Securing our future health: Taking a long-term view

Review of the trends affecting the health service in the UK
Derek Wanless
April 2002

Terms of Reference

(1) To examine the technological, demographic and medical trends over the next two decades that may affect the health service in the UK as a whole.
(2) In the light of (1), to identify the key factors which will determine the financial and other resources required to ensure that the NHS can provide a publicly funded, comprehensive, high quality service available on the basis of clinical need and not ability to pay.
(3) To report to the Chancellor by April 2002, to allow him to consider the possible implications of this analysis for the Government’s wider fiscal and economic strategies in the medium term; and to inform decisions in the next public spending review in 2002.
(4) The report will take account of the devolved nature of health spending in the UK and the devolved administrations will be invited to participate in the review.

Factors that will affect health service resources over the next 20 years

• The terms of reference specified:
  – Technology and medical advances;
  – Demography.
• 3 additional areas were identified in the Interim Report:
  – Patient and public expectations;
  – Changes in health needs and different patterns of disease;
  – Workforce roles, pay, and the overall productivity of the health service
• Over this decade the commitments in the NHS Plan and National Service Frameworks to modernise the service will add significantly to cost.
• The current method of financing is not itself anticipated to be a factor leading to additional resource pressures.
Technology – future trends

• Technologies and drugs in development are likely to continue to add to total expenditure.
• Although it is difficult to predict the exact effects, the key trends include:
  – More drugs to be developed that reduce the risk of disease. Treating risk rather than waiting for diseases to develop increases the number of patients using a technology. If the increased risk is the result of lifestyle factors – e.g. poor diet – how far should the NHS provide drug treatment to manage the consequences?
  – Increased opportunities for individuals to take greater responsibility for their own health, including self-diagnosis and self-treatment or home care and monitoring.
  – More miniaturisation and remote communications.
  – More diseases moving from acute treatment to chronic treatment
  – A cancer pill to take everyday like insulin?
  – Alzheimer’s disease becoming increasingly medicalised, shifting some of the cost burden from informal carers to formal healthcare system.
• Genomics, protonomics and stem cell therapy are unlikely to have a major impact in the first decade. We may start to see significant developments in the second decade. But their major impact is likely to be beyond the timescale of the review. However, the potential is huge. It is not clear if it will add to cost or reduce cost.

Rectangularisation

Proportion of persons surviving to successive ages, according to death rates experienced or projected, England and Wales, 1851-2031

Age cost curve

Average annual per capita expenditure on hospital and community health services, England 1996-99 (Department of Health data)
The ageing population

- There is a lot of evidence that proximity to death has a bigger impact on acute health care costs than age.
- 30% of men’s lifetime use of hospital services is in the last year of their life (22% for women).
- The cost of the last year of life appears to fall with age.
- It is possible that an ageing population will postpone rather than increase health service costs. If this is the case the ageing of the population will not be as big a pressure for the health service as many people think.
- Other studies suggest that demographic change will add around 0.5% a year to health care spending.
- The effect of ageing will be larger for social care as care needs rise sharply with age.

Patient expectations in 2020

- ‘Safe, high quality treatment’
  - The best treatment outcomes with minimum variation
  - Rapid uptake of new technologies
  - More proactive primary care services
  - Staff ‘at their best’
- ‘Waiting within reason’
  - for months, read days or weeks,
  - for weeks, read hours or days
  - for hours, read minutes
- ‘An integrated, joined up system’
  - A hassle free service, effective links and communication between different parts of the services
- ‘Comfortable hotel services’
  - not the Ritz but not a hostel
- ‘A patient-centred service’
  - Not all patients are the same – not just income, gender or ethnicity, attitudes to health very different.
  - More choice – but over what, hotel services, doctors, speed of treatment, range of treatment?

Workforce

- The NHS employs over 1.2 million people.
- Two-thirds of spending on the health service is on pay.
- Pay inflation has been an important driver of expenditure growth in the NHS over the past 20 years. Staff costs have increased by 2 percentage points more than inflation.
- The UK does not have enough doctors and nurses.
- The NHS plan will increase the number of doctors by 20% and nurses by over 10% by 2004.
- The number of training places has been increased. In 20 years time:
  - Doctors will increase by a further 50%
  - Nurses and midwives by a further 7%
  - Other qualified staff by a further 80%
Doctors and nurses per thousand population

Interim Report: where are we now?

Outcomes
- Poor health outcomes
- Not meeting needs of an ageing population

Capacity
- History of under-investment
- Too few doctors, nurses and other professionals
- Too many old, inappropriate buildings
- Late and slow adoption of medical technologies

But scope for productivity improvements:
- Information and Communication Technology (ICT)
- Skill mix
- Organisational and delivery issues

Interim Report findings:
Looking forward
- Patients will want more choice in future and will demand higher quality services;
- While ageing is an important factor, demographic change is not the main factor driving up health care costs;
- Main cost pressures to be:
  - medical technologies;
  - more staff
- Improving the use of ICT in the health service is a key issue in improving quality and productivity; and
- There is scope for major changes in skill mix and the ways in which professionals work in the health service, including an enhanced role for primary care.
Interim Report findings: Financing

- Mixed systems exist everywhere - general taxation, social insurance, out-of-pocket payments and private insurance
- Efficiency, equity and choice are the criteria against which to judge: UK system is relatively efficient and equitable
- Administrative burden of other systems can be high
- Costs of social insurance models fall on employment
- Private funding tends to be inequitable and regressive
- Conclusion for the UK: that no other system would deliver a given quality of care at a lower cost
- Weakness of public financing is that it provides limited scope for individual preferences and choice
- Consider charges for non-clinical services

Consultation summary

- The Interim Report was widely welcomed and generally endorsed
- Wide-ranging agreement but also comments on:
  - Health promotion/disease prevention: felt to be understated
  - Social care: deteriorating and link with health care understated
  - Financing systems: some support for insurance models
  - Mix of public and private providers: opportunities stressed
  - Efficiency and effectiveness: other suggestions about resource management
  - Not much to assist the numerical modelling of future resources/costs

The Health Service in 2022

- Patient-centred and meeting expectations:
  - Safe, high quality treatment
  - Fast access
  - An integrated system
  - Comfortable accommodation services

- What the service must look like against today's reality:
  - Patients at the heart of the service
  - Recruiting and retaining the required staff
  - Integrated ICT leading to better links with social care
  - Need to deliver greater choice once access issues resolved
  - Better accommodation and food
Closing the gaps by delivering:

- The current NSFs
- NSFs for other diseases
  - Each a 10-year plan
  - Phased in
  - Complete by 2022
  - 7 per cent per annum real spending increase
- Clinical governance: 10% of doctors’ time
- Better quality - reductions in:
  - hospital acquired infections, adverse incidents, emergency admissions, clinical negligence
- Fast access

Fast access

Table 2.2 Reducing Waiting Times in Hospital

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Maximum inpatient waiting time</th>
<th>Maximum outpatient waiting time (excludes cancer)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Today</td>
<td>15 months</td>
<td>6 months</td>
</tr>
<tr>
<td>2005-06</td>
<td>6 months, with all admissions booked</td>
<td>3 months</td>
</tr>
<tr>
<td>2008-09</td>
<td>3 months</td>
<td>3 months</td>
</tr>
<tr>
<td>2022-23</td>
<td>2 weeks</td>
<td>2 weeks</td>
</tr>
</tbody>
</table>

‘Solid progress’

- People become more engaged in relation to their health;
- Life expectancy rises considerably;
- The health status of the population improves;
- People have confidence in the primary care system and use it appropriately; and
- The health service is responsive with high rates of technology uptake and a more efficient use of resources.
Scenario 2

‘Slow uptake’

- There is no change in the level of public engagement;
- Life expectancy increases by the lowest amount in all three scenarios;
- The health status of the population is constant or deteriorates;
- The health service is relatively unresponsive; and
- The rates of technology uptake and productivity are low.

Scenario 3

‘Fully engaged’

- Levels of public engagement in relation to their health are high;
- Life expectancy increases beyond current forecasts;
- Health status improves dramatically;
- People are confident in the health system and demand high quality care;
- The health service is responsive with high rates of technology uptake, particularly in relation to disease prevention; and
- Use of resources is more efficient.

Capital Investment

- Over the first ten years of the Review the average annual capital spending (including new Buildings and ICT) increases from £2.2 billion to £5.5bn.
- These projections represent a massive increase in NHS investment, replacing and refurbishing:
  - a third of the hospital estate over the period
  - the whole of the primary care estate over the next ten years.
- The Review’s assumptions imply an additional spend on new hospitals of £42 billion over the 20 year period.
- Assuming a cost of £207 million to build a 500-bed hospital with 75% single en-suite rooms, this translates to around 205 new hospitals.
How the modelling was done

- Baseline: 1998/9 data extrapolated to 2002/03
- Health care expenditure:
  - Hospital and community health services; family health services; current and capital spending
- Social care:
  - Long-term care for 65+;
  - Care for 18-64s with physical disabilities; learning disabilities; mental health problems
- Projections:
  - Demographic change; health care needs; NSFs; waiting times; productivity; accommodation costs; technology; clinical governance

Model Results: Workforce

- Significant increase in the demand for healthcare professionals in 2020 - up to a third more nurses; two-thirds more doctors;
- Existing plans for expanding the skilled workforce are ambitious but, even if met:
  - There would still be a small shortfall in numbers of nurses in 2020; and
  - There would be a larger shortfall in the number of doctors (say, 25,000);
- The gap would need to be filled by benefits from:
  - Changes in skill-mix. Some doctors’ activity moves to nurses; some nursing duties move to health care assistants;
  - Pay modernisation/productivity

Model Results:

- The model also quantified the impact on costs of the other factors; e.g:
  - NSFs
  - Clinical Governance
  - Waiting times
  - Population growth
- Pace of activity growth is determined by the available capacity
- Cost growth is greatest in the first five years
Health care spending: growth rate

<table>
<thead>
<tr>
<th>Total UK NHS Spending</th>
<th>Average annual real growth, per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid progress</td>
<td>7.1</td>
</tr>
<tr>
<td>Slow uptake</td>
<td>7.3</td>
</tr>
<tr>
<td>Fully engaged</td>
<td>7.1</td>
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</tbody>
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Notes: Spending for pre-2004/2005 periods is based on NHS data, while the GDP deflator is used from 2005/06 onwards.

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Health care spending

Chart 5.1: Total UK NHS spending

Health care spending: share of GDP

Not available in natural text format.
Social care

- Health and social care are inextricably linked;
- Not in original remit, but felt necessary to look at integration;
- Information lacking to develop a ‘whole systems’ model;
- For consideration whether a separate study is needed
- Simple model built which only took account of demographic and health need changes

Social care spending: growth rate

<table>
<thead>
<tr>
<th>Table 5.4: Personal social services (PSS) spending in England</th>
<th>Average annual real growth, per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projected spending</td>
<td>1999-00 to 2002-03</td>
</tr>
<tr>
<td>Solid progress</td>
<td>1.2</td>
</tr>
<tr>
<td>Slow uptake</td>
<td>1.2</td>
</tr>
<tr>
<td>Fully engaged</td>
<td>1.2</td>
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1 Net spending on a resource basis, converted to real terms using the GDP deflator at market prices. Excludes children’s and family services.
Effective use of resources: Standards

- Standards and processes set by government
  - NICE to look at older technologies and practices, as well as new technologies;
  - NSFs to include resource estimates;
  - ICT: common standards established, budgets ring-fenced, achievements audited.
- Public health expenditure; to be evidence-based
- Rigorous and regular independent audit

Effective use of resources: funding

- Interim Report conclusions agreed by majority, but not all
- Final report based on same conclusion; gives opportunity for debate
- Issues are long-term sustainability of sources of funding and confidence to plan ahead
Effective use of resources: delivery

- Decentralisation of delivery; local governance and freedom to innovate
- Balance of health and social care wrong:
  - Skewed towards acute beds
  - Financial incentives needed to end bed-blocking
- More diagnosis in primary care
- Self-care: expansion possible
- Public engagement:
  - More informed partnership between patients and the service
  - Greater appreciation of the costs
  - Health promotion: reduction of key risk factors through better knowledge, well-communicated
- Further Review in five years’ time