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ANALYSIS

How the NHS measures up to other health systems

Debate about how to improve the NHS has been handicapped by a lack of suitable comparative data about the functioning of other health systems. **David Ingleby and colleagues** examine two recent reports by the Commonwealth Fund

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The government's plans for reorganising the English National Health Service have sparked heated discussions about the performance of the UK health system in comparison with that of other countries. Politicians favouring reform have emphasised real and perceived shortcomings of the NHS, while opponents have lauded its successes. Objective data have been sadly lacking in much of this debate. Arbitrary examples of good or bad performance from the UK and various other countries have been thrown back and forth, often using totally incommensurable data. Two new publications from the Commonwealth Fund, a New York based health policy institute, shed some much needed light on these questions.^{1,2} We analyse the data and discuss the strengths and weaknesses of the NHS in the light of current proposals for reform.

The studies

The first study applied uniform criteria to assess health systems in 14 high income countries (Australia, Canada, Denmark, France, Italy, Japan, Germany, the Netherlands, New Zealand, Norway, Sweden, Switzerland, the UK, and the United States). Most of the data came from telephone interviews carried out in 2010 with over 19 000 randomly chosen adults from 11 countries (1511 in the UK).^{3,4} Samples were weighted to ensure that they were representative of the general population; to minimise possible response biases, questions were as detailed and factual as possible. These data were supplemented by information published by the Organisation for Economic Cooperation and Development⁵ and from a recent study on mortality amenable to healthcare.⁶

The second publication was based on telephone interviews conducted in 2011 in the same 11 countries as in the first study and used the same methods and asked many of the same questions. This time, however, the sample consisted of over 18 000 "sicker" patients (1001 in the UK) who were in fair or poor health, had recently been in hospital, or had had major surgery or a serious illness or injury in the past year. Sixty two per cent

of those interviewed were aged 50 or over. This is an important group because in the US, for example, 89% of total health spending goes on the sickest 30% of the population.

Health system survey

We used the raw figures in the first report to compare countries. We could make only simple comparisons because of the limited number of countries studied. Nevertheless, some interesting results emerged. Although the UK seems to deserve criticism in specific areas, these are outnumbered by the areas in which it does well. Moreover, the levels of public confidence and satisfaction measured in the UK were higher than in any other country (tables 1 and 2).

Spending

One of the most striking comparisons concerns cost. The UK has one of the least expensive health systems among the countries studied: annual costs (after adjustment for the cost of living) are \$3487 (£2220; €2652) per person compared with an average of \$4342—a difference of 20%. By contrast, costs per person in the US are twice as high as in the other countries studied.

The data also confirm that the NHS is effectively "free at the point of delivery." Only 5% of UK respondents had experienced financial barriers to accessing healthcare in the previous two years, compared with an average of 16% in other countries—including some in which healthcare is also free in theory. A third of US respondents had experienced financial barriers such as out of pocket charges and high insurance premiums.

Countries differed in how they invest their resources. Per capita expenditure on drugs is 2.5 times higher in the US (where the lobbying power of the pharmaceutical industry has blocked price controls) than in the UK, and provision of magnetic resonance imaging machines per million population differs

widely: 43 in Japan, 26 in the US, and only six in the UK. This is a widely used proxy for expenditure on high technology. Regrettably, no figures were available concerning UK expenditure on hospitals; the US leads here with \$2475 per capita compared with an average of \$1480 in the 11 other countries.

Quality

The first report lists 20 indicators of health system performance that cover accessibility, safety, coordination of care, chronic care management, primary care, mortality, and prevention (few data were available for Japan, Italy, and Denmark).¹ An additional question concerning confidence in the treatment offered was included in the original survey,³ which we have also included in our table 1⇓ because of its relevance to this article. We ranked scores on these indicators and report below the position of the UK on each. More information about the indicators is available from the original report.¹

The UK did well in 13 areas and badly in five; it was best in seven areas and worst in two (table 1⇓). However, in the two areas where the UK does worst, cancer survival and measles immunisation, other factors need to be taken into account.

Cancer registration in the UK covers the entire population, whereas in many other countries registers cover relatively small geographical areas that may not be nationally representative.⁷ Cancer survival rates in the US are artefactually increased by the systematic exclusion of poor people and African Americans from the Surveillance Epidemiology and End Results register.⁸ Nevertheless, cancer survival has historically been worse in the UK than in the best performing countries. A recent study has attributed this to the much more limited resources available for diagnosis and treatment,⁹ although outcomes have been improving rapidly since the introduction of the National Cancer Plan.¹⁰

Measles immunisation in the UK is a special case, having been negatively influenced by the publication of Wakefield and colleagues' misleading scientific paper, which gave rise to widespread public concern about the safety of the MMR vaccine.¹¹ By contrast, the UK achieves the highest rate of influenza immunisation.

Satisfaction

Table 1⇓ shows that 92% of respondents in the UK were confident that they would receive the most effective treatment if they became seriously ill. This was the highest percentage of any country studied. Further encouraging results for the NHS concerned public satisfaction and the nature of improvements that respondents felt to be necessary. In a question about how well the health system worked, the UK had the highest proportion of respondents who thought "On the whole, the system works pretty well and only minor changes are necessary to make it work better" and the lowest score for "Our healthcare system has so much wrong with it that we need to completely rebuild it" (table 2⇓). We know from longitudinal data that levels of satisfaction with the NHS in England reached an all time high in 2009.¹²

Survey of sicker patients

The second publication, reporting data collected in 2011 from sicker healthcare users, focused on access to care and questions concerning how well the care was organised and delivered.² The results broadly confirmed the findings of the first publication,

with the UK obtaining first or second place on most of the variables studied.

The finding that financial barriers were lower in the UK than anywhere else is unsurprising, but the UK also did well in other areas. It achieved the best scores on obtaining after hours care or a same day appointment with a doctor or nurse (tying with Switzerland on the first of these). In the UK, the regular doctor or place of care was most likely to have information about the patient's medical history and to get involved in coordinating care. More British patients (74%) than in any other country had what the report calls a medical home—caregivers who knew them and gave person centred primary care. The report ascribes a key role to medical homes in improving delivery of care, especially for people who are chronically ill.

In this survey British doctors gained the highest scores for their willingness to inform and involve the patient. This was a major improvement since the 2008 Commonwealth Fund survey, in which British doctors were given lower scores than doctors in any other country except France. In 2011 British doctors also gained second place for "spending enough time with patients, encouraging questions, and explaining things carefully"; for the willingness of specialists to share decision making with the patient; and for the readiness of health workers to contact sick patients to see how things were going. Top scores were obtained for the engagement of patients in management of chronic conditions and for openness to telephone contacts between visits.

The last area explored in the second publication concerned gaps in planning discharge from hospital. UK caregivers achieved top scores for giving patients instructions on their treatment and information about whom to contact when needed, as well as for arranging follow-up visits. The UK gained second place for providing written care plans and giving clear instructions on medication; the overall assessment of the coordination of discharge planning was the highest achieved by any country. The UK had the lowest percentage of patients who had experienced medical or other errors in the past two years, as well as the highest percentage whose prescriptions were kept under review.

In summary, the UK's performance as evaluated by "sicker" patients was best or second best in almost all respects studied. The only discordant note concerned patients with diabetes, heart disorders, and hypertension, who were least likely to have their blood pressure "controlled last time it was checked." The authors of the second publication conclude that "compared with UK patients' responses to earlier surveys, those who responded to this year's survey reported marked improvements in care access, management, and communication." They linked these findings to policy interventions introduced in recent years.

Discussion

The Commonwealth Fund data indicate that accessibility of healthcare in the UK is better than in any other country studied (box). Care also seems to be better organised, safer, and more patient centred. These publications report less information about outcome measures, however, and what they do report tends to be less favourable to the UK, except in preventive care for diabetes, where scores are highest. Three measures warrant particular concern: deaths amenable to healthcare, survival rates for breast cancer, and survival after acute myocardial infarction.

Of course, no outcome measure is a pure indication of the effectiveness of healthcare. The characteristics of patients and their illnesses also influence outcomes. (This, incidentally, may also explain some of the regional disparities in outcomes within countries.)

Key conclusions from Commonwealth Fund data

- The NHS outperforms other high income countries on many measures despite spending much less than most of them
- It enjoys the highest levels of public confidence and satisfaction of all the countries studied
- The effects of increased investment and policy improvements over the past decade are clearly visible

Nevertheless, concern about NHS clinical outcomes seems justified. The analysis of 16 high income nations⁶ quoted in the first publication showed that UK deaths amenable to healthcare were higher in 2006-7 than anywhere else except the US; these deaths were down 35% on the even more alarming figures recorded nine years earlier, but there was still much room for improvement.

Making care more accessible and better organised, as has clearly been achieved over the past few years, is likely to improve outcomes. However, investment in high technology equipment and more expensive treatments is low in the UK, despite an increase in spending between 2000 and 2010. Given that health expenditure in the UK is still relatively low, there is a case for increasing spending on diagnosis and treatment to the level of other comparable countries.

Conclusions

The results reported here do not support complacency about the current performance of the health system in the UK. They show that, like all health systems, it has its strengths and weaknesses. They do, however, cast serious doubt on any claim that there is widespread popular support for radical reform. Improvements are needed, but continuation and expansion of the measures already set in motion—more of the same—seems to be a better formula than totally rebuilding a system that, by international standards, already works remarkably well.

Contributors and sources: DI has carried out research for the World Health Organization and Council of Europe on health policy issues. MM, BR, and PM have extensive experience of comparing European health systems through their involvement with the European Observatory on Health Systems and Policies. DI wrote the first draft; all authors contributed to subsequent drafts and have read and agreed to the final version. DI is guarantor.

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Tables

Table 1 | Ranking of UK health system compared with other countries in Commonwealth Fund surveys

Item	UK rank	No of countries with data	UK score (%)	Range of scores (%)
UK does well				
Users are confident they would receive the most effective treatment if they became seriously ill ³	1	11	92	70-92
Low rate of errors ³	1	11	8	8-18
Preventive care for diabetics ³	1	8	67	67-31
Use of clinical outcomes data ³	1	10	89	89-12
Use of patient satisfaction data ³	1	10	96	96-2
Financial incentives, targeted support*	1	14	89	89-10
Avoids amputation in diabetic patients ⁵	1	10	9	9-36
Problems getting care after hours ³	2	11	38	33-68
Problems coordinating tests, records ³	2	11	20	14-34
Gaps in hospital discharge planning ³	2	8	50	38-71
Guidelines used for diabetes*	2	10	96	98-62
Specialist not informed about history ³	3	8	14	12-32
Influenza immunisation over age 65 ⁵	3	10	73	77-61
UK does neither well nor badly				
Able to get appointment on same/next day ³	4	11	70	93-45
Waited ≥2 months for specialist appointment ³	5	11	19	5-41
Waited ≥4 months for elective surgery ³	8	11	21	0-25
UK does badly				
Regular doctor always informs and involves patient†	7	8	51	43-58
Deaths after admission for acute myocardial infarction (per 100 patients)‡ ⁵	7	8	6.3	2.9-6.6
Amenable mortality per 100 000‡ ⁶	7	8	83	55-96
Measles immunisation rate ⁵	10	10	87	87-97
Breast cancer 5 year survival rate‡ ⁵	7	7	79	79-91

*2009 Commonwealth Fund international health policy survey.

†2008 Commonwealth Fund international health policy survey of sicker adults.

‡2007 data.

Table 2| Public views of the health system in 2010 in UK and 10 other countries (% of respondents)³

	UK	Others (mean)
Works well, minor changes needed	62	39
Fundamental changes needed	34	47
Needs to be completely rebuilt	3	13