# Health in Scotland and the UK: an economist's view

PHINS presentation, 8th October 2010

## Purpose of the report

- Originally, to identify potential savings from Health budget by comparing relative spending levels across the UK
- Ultimately, to try to better understand Scotland's relative health needs and how existing absolute and relative spending patterns fit with these needs

## Expenditure

- Spending per head of population on health is higher in Scotland than in England by around 12-16%. However, this positive differential has narrowed post devolution.
- This narrowing of the spending gap has not been exhibited for total Scottish spending (or spending related to the Scottish Block), which means that it has been a conscious choice of consecutive Scottish Government's to have relatively greater increases in other public services budgets (mainly economic related ones).

### Factors explaining higher need? (i)

- Mortality rates higher in Scotland than other countries in the UK, for each of the main causes of death.
- Widest relative gaps are with regards to the categories of 'mental and behavioural' and 'intentional self harm'.
- Decreases in mortality rates have been broadly similar between Scotland and England between 1999 and 2008.
- Scotland's life expectancy has improved but not as much as England's, i.e. extra spend has not reduced gap.
- Measure of 'unhealthy' life expectancy no longer in Scotland than rest of UK. This suggests that a longer period of treatment for illness cannot explain Scotland's higher spend per capita.

#### Factors explaining higher needs (ii)

- Deprivation, which reflects many of the relevant behavioural patterns, accounts for some 50% of the difference in excess mortality ratios over England – although declining over time.
- Estimates for the impact of population sparsity on relative health needs suggests that this might account for 1-2% of the 12% to 16% higher spend identified.
- Smoking (10-15%) higher in Scotland than in the UK.
- Insufficient evidence is available in order to gauge what effect variables like genetics or environment might have.
- Scotland's diet is very similar to the UK's, with two exceptions, much higher consumption of soft drinks and lower consumption of fruit and vegetables (exc potatoes).

#### Factors explaining higher needs (iii)

- On ALCOHOL, all survey evidence points to Scotland exhibiting average UK consumption levels but sales data suggests significantly higher consumption in Scotland.
- Regardless of the mixed evidence over consumption, alcohol related deaths (ARD) e.g. cirrhosis of the liver, are much higher in Scotland. This suggests that consumption patterns differ in Scotland or that some other factor is combining with alcohol intake to produce such an effect.
- The growth over time of ARD's in Scotland is difficult to reconcile with consumption patterns. ARD's were unchanged from 1979 to 1993, then more than doubled to 2002, before flat-lining again to 2008. If correct this pattern suggests that some sort of tipping point may have been reached based on past drinking increases.

## Alcohol issues

- Relative under-reporting?
- Relative omitted population?
- Sales data (2008, spirits, beer, wine)?
- ARD's across the UK (Sc vs N of Eng)?
- ARD's across time (profile, Sc vs UK, Glasgow)?
- Vs real damage done (Sc vs N of Eng, Liverpool, M'c'r etc)

## Analysis from 2001

ONS's Decennial analysis of 'Geographic Variations in Health':

• "Studies have suggested that diet has little influence on regional influences in mortality and alcohol some influence, whereas smoking has a substantial degree of influence. Data in this volume show that alcohol consumption and diet seem to vary only a little between regions and are therefore likely to have limited influence on the regional geographic patterns of health described."

# Conclusions over relative needs

- Uncertainty due to poor quality of the data and lack of direct comparability
- Worse health outcomes seen but connection with higher need for spend unclear
- If higher spend valid still uncertainty over where needs to be spent

## Staffing and Activity

- Higher spending levels of 12-16% are reflected in even higher staffing, per head of population, levels (+30%) seen in Scotland vs England. Problems arise when trying to disaggregate these differences.
- Activity data for the UK is inconsistent, in relation to relative outputs per unit of input, making it difficult to draw conclusions on relative UK productivity.
- The Nuffield Trust report from earlier this year suffered from significant data errors with regards to staff and activity numbers. As a result, their imputed findings with regards to relative productivity of the NHS in Scotland are not robust.

#### Patient Satisfaction and Productivity

- Patient satisfaction surveys (as a proxy for quality) findings are mixed. General satisfaction is higher in Scotland, but Scotland no longer experiences a substantially higher level of satisfaction over England with regards to individuals' experience of inpatient or outpatient attendances.
- In general, across the UK, productivity in the NHS is an issue as it has fallen in most years since 2001.
- Given the difficulty in identifying Scotland's appropriate level of health needs and of the relative productivity of the NHS in Scotland then it is difficult to pronounce on how efficient health services in Scotland are.
- The low degree of comparability of data across the UK makes it difficult to compare systems and allow lessons to be learnt.

#### **Conclusions and Recommendations**

- Our understanding of relative health needs and spend is poor.
- Devolution has not acted as a lab to measure effectiveness and efficiency of different approaches to similar problems.
- Ambitious research programme badly needed to improve our level of understanding, covering comparability of UK health needs, systems and behavioural patterns, plus international evidence.
- Such research with an eye to what potential savings or reductions in demand with regards to future health budgets.
- The creation of a Health Regulator for Scotland could improve the situation with regards to data and analysis, especially working in tandem with similar organisations in England, Wales and Northern Ireland.

## **Upcoming Issues - Budget**

- What is protected in England and Scotland?
- Will the Barnett baseline in England be pre or post efficiency savings and how are these savings reflected in Scotland?
- Why should health wages (two-thirds of Health budget) grow with inflation?
- Year 1 has biggest cut (£-1bn), unclear what profile best suits Health budget.
- Implication of Health protection for unprotected Long Term Care, early years investment, non NHS health prevention measures etc?

# Upcoming Issues - general

- Obscuring bigger picture of looking at both sides of causes and treatments.
- Importance of accommodating demographics related rise in Long Term Care. Current model unsustainable.
- Large change in lifestyles overdue re working/retirement patterns, pensions etc
- Scottish Government priorities: Economy (mid-ranking) vs Health (low ranking)