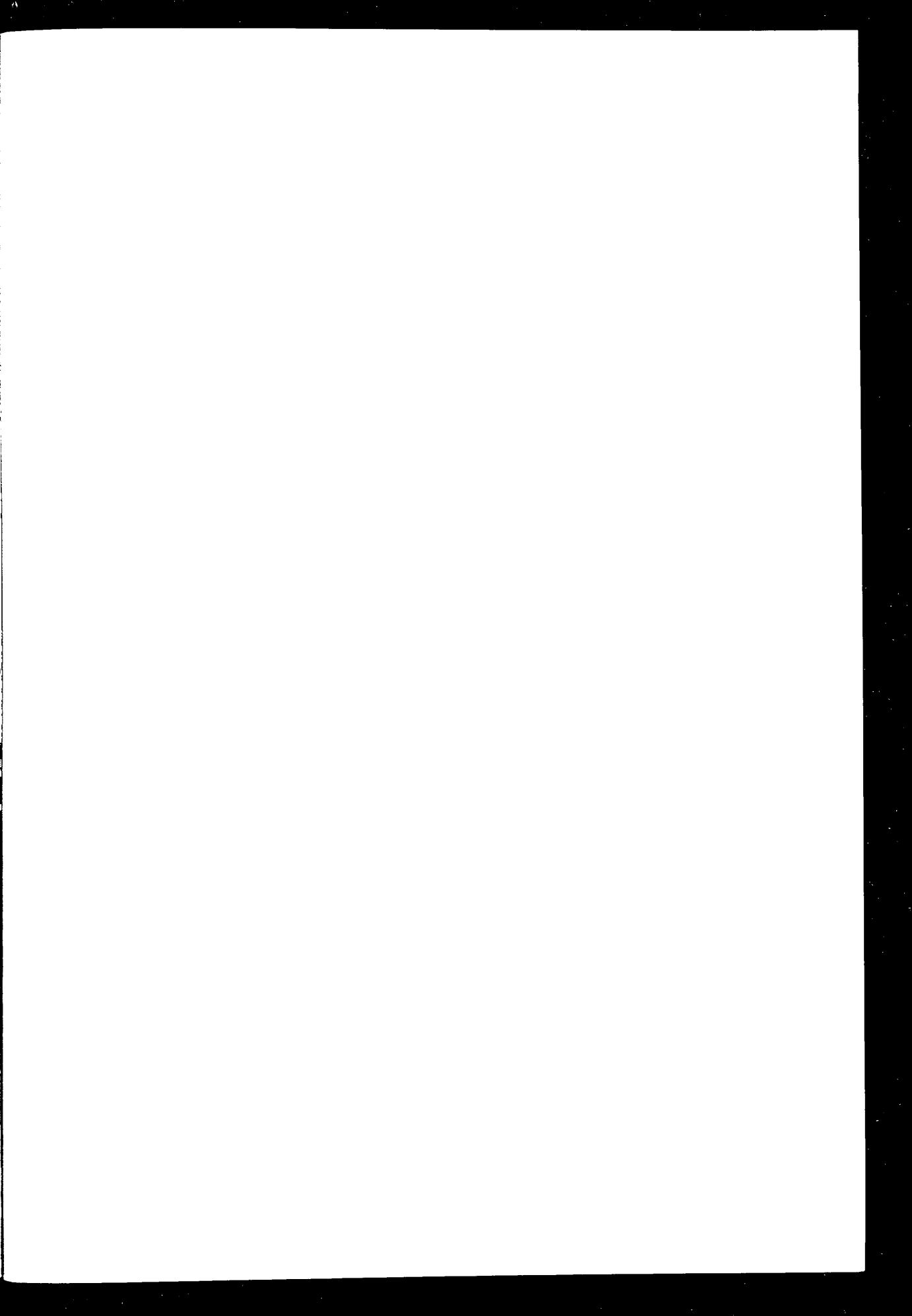
The services provided by each community resource centre have been taken to be physiotherapy, occupational therapy, speech therapy, dental services, social work support, dietetics, chiropody, some out-patients, educational facilities and facilities for local community and voluntary organisations. Twenty beds, controlled by GPs, might be provided and fifteen day places. In total forty staff have been assumed to be directly employed. In addition, contracts would be entered into with local GPs.

A rough estimate of the revenue cost of such developments, including capital charges, would be £1.6 million per annum. Ninety new community-based health care centres scattered throughout London would cost £144 million per year. Extra GPs might cost a further £20 million per year. The total figure of £164 million per year is close to the most pessimistic estimate of how much resource might be released from the acute sector. This raises the hope that there might be a surplus to plough into improving provision of nursing and residential home places and sheltered housing. Capital costs of the accommodating of the community centres are estimated at £2.4 million per centre. The total cost for 90 centres would be £216 million. Again this looks manageable, given the potential locked up in the acute sector.

Conclusions

The resources releasable from site rationalisation in the acute sector are very considerable. Our estimates range from £140 million per year at worst to in excess of £250 million at best. Some part of the sum released may be lost to the capital as part of a distribution of funds away from London purchasers, but that is far from clear. Even the most pessimistic calculations would allow substantial developments in community care whilst sustaining the acute workload for the local population. The process would have to be begun by targeting London's annual capital allocation costs onto site rationalisation. Once begun it should become self-sustaining, allowing released capital to be used to support further site rationalisation and provision of new community services, and allowing released revenue to support developments in the community.

Ron Akehurst, Director, and Michael Stevens, Research Assistant, York Health Economics Consortium, University of York





REPORT OF THE KING'S FUND COMMISSION

London Health Care 2010 analyses the interlocking set of problems posed by health services, medical education and research in the capital. It demonstrates that Londoners receive a poor deal from present-day services. It warns that health care in the inner-city may become unsustainable unless there is the political will to back a strategy of fundamental reform.

The report examines the demographic, technological and social changes that are combining to forge new patterns of health care, and shows that London's services must be reshaped to meet the demands of the new century. It outlines a new pattern of care for the city, and makes recommendations designed to promote substantial change to its health services.

£14.00

ISBN 0 9518893 5 4