3.2 Health

The health of any population is a complicated function of many economic, social, cultural, lifestyle, educational and other factors, as well as the level and consumption of health and social care services, provided and used over people's lifetimes. Although there is a conventional wisdom that health and social care contribute only marginally to improvements in population health, it is now increasingly recognised that once the big breakthroughs in public health measures have been achieved - proper sanitation, good housing, universal education and so on - organised health and social care services, at the margins, have a substantial impact on improvements in life expectancy and other measures of health.

While, in part, improvements in populations' health is attributable to the provision of health and social care services (and provide an indication of the success or performance of services), care needs to be taken in interpreting changes in, or comparative levels of, health either in terms of success or in terms of failure to fully meet needs (with the implication that too little is being spent on services).

Here we provide an overview of broad measures of the health of the Northern Irish population and report on a survey of a sample of the population carried especially for this Review and investigating people's self-reported health.

3.2.1 Mortality

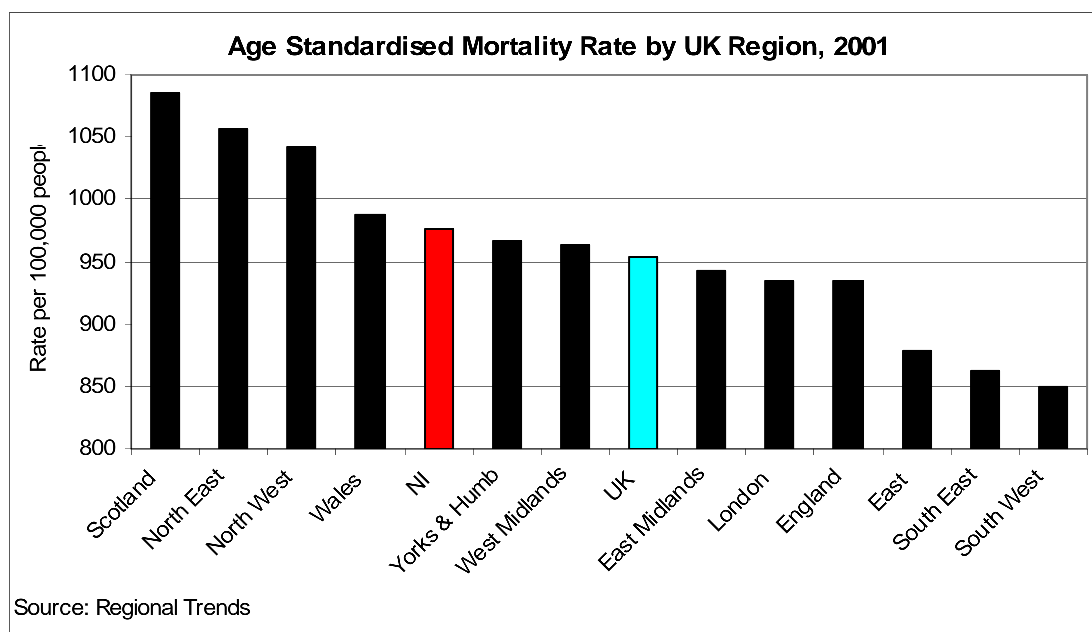
Age-standardised mortality rates per 100,000 population in Northern Ireland are comparable to Yorkshire and Humberside and around 2.4% higher than for the UK as a whole (figure 3.1). Although cancer mortality rates are lower than the UK average, Northern Ireland has significantly higher rates for respiratory diseases and the highest mortality from road traffic accidents. Infant mortality is also now close to the UK average having fallen from 13.2 per 1,000 live births in 1981 to 5.3 in 2004.

An issue that arose in the Review's consultation process was the assertion that the high number of suicides in Northern Ireland was a reflection of broader general mental health problems - and by implication, a need for greater investment in mental health services. However, mortality rates from suicides match the UK average.

As in many countries, however, over time, overall mortality in Northern Ireland has been falling. In fact, between 1996 and 2001, death rates have fallen by nearly 14% - faster than for the UK as a whole (9%)[31].

[31] However, in a historical context, during the 1960's NI had the lowest level of mortality of any UK region (Bardon J, A History of Ulster)

Figure 3.1: The age standardised mortality rate in Northern Ireland is 2.4% higher than the UK average in 2001



Falling mortality rates means that life expectancy improves. And over the last twenty years life expectancy at birth in Northern Ireland has increased by 4.2 years for females and 6 years for males - although females (80.6 years at birth) continue to have a significantly higher life expectancy than males (76.0).

Figures 3.2 and 3.3 show that over the past two decades life expectancy for both females and males has grown at a faster rate in Northern Ireland than the other constituent countries of the UK with the result that life expectancy is now higher than Wales although still slightly lower than England. Over the next fifty years, although the rate of growth in life expectancy is expected to tail off, by 2053 life expectancy in Northern Ireland is expected to have increased by a further 5.4 years for females and 6.1 years for males compared to 2003[32]. The DHSSPS aims to increase the life expectancy at birth of males and females in Northern Ireland by 3 and 2 years respectively by 2012; this represents an increase of 1.8 and 1.5 years over that projected by the Government Actuary.

[32] Source: Government Actuary Department

Figure 3.2: Female Life expectancy (at birth) in Northern Ireland is now close to the level in England.

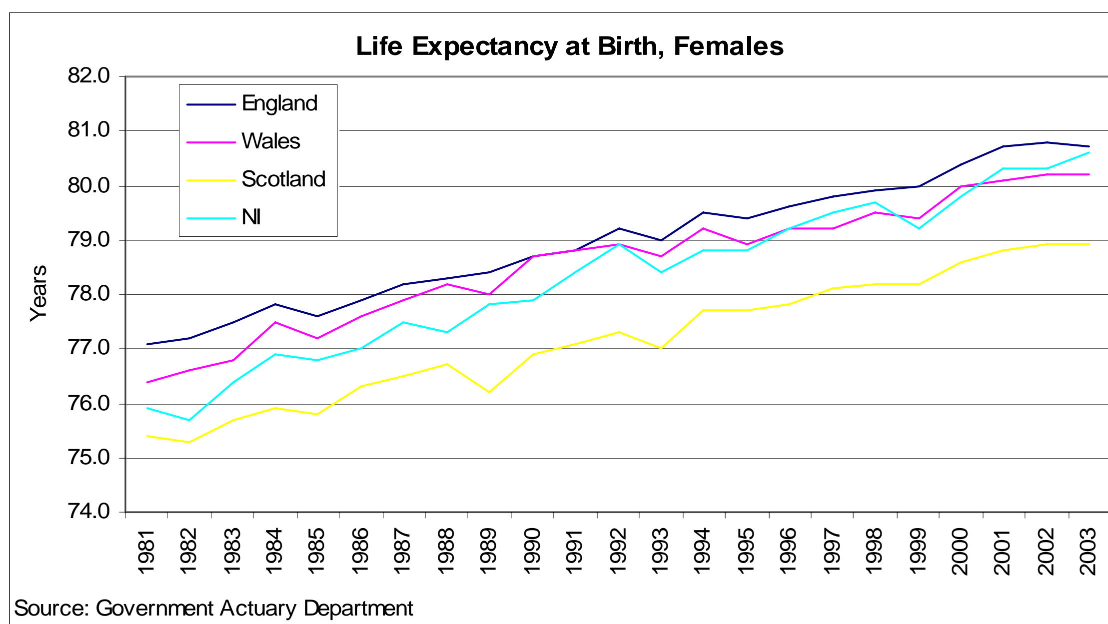
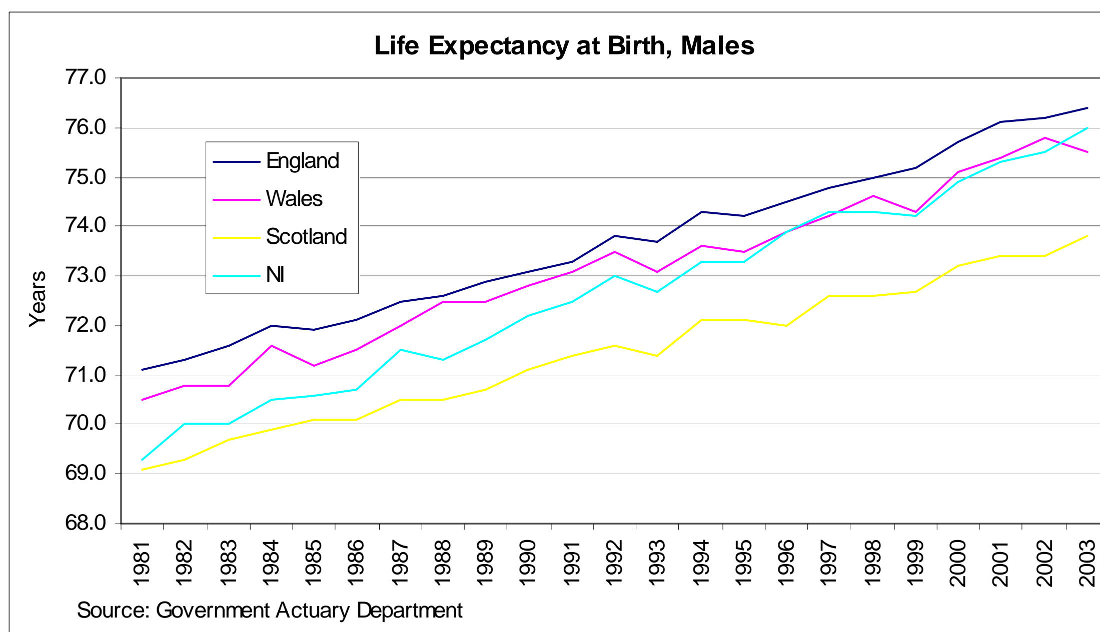


Figure 3.3: However, the rate of convergence with England has been greater for males.

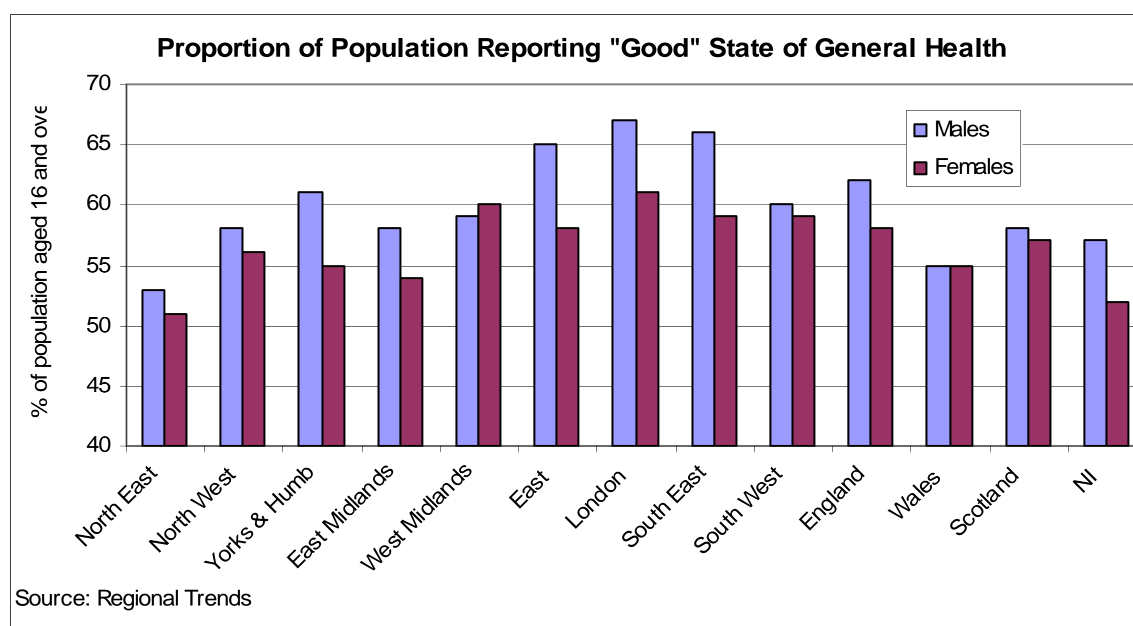


3.2.2 Self-reported health status

While mortality figures provide one perspective on the health of populations (and, with qualification, an indication of health service performance/need for investment), the vast bulk of the work and activity of health and social care services are directed at improving people's (health related) quality of life.

From this point of view, figure 3.4 - based on the General Household Survey - shows that the proportion of the population reporting themselves to be in good health is lower in Northern Ireland than most of the other regions of the UK (with the exception of the North East, and Wales with respect to males).

Figure 3.4: The proportion of population reporting "Good" state of general health in Northern Ireland is among the lowest in the UK in 2001



In order to expand on the information available on people's self-reported health status (and to provide data for the future funding modelling work detailed previously in section 2.3.4), the Review commissioned a special survey of 2,000 members of the public across Northern Ireland, using a generic, self-completed health status questionnaire - the EQ-5D[33].

One further reason for using this survey instrument was that the Health Survey for England also used the EQ-5D in its 2003 survey, enabling some direct comparisons to be made with the results from the Northern Ireland survey.

In the EQ-5D survey, respondents were asked the extent to which they have problems in various aspects of everyday life. Figure 3.5 shows that a higher proportion of people in Northern Ireland than England have problems with self-care and usual activities such as work and leisure activities. On the other hand, a lower proportion report problems with pain/discomfort or anxiety/depression.

It is also possible to obtain an overall measure of health status by combining these five dimensions of the EQ-5D (details of the calculations used to construct the EQ5D index are contained in Annex F)[34]. On this weighted aggregate measure, overall the population sample for Northern Ireland reported a health status some 4% *lower* than that of an equivalent population group resident in England.

This average score masks significant variations within Northern Ireland (and across England) - as figure 3.6 shows.

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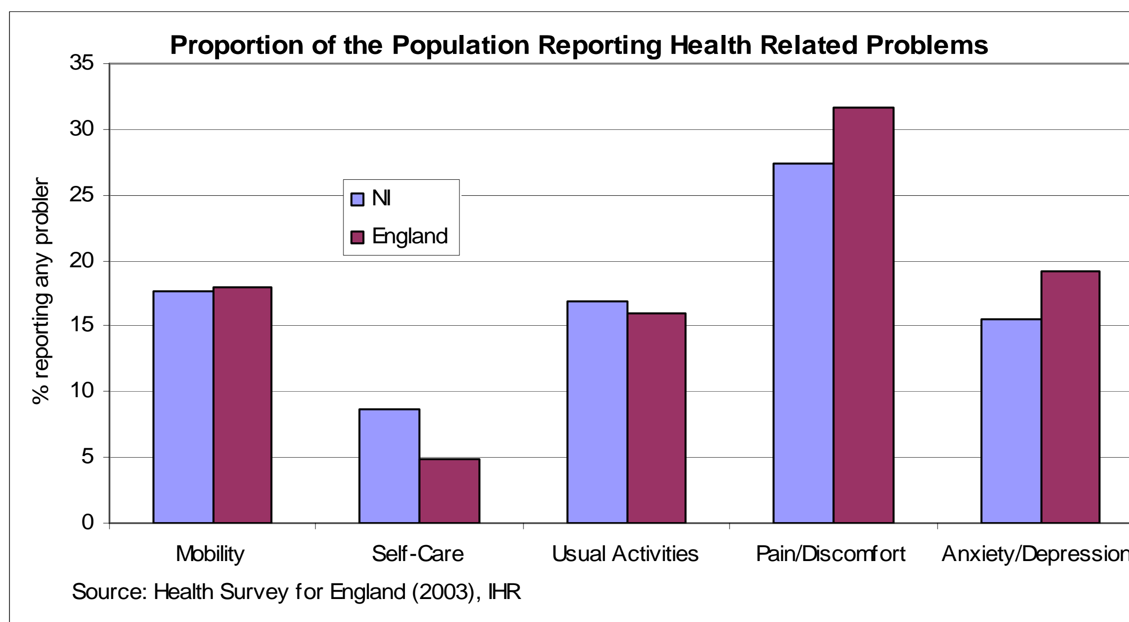
[33] The EQ-5D is a well-tested instrument often used in clinical trials as well as across populations and designed to produce a single health score. Further details of the survey are contained in Annex F

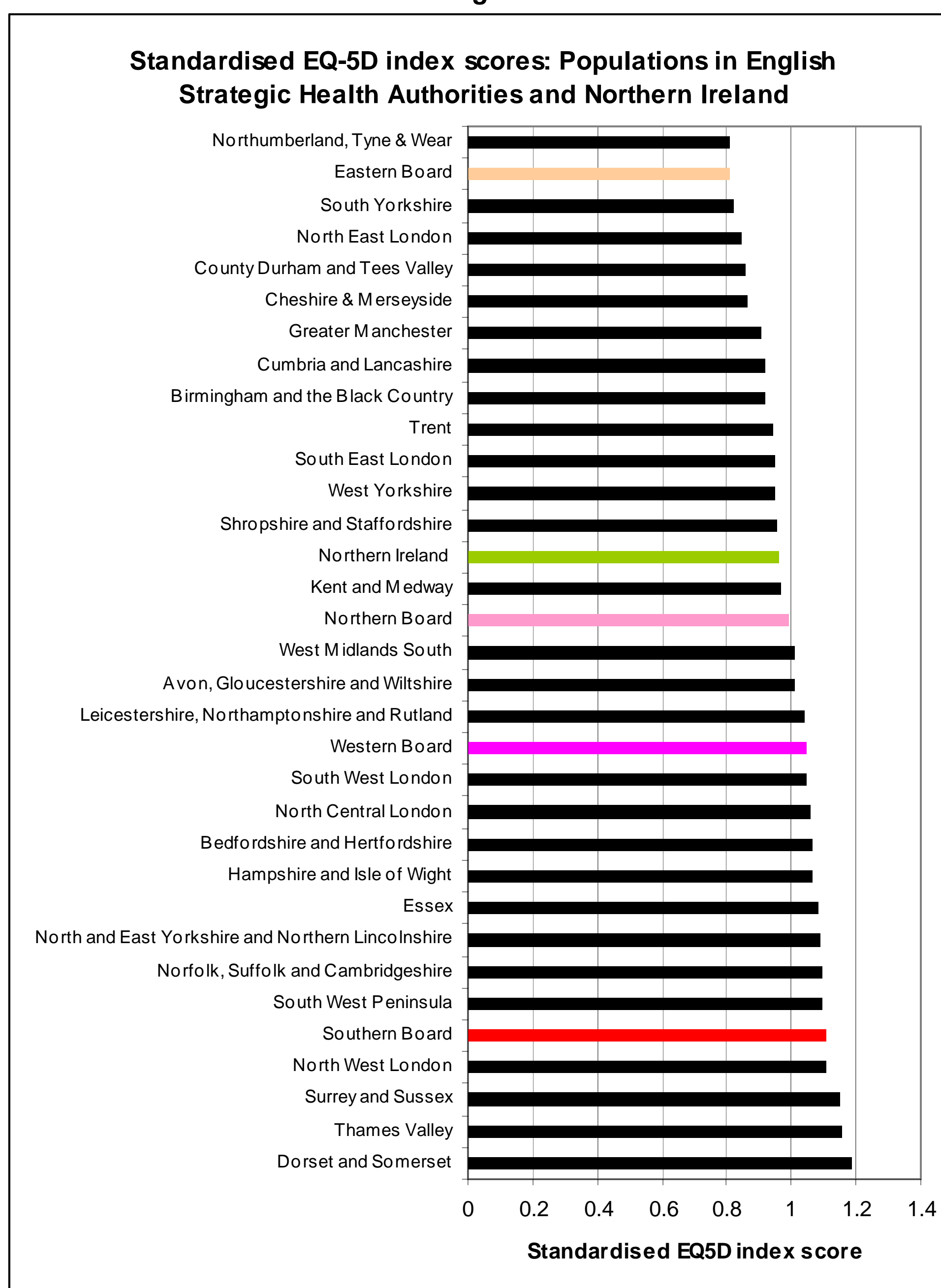
[34] When applied to subgroups of interest this index takes a value greater than 1 where health status is higher than that of an equivalent normative age/gender sample of the target comparative population. The index is lower than 1 where that health status is poorer.

Figure 3.5: Although the proportion of the population reporting health related problems is slightly lower in Northern Ireland than England on an unweighted basis, once adjustment is made for relative social values for the five dimensions, health status in Northern Ireland is lower than in England.



Within Northern Ireland, for example, there were found to be a significantly higher proportion of people reporting problems with health and a lower health status score in Belfast than the rest of Northern Ireland. Whilst the Southern Health and Social Services Board would have been ranked 5th out of the 28 Strategic Health Authorities in England, the Eastern Health and Social Services Board would have been the second lowest in terms of self-reported health status as measured by a standardised EQ-5D index (see figure 3.6).

Figure 3.6: Health Status of People Living in the Eastern Health Board Area is around 16% worse than the Northern Ireland average.

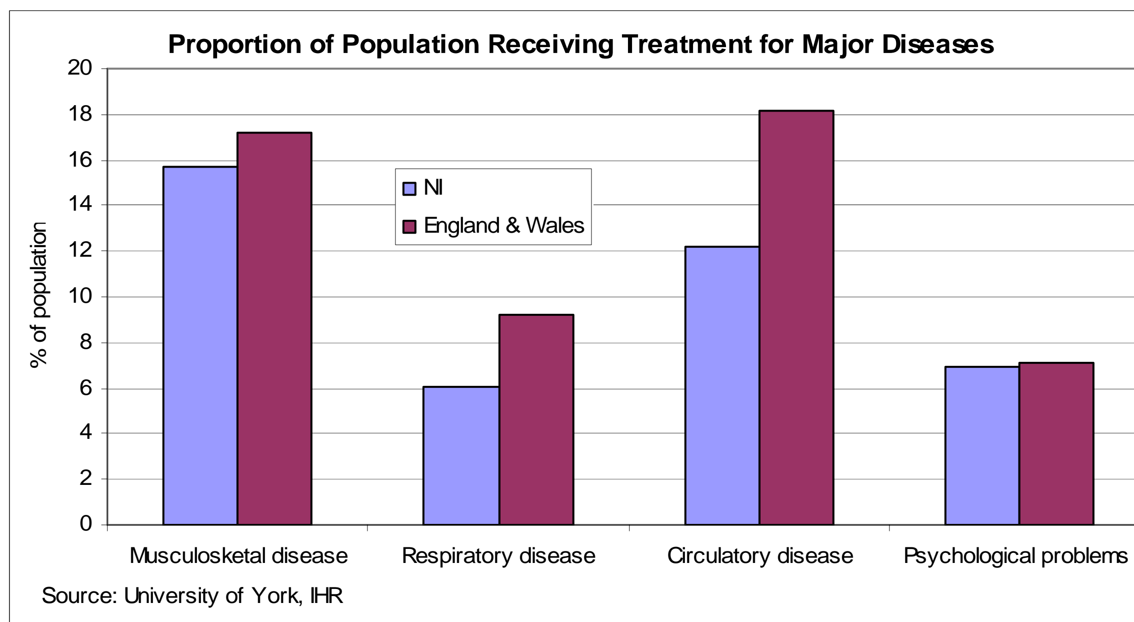


The EQ-5D survey also asked respondents to score their current state of health between 0 (representing the worst state of health) and 100 (the best possible state of health). The average score for Northern Ireland females was 76.2 compared to 76.8 for males. The overall score for people in Northern Ireland was around 3% lower than that found in previous studies for England, with the differential greater for males.

The survey also included questions relating to whether treatment was currently being received for a range of therapeutic areas. Figure 3.7 shows that there is a lower proportion of people in Northern Ireland than England & Wales currently receiving treatment. This result is somewhat surprising given that health status is worse in

Northern Ireland and is inconsistent with the data that will be presented in Section 3.3 which implies that hospital activity levels are close to the UK average in Northern Ireland.

Figure 3.7: People in Northern Ireland are less likely to be currently receiving treatment than in England & Wales for major diseases.



3.2.3 Distribution of health

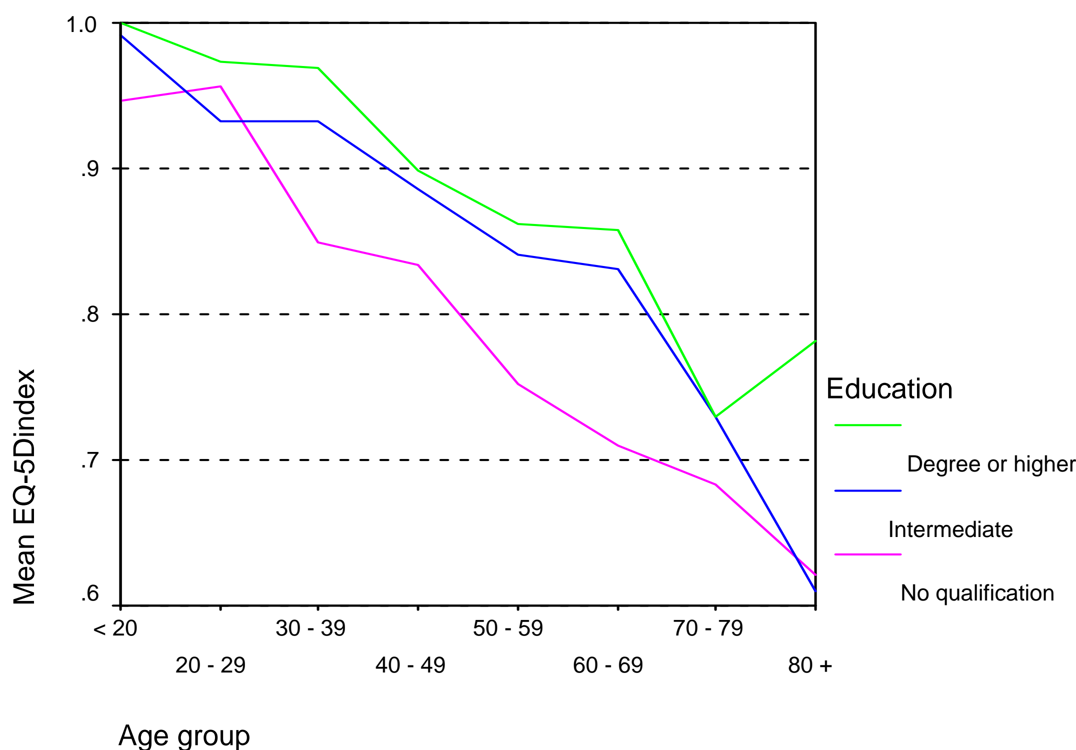
Although overall mortality rates are improving, there remain significant health inequalities within Northern Ireland. For example, data covering 1998 to 2002 show that mortality rates in the under 75s are 47% higher in socio-economically deprived than non-deprived wards. People in deprived areas are also more likely to be admitted to hospital - particularly as emergency admissions; admission rates for people living in deprived wards are 41% higher than in non-deprived wards, for example.

In terms of community background, 55% of those living in the fifth of wards with the worst premature mortality rates have a Catholic community background whereas 44% of the population are from this community[35].

Apart from the geographical variation in EQ-5D index scores across the four Northern Ireland health boards, the survey also recorded some characteristics of respondents - in particular, educational attainment. As figure 3.8 shows, EQ-5D index scores show a marked difference depending on educational attainment.

[35] Data source for this paragraph is DHSSPS report *Health and Social Care Inequalities Monitoring System: First Update Bulletin 2004*

Figure 3.8: People with higher educational attainments report better health across all age groups.



3.2.4 Lifestyles and health-seeking behaviour

As we note above, the determinants of a population's health are many and varied and while the level and distribution of health and social care services plays an important part in explaining changes in health, lifestyle factors - particularly for some diseases, for example, lung cancer - are also an important contributor to the general health well being of the population.

Table 3.1 sets out the main comparisons in terms of key lifestyle behaviours - diet, smoking, drinking, exercise and cancer screening. It can be seen that Northern Ireland has higher levels of fat intake and excessive drinking than England & Wales, whilst physical activity is below the rest of the UK. Although the proportion of people who smoke - around a quarter of the population - is similar to other parts of the UK, Northern Ireland has a higher percentage of heavy smokers. In terms of prevention, although the proportion of women screened for breast cancer is higher than in England & Wales.

Heavier drinking and smoking coupled with a high fat diet and a sedentary lifestyle add up to poorer health outcomes - regardless of the best efforts of the health services. But unhealthy lifestyles not only affect health outcomes but also place significant resource pressures on the health and social care system as they address the health consequences and with a consequential impact on the level of service provision (as shown in the UK Wanless Report[36]).

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[36] The Final Report of the UK Wanless Review, Securing our Future Health: Taking a Long-Term View, projects under the solid progress scenario (which incorporates inter alia the meeting of public

Table 3.1: Prevalence of healthy lifestyle choices for UK countries

	England	Scotland	Wales	NI
Fat intake per day (grams)[1]	73	71	73	76
% of people who smoke[2]	26	28	27	26
Excessive Drinking (Males)[3]	21	29	23	27
Exercise (%)[4]	11.4	10.4	12.8	7.1
Cervical Cancer Screening (%)[5]	81.6	86.5	80.0	72.2
Breast Cancer Screening[6]	69.8	75.0	66.6	72.6

Source: National Statistics, NISRA

Notes:

1. 1999/2000 data
2. 2002/03 data for persons aged 16 and over
3. 2000/01 data for persons aged 16 and over relating to more than 8 units of alcohol in past week
4. 2000 data based on minutes per day spent on physical activity as a % of sedentary activity
5. March 2002 data as % of all aged 25-64
6. March 2002 data as % of all aged 50-64

Recommendation 7: Routine collection of self-assessed health status data at population level would yield useful comparative data on population health status. In addition, the potential for routine collection of patient related outcome measures in health care services should be explored.

Recommendation 8: On the basis of current lifestyle data, the funding recommendations based on the Wanless 'fully engaged' scenario (investigated in more detail in a subsequent report[37]) imply considerable effort will be needed to engage the Northern Ireland population through expanded public health services and other means.

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health targets) a 12.5% lower need for expenditure by 2022/23 than under the slow uptake scenario where no change in public health behaviour is assumed.

[37] In April 2003, the Prime Minister, the Chancellor and the Secretary of State for Health asked Derek Wanless to provide an update of the challenges in implementing the fully engaged scenario set out in his report on long-term health trends. Derek Wanless' final report "Securing Good Health for the Whole Population" was published on 25th February 2004.