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FOR RESEARCH AND POLICY
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SUMMARY BRIEFING
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FUNDING AND PERFORMANCE OF HEALTHCARE SYSTEMS IN THE FOUR COUNTRIES OF THE UK

The health services of England, Scotland, Wales and Northern Ireland are all funded by the UK taxpayer, but since political devolution in 1999 they have developed different systems of governance and different policies. A revised report from the Nuffield Trust, *Funding and Performance of Healthcare Systems in the Four Countries of the UK Before and After Devolution*, examines the impact of these changes. Key statistics for the NHS in the four countries are examined before and after devolution. Each indicator, such as expenditure, staffing levels, activity (outpatient appointments, inpatient admissions and day cases), productivity and waiting times, is examined at three time points – 1996/07, 2002/03 and 2006/07. The report also undertakes a completely new comparison of the NHS in the ten English regions with the NHS in England as a whole, and with the devolved countries.

The full report and summary were originally published in January 2010. Following subsequent queries from NHS Scotland about the accuracy of some statistics for Scotland published by the Office for National Statistics (ONS), on which the analysis was based, ONS revised some of the officially published statistics. The full report, and this summary, now take account of the revised data published by ONS. Both the summary and full report are available at **www.nuffieldtrust.org.uk**.

Key points

- Historically Scotland, Wales and Northern Ireland have had higher levels of funding per capita for NHS care than England. The research confirms this, but shows other striking differences between the four nations, some accentuated since devolution.
- The research suggests the NHS in England spends less and has fewer hospital medical and dental staff; nursing, midwifery and health visiting staff; and management and support staff per capita than the health services in the devolved countries, but the NHS in England is delivering higher levels of crude productivity and lower waiting times.
- Scotland has the highest levels of poor health, the highest rates of expenditure and the highest rates of general practitioners (GPs), and nursing, midwifery and health visiting staff per capita, and yet it had the lowest rates of crude productivity of hospital clinical staff in 2006/07.
- Due to the skewing effect of London on data from England, the North East of England provides a better benchmark for comparisons with the devolved countries than England as a whole.
- In 2006 Scotland had the highest per capita spend, whereas Wales and Northern Ireland had similar per capita expenditure on the NHS, relative to North East England.
- Wales had substantially higher management and support staff per capita than North East England. The percentage of patients waiting more than 13 weeks for admission as an inpatient, outpatient or day case was higher in Wales and Northern Ireland relative to all English regions (comparable data are not available for Scotland).
- Some of the differences and trends may be because of historic differences in funding levels, which are not directly related to policy differences following devolution. But some will reflect the different policies pursued by each of the four nations since 1999, in particular the greater pressure put on NHS bodies in England to improve through targets, robust performance management, public reporting of performance and financial incentives.
- The research raises important questions about the accountability of the devolved administrations for their health services, and the availability of comparable data that allow differences to be analysed in future. Without such comparable data, UK taxpayers and HM Treasury cannot know whether they are securing value for money for their health services.

BACKGROUND

Political devolution to the Scottish Parliament, and the Welsh and Northern Ireland Assemblies, means it is no longer possible to speak of a single NHS in the UK. The health services of England, Wales, Scotland and Northern Ireland are funded by the UK taxpayer but now have different systems of governance and pursue different policies.

The period following devolution in 1999 was followed by unusually high increases in real-terms funding for the NHS across the UK. Only in England, however, was this made contingent on the health service meeting Public Service Agreement (PSA) targets set by the UK Treasury. Funding for the NHS in the devolved countries is determined by their governments from a global sum for 'devolved services' that is based on the Barnett Formula (a 30-year-old system for dividing public money between England and the other countries of the UK) and bilateral negotiations with HM Treasury. Following devolution, marked differences in health service policy have developed between England, Scotland and Wales (in Northern Ireland, devolution was suspended between 2002 and 2007).

In England, the 'purchaser/provider' split was maintained between NHS organisations that plan and buy healthcare and those that provide it – a split first introduced to the UK during the 'internal market' of the 1990s (today, these functions are carried out by strategic health authorities and primary care trusts, and by NHS trusts of various kinds).

In England, policy has also been characterised by a significant central government challenge to NHS bodies to improve through targets, robust performance management, public reporting of performance and financial incentives. Latterly this has been complemented by encouraging competition between providers (including new NHS foundation trusts and independent sector treatment centres) by promoting patient choice between them. Furthermore, funding increases for the NHS in England have been contingent in part on the NHS meeting PSA targets with HM Treasury.

In Scotland and Wales, the purchaser/provider split was abolished, and organisations recreated to meet population needs and run services within defined geographical areas (NHS health boards in Scotland and, since October 2008, local health boards in Wales). While there have been targets in each of the devolved nations, for example to reduce waiting times and healthcare associated infections, in England they were supported by public reporting (NHS 'star ratings' followed by the annual 'Health Check', now overseen by the Care Quality Commission) and strong performance management designed to penalise failure and reward success.

There were no equivalent systems of public reporting in the devolved countries. In addition, there have been other differences that are more obvious to patients. For example, in Scotland there is free personal care for older people, and in Wales, Northern Ireland and Scotland the respective governments have abolished charges for prescriptions. Neither change is planned in England.

RESEARCH METHODS

The principal purpose of the report is to identify differences in performance between the NHS across the four nations. This builds on a previous study by two of the authors that compared key indicators for the four health services before and after devolution (in 1996/07 and 2002/03) (Alvarez-Rosete and others, 2005). The present report brings this research up to date by examining NHS expenditure (per head of population in cash terms), life expectancy, staffing levels (per 1,000 population), activity (outpatient appointments, inpatient admissions and day cases per 1,000 population), 'crude' productivity (activity per staff member), some medical procedures and waiting times. The percentage of the population reporting satisfaction with health care is also examined.

There are two parts to the analysis. In the first, comparisons are made between the four countries. In the second, comparisons are made between the three devolved nations and regions in England. This second analysis allows comparisons between the devolved nations with areas of England that are similar in scale and in their levels of health and socioeconomic characteristics.

Each indicator of NHS performance is examined at three time points – 1996/07, 2002/03 and 2006/07. The indicators relate to inputs, rather than, for example, staff and patient experience (other than a broad measure of satisfaction) or health outcomes. They were chosen because it was largely possible to define and measure them in the same way in each country and at each time point. Other studies have examined the quality of care across the four nations, but not consistently over the same time points: for example, in 2009 the Health Foundation published a comprehensive analysis of quality across six domains at various times, which demonstrated no systematic differences in quality across the four nations (Sutherland and Coyle, 2009).

COMPARING PERFORMANCE BETWEEN THE FOUR DEVOLVED COUNTRIES

The main findings of the report are as follows.

- *Per capita expenditure* on the NHS for 1996, 2002 and 2006 across the four countries: Scotland had the highest and England the lowest rates.
- Rates of hospital medical and dental staff *per 1,000 population* for 1996, 2002 and 2006 across the four countries: Scotland had the highest and England the lowest rates (except in 2002 when Wales had the same rate as England, and in 2006 when Northern Ireland had the same rate as Scotland).
- Rates of nursing, midwifery and health visiting staff *per 1,000 population* for 1996, 2002 and 2006 across the four countries: Scotland had the highest and England the lowest rates (except in 1996 when Northern Ireland had the same rate as Scotland).
- Rates of GPs *per 1,000 population* for 1996, 2002 and 2006 across the four countries: Scotland had the highest and England the lowest rates (except in 2006 when Wales had the lowest rate).
- Rates of management and support staff *per capita* for 1996, 2002 and 2006: Wales had substantially higher levels relative to England (comparable data were not available for Scotland and Northern Ireland).
- Rates of outpatient appointments *per capita* for 2006: Scotland had the highest and Northern Ireland the lowest rates (comparable data were not available for Wales).
- Rates of day cases *per capita* for 2006: Northern Ireland had the highest rate and Scotland the lowest (comparable data were not available for Wales).
- Rates of outpatient appointments *per hospital medical and dental staff member* for 2006: England had the highest rate and Northern Ireland the lowest (comparable data were not available for Wales).
- Rates of inpatient admissions *per hospital medical and dental staff member* for 2006: Northern Ireland had the highest rate, with Wales and England having the same rates (comparable data were not available for Scotland).
- Rates of day cases *per hospital medical and dental staff member* for 1996 and 2006: England had the highest rates, and Northern Ireland the lowest in 1996 and Scotland the lowest in 2006 (comparable data were not available for Wales).
- Rates of outpatient appointments *per nursing, midwifery and health visiting staff member* for 1996, 2002 and 2006: England had the highest rates across all years and Northern Ireland had the lowest rates across all years (in 2006, Scotland had the same rate as Northern Ireland) (comparable data were not available for Wales).
- Rates of inpatient admissions *per nursing, midwifery and health visiting staff member* for 1996 and 2002: England had the highest rate in each year, Northern Ireland the lowest in 1996 and Scotland the lowest in 2002. For 2006, we can compare England, Wales and Northern Ireland only: Wales had the lowest and England the highest rate.

- Rates of day cases *per nursing, midwifery and health visiting staff member* for 1996, 2002 and 2006: England had the highest rates in each year, Northern Ireland had the lowest in 1996 and Scotland the lowest in 2002 and 2006 (comparable data were not available for Wales).
- Percentage of ambulance responses in under eight minutes to what may have been life-threatening emergencies: from 2004 to 2006 England had a better performance than Scotland or Wales (comparable data for Northern Ireland were not available).

The proportion of the population reporting satisfaction with the general running of the NHS rose in England and Scotland between 1996 and 2002, and rose in England, Scotland and Wales between 2002 and 2006.

It is notable that Scotland's waiting times cannot easily be compared with those of England, Wales and Northern Ireland at the three time points, because they are measured in a different way. However, the performance of Wales and Northern Ireland in key measures of waiting has also been poor compared with England. By 2006, virtually no patients in England waited more than three months for an outpatient appointment, whereas in Wales and Northern Ireland, 44 per cent and 61 per cent, respectively, of patients did. By 2006 virtually all patients in England who needed inpatient or day case treatment were seen within six months, while in Wales and Northern Ireland, 79 per cent and 84 per cent, respectively, had their appointment within six months.

COMPARING PERFORMANCE BETWEEN THE ENGLISH REGIONS AND THE DEVOLVED COUNTRIES

Uniquely, the report looked at the impact of devolution by conducting a comparison of the English regions (nine government office regions (GORs) or ten strategic health authorities) with the NHS in England as a whole and the NHS in each of the devolved countries in 2006/07. This is the first time such an analysis has been conducted. The national differences reported are more pronounced when the devolved nations are compared with regions of England that are similar both in scale and on a range of health and socioeconomic indicators.

The national averages for England are distorted by London, due to the capital's relatively young and healthy population, high labour costs, and high concentration of teaching and research hospitals (which lower the crude productivity of its staff). The analysis suggests that the North East region is a better benchmark for comparisons of the NHS between the three devolved countries than England as a whole. For example, compared with Scotland it has a similarly-sized population, similar levels of income, deprivation and unemployment, and comparable health status and life expectancy. The main results are as follows:

- Standardised mortality rates: Scotland had the highest rates (though these were close to North East England), and the South East and South West of England the lowest. Rates for Northern Ireland were similar to those in the two worst English regions (North East and North West England) and rates for Wales were closer to the median rate for English regions.
- Perinatal mortality rates: most English regions had higher rates than in the devolved UK countries.
- Infant mortality rates: similar rates were observed in England and Northern Ireland, which were higher than those for Scotland and Wales.
- Life expectancy: Scotland had the lowest rate, and Wales and Northern Ireland had rates similar to the English regions with the lowest rates (North East and North West England).
- Per capita spend on the NHS: Scotland had the highest rate, and Wales and Northern Ireland had rates similar to the North East region.
- Hospital medical and dental staff, and nursing, midwifery and health visiting staff per 1,000 population: these rates were highest in Scotland and Northern Ireland, with Wales having rates similar to North East England.

- GPs per 1,000 population: Scotland had the highest rates, Northern Ireland and Wales had similar rates to most English regions.
- Total outpatient appointments per 1,000 population: Scotland and Northern Ireland had lower rates than North East England (comparable data for Wales were not available).
- Day cases per 1,000 population: Scotland and Northern Ireland had lower rates than North East England (comparable data for Wales were not available).
- Inpatient admissions per 1,000 population: Northern Ireland and North East England had the highest rates, and rates for Wales were lower (comparable data for Scotland were not available).
- Outpatient appointments per hospital medical and dental staff member: Scotland and Northern Ireland had lower rates than all English regions (comparable data for Wales were not available).
- Day cases per hospital medical and dental staff member: with the exception of London, Scotland had a lower rate than all regions of England (comparable data for Wales were not available).
- Inpatient admissions per hospital medical and dental staff member: Wales and Northern Ireland had lower rates than North East England (comparable data were not available for Scotland).
- Outpatients, inpatients and day cases per nursing, midwifery and health visiting staff member:

Figure 1: Total NHS expenditure per capita for the nine English GORs and England, Scotland, Wales and Northern Ireland (2006)

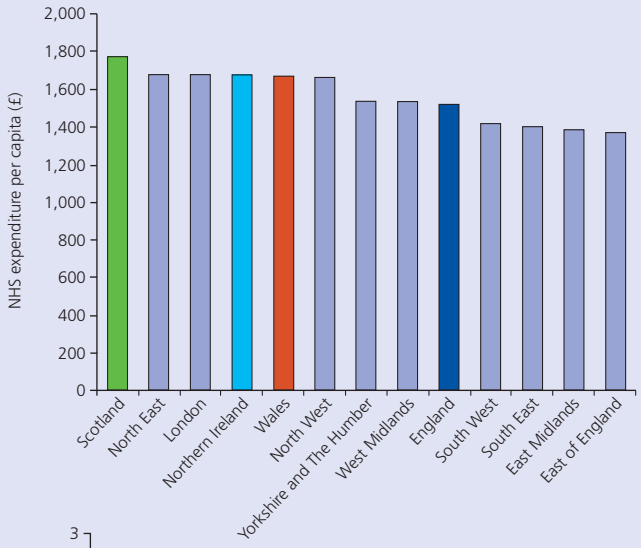
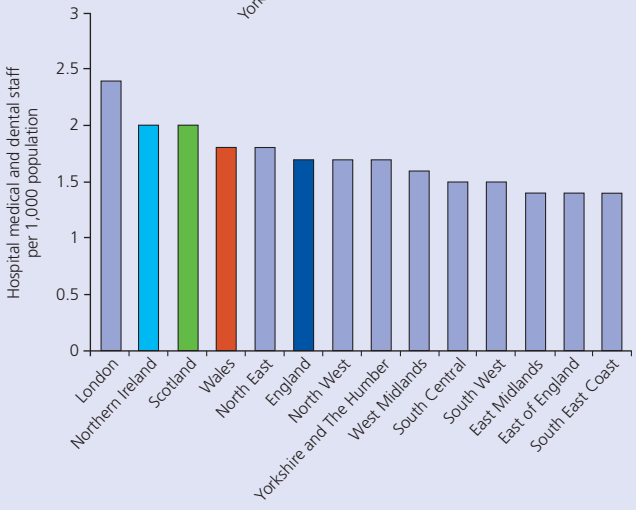


Figure 2: Hospital medical and dental staff (whole time equivalents) per 1,000 population in the ten English SHAs and England, Scotland, Wales and Northern Ireland (2006)



Northern Ireland had lower rates than all English regions for outpatients and inpatients (except for London), and than seven English regions for day cases (the exception being London).

- Management and support staff per capita: Wales had a substantially higher rate than any English region (comparable data were not available for Scotland and Northern Ireland).

Figure 3: Nursing, midwifery and health visiting staff (whole time equivalents) per 1,000 population in the ten English SHAs and England, Scotland, Wales and Northern Ireland (2006)

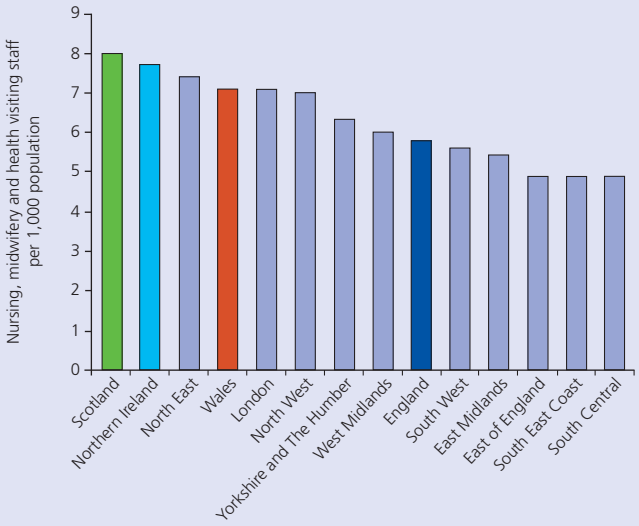


Figure 4: Inpatient admissions per hospital medical and dental staff member in eight regions of England and England, Wales and Northern Ireland (2006)

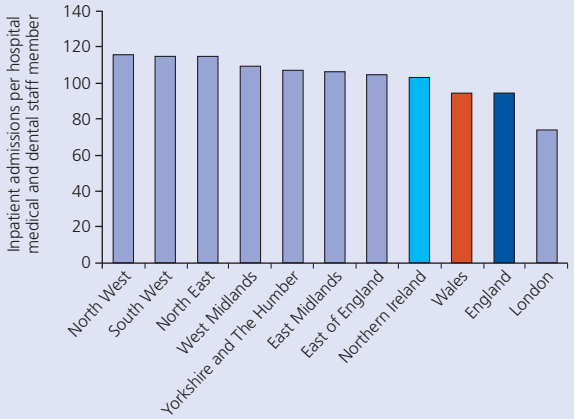


Figure 5: Percentage waiting more than 13 weeks for inpatient or day case admission for the ten English SHAs, England, Wales and Northern Ireland (March 2008)

CONCLUSIONS

Historically Scotland, Wales and Northern Ireland have had higher levels of NHS funding per capita than England. The research confirms this, but shows other striking differences between the four nations, some accentuated since devolution. Broadly, these were higher numbers of hospital medical and dental staff; nursing, midwifery and health visiting staff; and management and support staff per head of population; lower crude productivity per staff member (particularly in Scotland); and a higher percentage of the population waiting for care in Wales and Northern Ireland than in England.

The analysis presented in this report suggests that England's NHS spends less and has fewer staff per capita than the health services in the devolved countries, but that it makes better use of its resources with respect to delivering higher levels of activity and productivity, and lower waiting times. Comparing the devolved nations with regions of England that are similar on a range of health and socioeconomic indicators, the differences highlighted in the analysis remain, and in some areas are even more pronounced.

However, the report looks only at statistics that can be measured in the same way in the English regions and the devolved countries before and after devolution. It is possible that the comparative statistics that are available fail to capture some important dimensions of performance. Other dimensions, such as staff and patient experience, and health outcomes, should therefore be the subject of further research – although previously published studies do not point to consistently higher levels of quality of care in the devolved nations that might partly offset the lower crude productivity levels of staff relative to England (Sutherland and Coyle, 2009).

Some of the differences and trends may be because of the historical differences in funding levels, which are not directly related to policies pursued after devolution. But some will reflect the different policies pursued by each of the four nations since 1999, in particular, the greater pressure put on NHS bodies in England to improve performance in a few key areas such as waiting times and efficiency. This has been done through means such as targets, robust performance management, regulation with public reporting of performance, and financial incentives.

Meanwhile, the report raises important questions about the accountability of public services in the devolved countries and the equity of the funding they receive. As indicated earlier, the way money is distributed to the devolved administrations means public spending is not determined by need, but by the Barnett Formula and negotiation with HM Treasury. The House of Lords Select Committee report on the Barnett Formula concluded this should change – the report authors agree.

Regardless of overall levels of funding, a key question for the NHS in all four countries, especially in the current economic climate, must be whether value for money is being obtained. The results shown in this report suggest that efficiencies can be made in all four nations, but the marked differences in crude productivity of staff relative to England in the three devolved nations raise awkward questions.

Comparative analysis, such as that presented in this report, helps to increase the accountability of the public sector. But the authors had difficulty obtaining data that were comparable across the four nations. Although the UK Statistics Authority has a crucial role in monitoring the quality of statistics produced by each country, it does not have the powers to require the four countries to produce comparative data on the performance of their public services. Without these data, UK taxpayers and HM Treasury cannot know whether they are securing value for money in future.

REFERENCES

1. Alvarez-Rosete A, Bevan G, Mays N and Dixon J (2005) 'Effect of diverging policy across the NHS', *BMJ* 331: 946–50.
2. Sutherland K and Coyle N (2009) *Quality of Healthcare in England, Wales, Scotland, Northern Ireland: An intra-UK chartbook*. London: The Health Foundation.

ABOUT THE REPORT

Funding and Performance of Healthcare Systems in the Four Countries of the UK Before and After Devolution by Sheelah Connolly, Gwyn Bevan and Nicholas Mays.

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The full report is available to download from the Nuffield Trust's website at **www.nuffieldtrust.org.uk/publications**

Further copies of this summary are available via the Trust's website.

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The Nuffield Trust is a charitable trust carrying out research and policy analysis on health services. Our focus is on the reform of health services to improve the efficiency, effectiveness, equity and responsiveness of care. Current work themes include:

- The future organisation and delivery of care
- Commissioning
- Efficiency in healthcare
- Competition in healthcare
- UK and international comparisons.

The report *Funding and Performance of Healthcare Systems in the Four Countries of the UK Before and After Devolution*, on which this summary is based, forms part of our work on UK and international comparisons. By looking at established best practice, we aim to bring the benefits of international experience to the attention of UK policy-makers and health leaders.

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