Inequalities in Health: The Welsh Dimension 2002-2005
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Foreword

By Professor Peter Townsend, Chair of the Standing Committee on Resource Allocation

Early in my adult life I came to know Archie Cochrane, subsequently the Director of the MRC Epidemiology Unit in Cardiff. Along with Aneurin Bevan and front-line GPs like Julian Tudor Hart he was one of a cluster of pioneering advocates of the NHS in Wales who put the resolution of inequalities in health at the heart of the nation’s objectives.

Cochrane achieved fame for his insistence on the Randomised Controlled Trial as the scientific method necessary to new medicine and health care. In 1971 he elaborated on the method as a key to getting professional and public support for a broad attack on inequalities in health - made up crucially of social class inequality but also with three other types of inequality - inequality of patient experience between chronic and acute care; inequality in standard of health care; and inequality in the allocation of resources between categories of disease, as well as geographical areas.1 There were underprivileged services as well as underprivileged patients. He was one of those who triggered my own interest in inequality.2 Unless all types of inequality were kept to the forefront of professional and administrative attention, the top-heavy structure would stay the same. Called upon to allocate the NHS budget for each following year the administrators are always tempted to do the “same as last year plus or minus 5 per cent for pressure groups.”3

The National Assembly for Wales has embarked on a novel strategy. A National Steering Group to allocate NHS resources more fairly was set up in 2000. Its report in 2002 entitled Targeting Poor Health (Townsend, 2001) made three particular recommendations to reduce inequalities in health and access to health care:

1) to adopt a direct needs formula for the allocation of NHS resources more equitably by area;

2) to improve financial information, particularly in tracing costs to recipients of care; and

3) to establish a dual strategy for health covering action outside as well as inside the NHS.

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1 Cochrane A.C. (1971), Effectiveness and Efficiency: Random Reflections on Health Services, the Nuffield Provincial Hospitals Trust, chapter 8.


3 Cochrane A.C. (1971), op. cit., p. 76.
The report was accepted by all parties in the Assembly, and a Standing Committee was established to implement the recommendations. As a first step early in 2004 most of an additional £30 million was allocated to 5 of the local health boards, among the total 22, whose funding was found to be furthest below the average required by the relative health needs of their populations. Further steps towards establishing equity of NHS resources by local area in future years are anticipated, together with joint action with professionals and organisations to reduce inequalities within areas.

Some of the steps taken are new to the UK. As the basis for allocating funds a new “direct needs” formula was devised. It is based on the Welsh Health Survey, which provides detailed information about the conditions of health of a substantial representative sample (30,000) of the population of Wales. Among 18 indicators covered are arthritis, back pain, respiratory illness, heart problems, mental illness, cancer and diabetes. The survey is unique to the UK and in 2004-05 has been extended in scale to provide data for the populations of 22 local health boards, and in its scope by age to children. The formula displaces previous methods of using service utilisation as a proxy for need, and the data are considered to be more comprehensive, practicable and reliable than alternatives on offer (Gordon et al, 2001).

A second novelty has been to pilot Equity Training and Advocacy Grants in selected areas. These illustrate the changes that have to be made, both outside and inside the NHS, to reduce inequalities in health. The equity training element is intended to allow NHS professional staff time and resources to find improved methods of serving patients who are hard to reach, and to develop strategies to improve the health, or prevent the ill-health, of communities and families living in material and social deprivation. The advocacy element provides the means for NHS staff, groups and organisations to advocate for local action, beyond the health and social care sector, which can have a positive impact on the health of individuals. They should also be encouraged to advocate complementary steps that can be taken by bodies, including the British Government, for example, to improve information about health, via the web and in other ways, and to increase child benefit, incapacity benefit and other redistributive allowances, that reduce inequalities and poverty and equalise both health and access to health care.

A series of reports at different stages of work from 2000-2005 has been published. This is the final report. It includes recommendations to complement measures at national level with stronger action at local level than previously considered appropriate. Equity measures to be adopted separately by the 22 local health boards are envisaged to make a bigger contribution in achieving genuine equity of access to health and social care than action nationally. Joint and collaborative action is longer term, and more sustainable, than the perpetuation of top-down, or market-led, authority.

The precise mechanisms, as well as the general principles, which govern how resources are allocated to areas as well as within areas, have to be constantly reviewed in relation to health and health care needs. As Chair first of the Steering Committee and then of the Welsh Assembly’s Standing Committee on the allocation of resources this became a constant feature of informed
discussion at successive meetings. For example, I have come to believe that the principle that target shares in the allocation of health care resources can be achieved by differential growth - agreed in 2002 by the Assembly - should be re-visited. Things are never quite what they are supposed to be. This applies especially to the mechanisms of “equitable” allocation of resources. The meaning of “real growth” is unclear in determining exactly what additional resources will be available, after meeting costs carried over from the previous year, to reduce inequalities by area and within areas. The “surplus” for redistribution can become surprisingly small, or even non-existent, and the achievement of agreed objectives delayed for many years. There may be grounds for returning to arguments for more straightforward redistribution to achieve equitable health care. My own view is therefore that “real growth” as an element of developing a health care policy, must be re-visited in terms of its operational measurement.

In August 2005 the UK Government’s Department of Health issued “Tackling Health Inequalities: Status Report on the Programme for Action” launched in 2003. In the preface Sir Michael Marmot, chair of the scientific group preparing the report, pointed out that “The Government has made reduction of health inequalities a major public health goal and it has set quantitative targets to achieve this reduction. The Minister for Public Health said in her Foreword that some of the 12 national headline indicators “are moving in the right direction” but that in general, up to 2003, there had been “no narrowing of health inequalities against the Public Service Agreement target. There is a continuing widening of these inequalities as measured by infant mortality and life expectancy, reflecting the long-term trend”.

In Wales during 2000-2005 inequalities in health and health care have continued to be serious, and in certain respects have become more serious, despite hard work by many organisations. The same is true of other countries. All governments must therefore contemplate more extensive action than previously considered necessary. A stream of recent reports from the Assembly have set the scene. The multiplying evidence, some of which is summarised in Chapters 1 and 7 below, must be addressed. My own view is that a concerted programme, divided into explicit stages that can be monitored, to reduce material and social deprivation, prevent ill-health in the first place, and enhance life chances, should be drawn up as rapidly as possible by the Welsh Assembly Government.
Executive Summary

1. This report is an account of progress in taking forward the Welsh Assembly Government’s decision to implement the recommendations of Targeting Poor Health published in 2001. It is based on the work of the Standing Committee on Resource Allocation established by the Assembly in 2002 and chaired by Professor Peter Townsend of the London School of Economics and Bristol University, who is an adviser to the Minister for Health and Social Care and an international authority on poverty and inequalities of health.

2. The report evaluates what has been achieved since 2001 and sets out the priorities which now need to be addressed.

3. Chapter 1 reviews the evidence on the enduring legacy of poor health and inequalities in health, in Wales and in other countries. It underlines the interdependence of action on health and action on equity: tackling poor health requires tackling material and social deprivation as well as improving health care services.

4. Chapter 2 reviews progress on the dual strategy proposed in Targeting Poor Health: action by health and social care services, and wider action across policy areas. It emphasises the importance of action on inequality across Assembly responsibilities and calls for strong advocacy in respect of UK Government policies which affect health in Wales.

5. Chapter 3 reports on the progress of the Financial Information Strategy and underlines its importance, both to inform the resource allocation model, and to enable local health boards and their partners to target resources more effectively where needs are greatest.

6. Chapter 4 explains the direct needs model for distributing health resources between local health boards, and how it has been developed and refined since 2001. It reviews progress in implementing the budget allocations indicated by the model, and asks the Assembly to give further consideration to the application of the principle, agreed in 2002, that the target shares should be achieved through differential growth. It also calls for further work to track expenditure more effectively at the patient and local level.

7. Chapter 5 reports on the Standing Committee’s consultation with local health boards and Trusts. The chapter explains that the direct needs model is concerned with relative need, and the equitable distribution by area of a fixed sum. It is designed to capture the needs of the local population as a whole: those with above average needs and those will lower than average needs. Introducing adjustments to the model to respond to detailed differences between areas risks introducing excessive complexity and creating unforeseen anomalies. The chapter proposes arrangements for the on-going development and refinement of the model.
8. Chapter 6 explains that, although the implementation of the direct needs model will enable fairness in resource allocation to be reached between local health boards, it cannot guarantee an equitable distribution of resources within their areas. This depends on determined action by local health boards and their partners, to analyse the present budget distribution and identify options for change which will achieve a better distribution in relation to need.

9. Chapter 7 sets out the report’s conclusions and recommendations for the future. The breadth of action required makes it imperative to keep a firm grasp of priorities in terms of scale and impact: the chapter identifies and makes recommendations on six top priorities.

Six Principal Recommendations
(detailed recommendations will be found in the text - in bold type)

1. **Local action by health boards:** local health boards must recognise they play the key role in reducing inequalities in health care at every level of service. From the resources they receive each year they should regularly review how those resources should be allocated more equitably in their budgeted expenditure. They should be allowed and strongly encouraged, especially by means of the introduction of new forms of professional training about deprivation, and by consultation with NHS leaders about the needs of people in relation to different types of service, to play this role.

2. **Collaboration:** the development of a joint approach to health and social care, with local authorities, to achieve an equitable and seamless pattern of services must be a top priority.

3. **Annual allocation of resources:** the principle that target shares in the allocation of health care resources can be achieved by differential growth - agreed in 2002 by the Assembly – should be re-examined in relation to speed of implementation. The meaning of “real growth” in determining what additional resources will be available to reduce inequality by area is unclear and may lead to misunderstanding about the speed of implementation of equal care at the point of equal need, and may lead to years of delay.

4. **The Dual Strategy:** Inequalities in health are becoming very serious and extensive counter-action outside as well as inside the NHS is required. A number of recent reports by the Assembly have prepared the ground. The possibility of drawing up, with other relevant organisations, a concerted programme to reduce material and social deprivation, prevent ill-health in the first place and enhance life chances, by monitored stages, should be considered by the Assembly.

5. **UK Government fiscal and other policies:** In the UK non-devolved policies have a crucial impact on the socio-economic conditions which underlie unequal health. The levels of child benefit and incapacity benefit are two striking examples. The Assembly cannot control this aspect of policy but it can, and should, make serious representations on issues which make a huge difference to the health and well-being of people in Wales - and can seriously delay reductions in deprivation and improvements in health.
6. **Research, in two areas:**

a) the development of the direct needs model, and of the Welsh Health Survey on which it relies, should form part of a much wider, all-embracing programme of research and development on inequalities in health and social care;

b) an individual patient tracking health care costs model should be introduced by stages, within, say, three years, to improve capacity to address health care needs efficiently.
Chapter 1: Poor health: the case in 2005 for equity led policy

1. This is the final report of the Standing Committee on Resource Allocation chaired by Professor Peter Townsend. The Committee was set up early in 2002 to report to the Minister for Health and Social Care on progress in implementing the recommendations set out in the report Targeting Poor Health\(^1\), published in 2001, and approved by the Assembly in plenary in March 2002.

2. The nature of the problem, and the objectives of a new strategy, were set out in that report. The three key recommendations were accepted by the Assembly:

   i. that a new direct method of measuring need for health care should be the basis of future allocation of resources by area; this would be more effective than current methods in all parts of the UK;

   ii. that financial information at every level of service should be re-cast, to provide standardised data about expenditure year-by-year on health care, by treatment programme and local health area. In principle, this meant tracking actual, or estimated costs, back to the individual;

   iii. that a dual strategy of major structural action - inside, but also outside, the NHS should be developed. Outside action would need to be taken in particular to reduce multiple deprivation and establish minimum standards of income and benefit, as well as action locally on housing, environment, facilities etc. Inside action would require central administrators, local health boards and local authorities, service providers and individual professional practitioners, to give greater priority to those getting too little, or none, of the health services they need, either for treatment or to support long term health.

The problem of inequality in health and in health care

3. What lay behind the preparation of the 2001 report was a major, continuing, problem of inequality in health and in health care. Thus, along with other governments, the UK had in 1985 signed up to a programme of “Health for All”, developed by the European Office of the World Health Organisation, to reduce inequalities in health by the year 2000. In fact, this objective was not met during the following 15 years. Despite advances in health care and greater expectancy

\(^1\) Cochrane A.C. (1971), Effectiveness and Efficiency: Random Reflections on Health Services, the Nuffield Provincial Hospitals Trust, chapter 8.
of life from birth, inequalities in health have continued to grow in many member states of the European Union, in Wales and in the UK as a whole. Moreover, some vulnerable, especially poor, groups do not have equitable access to health care services.

**Poor health in Wales**

4. The legacy of ill-health in Wales was set out in the *Better Health: Better Wales* consultation paper, published in 1999, which described the inequalities in health status within Wales, and between Wales and other countries, and, more recently in the Chief Medical Officer’s *Health Status Wales* report, including:

- mortality rates in Wales among the worst in Western Europe;
- death rates from heart disease in Wales, and the UK, substantially higher than in many western European countries;
- Wales has amongst the highest rates of cancer registrations in Western Europe;
- consistently poor health in the South Wales valleys - in 2000-2002 death rates in Merthyr Tydfil were almost 50% higher than in Ceredigion;
- Wales has a much higher percentage of people reporting a long term limiting illness than in England - with the highest levels in the South Wales valleys;
- mortality rates from cancers are worse in Wales than in England and Northern Ireland, although better than in Scotland;
- in the 2001 Census, the percentage in Wales reporting that their health was not good was 12%, compared to 9% for England, and all Welsh local authorities had rates above the English average.

**The relationship between deprivation and poor health**

5. Since 2002, the “legacy” of the harsh relationship between mortality and socio-economic inequalities has continued to be mapped in UK official and unofficial research, and generally in all OECD countries. During the decade of the late 1990s and early 2000s “a very powerful inverse

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3 Health Status Wales 2004-05, Chief Medical Officer’s report series, Assembly, 2005.
association between the level of deprivation of a locality and life expectancy” was found. “The more deprived the local authority, the lower the life expectancy of the population within that locality.”

6. For the last three decades since the 1970s, evidence of the strong relationship between income and health has accumulated steadily. Most of the evidence suggests that the relationship is strongest when income is low, and therefore that reducing inequality by raising income at the bottom improves health. In the early years of the 21st Century there have been increases in health inequalities: life expectancy continues to rise faster in more affluent than in the poorest areas. A review published in the British Medical Journal earlier this year showed that, after reaching an historically high level in the 1980s, inequalities were sustained at a high level in the 1990s and early 2000s. “Inequalities in life expectancy have continued to widen, alongside widening inequalities in income and wealth.”

7. The authors of this review used revised population data, and information about trends in life expectancy over three-year periods. They took account of all areas and not only the top and bottom 10 per cent. They related the health data to the latest evidence about income trends, pointing out that although income provided only part (though a substantial part) of the explanation, the fact was that the poorest 10 per cent received only 3 per cent of the nation’s total income, whereas the richest 10 per cent received more than a quarter.

8. The message for areas like South Wales is stark. “What is also striking is that the places that suffered high deprivation and low life expectancy are largely the same today as in the nineteenth century. The legacy of mining and heavy industry can be clearly seen, both in terms of the physical and social deprivation left behind after the industries have come and gone, and in terms of the damaged health these conditions engender.”

9. Carefully devised international studies have been re-inforcing the conclusions drawn about inequalities in health and deprivation or poverty. One investigation comparing Britain and Finland - a country with approximately the same population as Wales - found that in both countries “each step down the income scale is related to an increased prevalence of less-than-

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8 Doran and Whitehead, op. cit. p. 112
good health”. Thus, in Britain 42 per cent of the poorest quintile, compared with 16 per cent of the richest quintile, reported less-than-good health.9

10. Wales’s relatively poor position on indices of socio-economic prosperity provide the wider context of the health status measures mentioned above:

- 18% of the working age population in Wales in receipt of key benefits10 compared with 13% in Great Britain as a whole, (November 2004);
- average gross weekly earnings in Wales 87.7% of earnings in Great Britain as a whole (2004);
- the employment rate in Wales below that of the UK, with 24% of the working age population in Wales economically inactive, compared with 21% for the UK as a whole (December 2004 to February 2005).

Inequalities in health as a continuing legacy

11. The latest work in the United States shows a continuing strong association between poverty and raised mortality. “Several studies, however, have indicated that the disparity in mortality by socio-economic position (as measured by income and education) has increased in recent decades.” 11 An impressively comprehensive review of 241 Canadian studies on income and health found grave weaknesses in methods of addressing the health effects of income and its social distribution. 12

12. As studies of this kind indicate, the problem of inequalities in health in developed countries is not simply a serious “legacy,” but a continuing one. In the majority of such countries, where income and social inequalities have been rising, the problem is set to become more serious unless countervailing action of a more substantial kind is taken.

Inequalities in health within Wales

13. How is the problem reflected in different local areas of Wales? Table 1.1 provides a useful illustration - using 5 criteria of ill-health. This shows the difference between the three ‘best’ and

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10 Jobseekers Allowance, Income Support, Incapacity Benefit, Severe Disablement Allowance and/or Disability Living Allowance.
three ‘worst’ areas in Wales in respect of five general measures of health status. The differences between the three local areas at each of the extremes are striking in all 5 health categories. The purpose of the action set out first in the 2001 report, and now in this report, is to reduce the ‘best /worst’ gap by securing a significant improvement in the health status of the areas with the poorest health.

Table 1.1 - Inequalities in Health in Wales

<table>
<thead>
<tr>
<th></th>
<th>Wales average</th>
<th>‘best’ LAs</th>
<th>‘poorest’ LAs</th>
<th>England average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mortality rates, 2000-2002 1a</td>
<td>710</td>
<td>571 633 634</td>
<td>Ceredigion Monmouthshire Powys 844 817 780</td>
<td>Merthyr Tydfil Blaenau Gwent Caerphilly 666 1b</td>
</tr>
<tr>
<td>Life expectancy, male, 2001-2003 2</td>
<td>75.5</td>
<td>78.5 77.1 77.0</td>
<td>Ceredigion Powys Monmouthshire 73.4 73.6 74.1</td>
<td>Merthyr Tydfil Blaenau Gwent Neath Port Talbot 76.2</td>
</tr>
<tr>
<td>Life expectancy, female, 2001-2003 2</td>
<td>80.1</td>
<td>81.7 81.4 81.0</td>
<td>Ceredigion Monmouthshire Vale of Glamorgan 78.4 78.4 79.1</td>
<td>Merthyr Tydfil Blaenau Gwent Rhondda Cynon Taf 80.7</td>
</tr>
<tr>
<td>Reported health not good, 2001 3</td>
<td>12.5</td>
<td>9.5 9.5 9.8</td>
<td>Monmouthshire Gwynedd Flintshire 18.1 16.5 16.4</td>
<td>Merthyr Tydfil Blaenau Gwent Neath Port Talbot 9.0</td>
</tr>
<tr>
<td>Reported limiting long-term illness, 2001 4</td>
<td>23.3</td>
<td>18.8 19.1 19.2</td>
<td>Cardiff Monmouthshire Flintshire 30.0 29.4 28.3</td>
<td>Merthyr Tydfil Neath Port Talbot Blaenau Gwent 17.9</td>
</tr>
</tbody>
</table>

Notes:
1a European age-standardised mortality rate per 100,000 population, based on three-year average 2000-2002.
1b European age-standardised mortality rate per 100,000 population, based on 2001 only.
2 Expectation of life at birth (in years), based on three year average 2001-2003.
3 % people saying their general health was ‘not good’ over the 12 months prior to census day (April 2001).
4 % people saying they had a limiting long-term illness, health problem or disability (including problems due to old age), 2001 census.

Source:
Office for National Statistics (with some additional calculations by Health Solutions Wales)
An initiative in Wales

14. In 2000-2001 a research team headed by Professor David Gordon of the University of Bristol prepared a detailed report on a novel formula for allocating resources that gained its strength from survey data collected specially in Wales on behalf of the Chief Medical Officer.

A. Disadvantages of the indirect method of measuring need for health care

15. In the light of this report, it was agreed to phase out the previous “indirect” method of capturing relative need for health care in deciding the allocation of NHS resources. It is “indirect” because evidence of the utilisation of services between different age and social groups in the population is used as a proxy for their relative health need.

16. Secondly it is “indirect” because mortality rates are used as a substitute for current health care need. However, some who die suddenly may make little or no demand on the health care services. Others who have chronic illnesses or disabilities for many years, and survive to an advanced age, may make huge demands on those services, with considerable long-term costs. And death registrations are not always reliable about cause of death, or easy to relate to previous socio-economic conditions - to check whether those in need are getting treatment irrespective of income.

17. A third disadvantage of the ‘indirect’ method is that data about service utilisation are collected by many different organisations, and the overall reliability and coverage of these data cannot be directly controlled.

B. The Direct Needs Formula

18. In the light of the limitations of the indirect approach: of principle because it uses service utilisation as a proxy for need, and of practicality because of problems of data accuracy and consistency, a “direct” approach was preferred. The model that has been agreed is more accurate and more reliable than existing methods at small area level. It is believed to represent an important scientific breakthrough. It is based on the Welsh Health Survey, which gives detailed information about the health of a very substantial representative sample of the population in Wales.

19. The survey is unique in the UK and can be refined to do an even better job in estimating future health care needs (thus, children’s health is in 2005 being covered better in the next stage of the survey, together with more reliable representation of some minority groups, including those in institutions). The survey was unusually substantial in numbers - nearly 30,000 interviews being achieved.13 The key health condition measures are listed below in Table 1.2.

13 See the research report for a detailed account - Gordon D. et al. (2001), Wales NHS Resource Allocation Review: Independent Report of the Research Team, Cardiff, National Assembly for Wales. See also the account below, in Chapter 4, especially p. 12.
Table 1.2 - Prevalence of health conditions: 1998 Welsh Health Survey

<table>
<thead>
<tr>
<th>Health Condition</th>
<th>Per Cent</th>
<th>Number in Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teeth - fewer than 20</td>
<td>31</td>
<td>9,634</td>
</tr>
<tr>
<td>Back pain</td>
<td>30</td>
<td>9,132</td>
</tr>
<tr>
<td>Arthritis</td>
<td>25</td>
<td>7,872</td>
</tr>
<tr>
<td>Respiratory illness</td>
<td>23</td>
<td>6,842</td>
</tr>
<tr>
<td>Heart (ever)</td>
<td>21</td>
<td>6,488</td>
</tr>
<tr>
<td>Food poisoning (last 3 months)</td>
<td>21</td>
<td>5,670</td>
</tr>
<tr>
<td>Mental illness</td>
<td>14</td>
<td>4,055</td>
</tr>
<tr>
<td>Hearing</td>
<td>13</td>
<td>3,882</td>
</tr>
<tr>
<td>Varicose veins</td>
<td>11</td>
<td>3,427</td>
</tr>
<tr>
<td>Seeing</td>
<td>8</td>
<td>2,419</td>
</tr>
<tr>
<td>Accidents (last 3 months)</td>
<td>8</td>
<td>2,072</td>
</tr>
<tr>
<td>Cancer</td>
<td>5</td>
<td>1,614</td>
</tr>
<tr>
<td>Diabetes</td>
<td>4</td>
<td>1,116</td>
</tr>
<tr>
<td>Stroke</td>
<td>1</td>
<td>380</td>
</tr>
<tr>
<td>Epilepsy</td>
<td>1</td>
<td>251</td>
</tr>
<tr>
<td>Parkinson’s disease</td>
<td>*</td>
<td>76</td>
</tr>
</tbody>
</table>

20. The survey evidence is used to distribute the all-Wales budget for Hospital and Community Health Services, along with other measures of health need such as cancer registrations\(^{14}\). The impact of the survey and other needs indicators on each local health board’s allocation depends on the scale of the expenditure which it distributes. For example, the distribution of mental illness has a much greater impact than the distribution of back pain - the relative impact of different conditions is shown in Chapter 4, Charts 4.1 and 4.2.

21. Box 1.1 summarises the stages in linking the needs data with relevant health expenditure to create each local health board’s target share of the overall budget, as explained in detail in Chapters 4 and 5.

\(^{14}\) Of the 17 conditions, 12 are used in the resource allocation model, two (cancer and food poisoning) are replaced in the model by other direct measures – cancer registrations and numbers of incidents of food poisoning; three conditions (seeing, Parkinson’s disease and pressure sores) are not used in the model (Chapter 4, Annex 4.3.)
**Box 1.1 - The needs led model: summary stages**

The steps in using the model are given in crude outline as follows:

**Step 1** To split the total HCHS expenditure into the principal health service categories, from the most recent data available, for non-psychiatric in-patients and day patients; maternity; psychiatric; A&E; community nursing and chiropody;

**Step 2** To select relevant health condition indicators for each category of expenditure and calculate expenditure rates, for example, average actual spending per head on heart disease patients, and then distribute the total to each local health board area according to the incidence of heart disease identified by the Welsh Health Survey;

**Step 3** To add together the allocation to local health board for each condition, combine with additional cost indicators for age and rurality, to create each local health board’s overall needs share of the total budget. The distribution depends on the evidence of incidence of illness and disability derived from the Welsh Health Survey, and other direct needs data such as cancer registrations.

**Step 4** From the total HCHS budget allocation determined by the Assembly, to create target allocations for the 22 local health boards on the basis of their needs share - according to the selected health care need indicators.

**Step 5** To compare the target allocations for the 22 local health boards with their existing budgets, to establish how far the allocation of resources in the present financial year is above or below the level of “equitable” area allocation according to need for service: this is each local health board’s distance from target.\(^{15}\)

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22. In each of the following years the Minister of Health and Social Services then decided the extent to which the allocation of resources could be adjusted towards the objective of equity between areas.

23. Table 1.2 above shows the prevalence rates for different health conditions in 1998 in the WHS, together with the number of respondents in the survey who had these conditions (covering 29,874 respondents in the survey).\(^{16}\) People declaring they have one or more of these conditions are more likely than others to require medical treatment for their condition now or in the future.\(^{17}\) For example an area which had 5% of the total of injuries in accidents, as measured by the Welsh Health Survey, would receive 5% of the amount spent on A&E, whatever its share of the Welsh population.

\(^{15}\) Chapter 4, Annex 4.2.


\(^{17}\) See the account of “face” and “criterion” validity and reliability at local health board level, and the results from applying Cronbach’s Coefficient Alpha for the 17 items used in the WHS.
The way forward

24. In addition to an area-based re-allocation of NHS resources, and financial information traceable to specific populations and individuals, the 2001 report recommended the need for a dual strategy of structural action inside, but also outside, the NHS. In the course of the Standing Committee’s work the nature of this strategy became clearer. To be successful there had to be:

- a fair system of resource allocation to local areas, in line with need;
- local action to ensure equity in care and treatment at sub-area level;
- action across devolved and non-devolved policy areas - to promote health, and target poor health, with the aim of reducing inequalities in health status across and within different parts of Wales.

25. The purpose of this 2005 report is to provide an account of progress since 2001 in respect of both strands of the dual strategy, including consultation on the financial model and continuing work to develop it. The report also aims to provide a platform for future action, with a set of recommendations that reflect the experience of the Standing Committee over the past 3 years in seeking to translate the principles endorsed by the Assembly into effective action.

26. In developing the dual strategy, the key issue that has emerged for health and social care is the need to integrate an equity strategy into the mainstream business of providing care and treatment - through the strategic planning and performance management processes for health and social care in Wales.\(^\text{18}\)

Equity at local level: the key role of local health boards and NHS trusts

27. The financial information strategy and the needs led resource allocation model provide the financial underpinning for the health care contribution to this strategic focus, but they do not guarantee equity in service delivery. This depends most on the actions of local health boards and NHS trusts, and of individual professionals and carers.

28. The report does not deal with the social care dimension of equity in care and treatment - this is the focus of the Social Services Inspectorate for Wales Performance Evaluation Framework, linked to the Wales Programme for Improvement (the framework for monitoring and improving

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performance in local authority services). But it is a necessary component of any strategy dealing with health and the efficient co-ordination of the respective roles within health and social care services.

29. Since the publication of Targeting Poor Health in 2001, much work has been done to improve the relationships between health and social care at national and local level. This has included structural change such as the establishment of local health boards co-terminous with local government areas, and the creation of the Health and Social Care Department of the Assembly. The respective roles of professionals within each service context also have to be complementary. The focus now is on the need to align the planning and performance management processes of health and social care - within the context of the different accountabilities of the health and social care structures. This will be crucial to evaluating and improving equity by identifying variations in standards of provision across and within local authority areas.

30. The Standing Committee’s work on the resource allocation model, and on financial information, has been concerned with the health care budget. There is a different financing and resource allocation model for local authority services, as discussed in Chapter 5. The report places the health financing structure in the wider context of the shared objective of the Assembly, local authorities and local health boards to work in partnership to improve health and reduce inequalities in health across and within areas of Wales.

31. In respect of the wider public health strategy discussed in Chapter 2, the key issues are: to ensure that the inequalities focus is not lost in the breadth of the Health Challenge Wales approach, and to capitalise on the opportunities for action presented by all the Assembly’s strategies which target disadvantage and poverty, as discussed in Chapters 2 and 7.

The dual strategy and the national health targets

32. Responding to unequal health is a challenge for many different agencies. To monitor progress and provide a focus for local action, the Assembly has adopted five national health targets, relating to:

- coronary heart disease
- cancer
- the health of children
- mental health
- the health of older people.

19 www.cmo.wales.gov.uk/content/work/health-gain-targets/index-e.htm
www.cmo.wales.gov.uk/content/work/health-gain-targets/index-w.htm
33. These were set as priorities in *Improving Health in Wales*: they relate to the major causes of disease and premature death, and to the particular needs of children and older people. The targets have two dimensions: improving health and reducing inequalities in health between areas and social groups within Wales.

34. The targets are summarised in Table 1.3. These were adopted in 2003-04 on the advice of the Health Gain Targets Expert Group\(^{20}\) which worked for two years to review the evidence and determine which disease and population groups, and what rate of progress, should be targeted. Following consultation, it was agreed that ownership of the targets should rest with the Assembly and the health and social care wellbeing partnerships whose role it should be to determine local action to ensure that they are met by 2012. Progress towards the targets will be reported through the Chief Medical Officer report series\(^{21}\).

35. The inequalities dimension of the targets relates to health status at ward level (where data are available at this level) with the aim of reducing the difference between the health status (measured as rates of death and of illness) of the most deprived 20% and the least deprived 20%. The local health board level indicators in Table 1.1 are averages which mask differences within areas - in large local health boards these differences can be substantial. This underlines the need to focus attention and action at deprived areas within local health board areas, as discussed later in this report.

36. Achieving the targets requires action by many different agencies, working within the framework of *Health Challenge Wales* as discussed in Chapter 2. For example, the reduction of 35% in child pedestrian injuries from car accidents, and the greater reduction in the most deprived wards which will be needed in order to reduce inequalities in the incidence of such injuries, requires action including through planning, design and transport policies.

37. Monitoring progress against the targets provides the mechanism for checking whether trends in inequalities are getting better or worse, and for evaluating policies in the light of these trends. However, as Table 1.3 reveals, there are significant time lags in the availability of detailed data at ward level.

38. To aid the tracking of progress against the targets, the Assembly has commissioned a project to identify a small set of readily available indicators of the social determinants of health. This will enable the tracking of progress towards the health gain targets. It will also strengthen the ownership of the targets across government and the voluntary and private sectors, by identifying more clearly the social and economic factors which underpin health inequalities.

\(^{20}\) Reference Expert Group report

\(^{21}\) *Health Status Wales 2004-05*, CMO series no 1, Assembly February 2005
Conclusion

39. The aim of the Standing Committee has been to support and strengthen the Assembly’s action to achieve its health targets and this aim underpins our recommendations in Chapter 7.

40. As will be reported, progress since 2002 in fulfilling the 2001 recommendations accepted by the Assembly is substantial, but in the subsequent three years there have been unexpected as well as expected difficulties. The most positive lesson learned has been the necessary interdependence of concern about poor health and action on equity. Tackling poor health requires tackling disadvantage.

41. Although the causes of disadvantage lie outside their control, those who plan and deliver health and social care have direct responsibility for ensuring equitable access to effective care and treatment. The importance of this issue for both England and Wales was recognised in the first report of the Healthcare Commission published in July 200422.

42. Equity was the guiding principle in establishing the NHS, and since Aneurin Bevan’s first vision, other leading figures working in Wales have made the case for equity in day-to-day care and treatment - Julian Tudor Hart and Archie Cochrane are striking examples.

43. Implementing the principle of equity is a complex and detailed process, involving issues of: defining and measuring needs, classifying expenditure and setting professional priorities. The work of the Standing Committee has shown how these policy, financial, planning and professional issues have to come together in a coherent process of change in pursuit of equity to improve health.

44. The problem of inequalities in health and poor health in Wales cannot be resolved only from action “on high” (or expectations of such action - which can be misplaced). Although measures taken by the UK government, and the Assembly, to reduce the widening gaps in income and re-establish basic public social services of a modern kind in the new millennium are vital, they do not provide the entire solution.

45. The problem is one to which every person in Wales, including members of many different organisations and professions, can massively contribute. Once fully grasped, this lesson will be a key source of personal and social energy.

Table 1.3 - Targets for health gain and reduction in inequalities in health by 2012

<table>
<thead>
<tr>
<th>Health gain target</th>
<th>Target</th>
<th>Case for target</th>
<th>Inequalities target</th>
<th>Case for inequalities target</th>
<th>Inequalities indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHD</td>
<td>to reduce CHD mortality in 65-74 yr olds to 400.0 European Age Standardised Rate</td>
<td>circulatory disease is cause of 40% of deaths</td>
<td>more rapid improvement in the most deprived groups</td>
<td>leading cause of differential mortality between deprived and non deprived areas</td>
<td>CHD mortality in most deprived quintile of electoral wards: least deprived</td>
</tr>
<tr>
<td>Cancer</td>
<td>to reduce cancer mortality below 75 yrs by 20%</td>
<td>cause of 24% of deaths</td>
<td>more rapid improvement in mortality in the most deprived groups</td>
<td>leading cause of differential mortality between deprived and non deprived areas</td>
<td>cancer mortality in most deprived quintile of electoral wards: least deprived</td>
</tr>
<tr>
<td>Children</td>
<td>to eliminate spread of MMR (by 2015) and to reduce child pedestrian injuries from car accidents by 35%</td>
<td>major cause of preventable ill-health and injury</td>
<td>to reduce incidence, severity and mortality of child pedestrian injuries</td>
<td>major cause of inequality in child health</td>
<td>injuries and deaths in most deprived quintile of electoral wards: least deprived</td>
</tr>
<tr>
<td>Older people</td>
<td>to reduce stroke mortality in 65-74 yr olds by 20% and to reduce hip fractures in 75+ group by 10%</td>
<td>major cause of death and disability</td>
<td>increase moderate to vigorous exercise by 50-65 yr olds</td>
<td>multiple preventative effect of exercise</td>
<td>levels of moderate to vigorous exercise by 50-65 yr olds</td>
</tr>
<tr>
<td>Mental health</td>
<td>to increase mental health summary scores to 50 and to reduce suicide rates by 10%</td>
<td>major cause of health inequalities</td>
<td>improved measures for carers’ mental health</td>
<td>mental health of carers is low – they are target groups in strategies for older people and children</td>
<td>carers’ mental health scores</td>
</tr>
</tbody>
</table>

1 The mental health of ethnic minorities, and suicide rates in young males, will also be monitored with a view to setting targets when sufficient data is available.

2 www.cmo.wales.gov.uk/content/work/health-gain-targets/index-e.htm
www.cmo.wales.gov.uk/content/work/health-gain-targets/index-w.htm
Chapter 2: Developing the dual strategy: health and social care and wider strategic action to improve health

1. This chapter provides a summary account of progress made in the past two years in respect of the dual strategy described in Chapter 1. It deals with:
   - equity and professional advocacy within health and social care services;
   - wider strategic action by the Assembly across the devolved policy areas;
   - advocacy by the Assembly in respect of non-devolved policies which affect health.

2. Action by the health and social care services to achieve greater equity in budget and service planning, through the direct needs resource allocation model and improved financial information to guide local strategy, is the subject of Chapters 3-6.

Equity and professional advocacy

3. *Targeting Poor Health* recognised that, while the Assembly and NHS managers could take important initiatives to allocate resources fairly to different parts of Wales, they could not alone deliver equitable access to services according to need. Achieving this depends most on the work that individual professionals in the health and social care professions do every day. They are in a unique position to recognise needs and initiate effective action to anticipate problems and reduce risk.

4. All professions have standards of practice - to do with the nature of the work that is done and its objectives, but also to do with customers, clients and patients served. In each respect equity is a governing principle - meaning that a professional has to be dispassionate, independent, expert in a particular context and socially unbiased or non-discriminating in what he or she accepts to do and how he or she carries out that work in relation to clientele. Need, rather than who or what conventionally or superficially gets attention, is the guiding message.
5. A conscious effort has to be made to treat every individual as having equal rights. That will never be easy. It will become easier if the human rights instruments adopted in the last half-century by the great majority of countries of the world are respected in practice and implemented. Wales, for example, has had a Children’s Commissioner for four years whose role is to safeguard the rights and welfare of children and young people.

6. In an unequal society, with widely distributed resources, levels of education and physical and social conditions, there are in-built temptations to be selectively discriminatory. Continuous changes in the nature of the patterns of work, as in the availability of technical equipment, and new drugs and forms of treatment, pose new challenges of how to give equitable and not discriminating service.

7. Taking account therefore of recent national as well as international developments, Targeting Poor Health included a recommendation to pilot an equity training and also an advocacy grant to help reduce inequalities - and then judge this pilot experiment after one year. These two grants - small in themselves - were intended to call sharp attention to the importance of professional action in achieving a more equitable set of services, and to be a focus for the recurrent professional review that has to take place about future priorities in the development of effective work.

8. The Assembly responded to this recommendation by developing a pilot programme to assess the potential value of equity training and advocacy grants. This enabled a programme of 25 projects in three areas: Carmarthenshire, Cardiff and Denbighshire, between December 2003 and March 2004, for a modest investment of £105,000.

9. The aim of the programme was to increase awareness and understanding of health inequalities and inequities in access to health care (equity training) and to stimulate new action locally to address un-met needs (advocacy). The specific objectives were:

- to support local action that increases awareness and understanding among local health professionals and practitioners of severe unmet health needs;

- to enable health professionals and practitioners to engage in multidisciplinary discussions that lead to the identification of unmet health needs and local solutions;

- to help influence local action to help people with health needs that can only be met through collaboration between services outside the NHS.

10. Independent evaluation has shown that the investment of small sums of money can prompt changes in equity of access initiated by professionals with direct experience of needs on the ground.

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1 See his annual report which can be found on: www.childcomwales.org.uk
11. The types of action seen included, for example:
   - investigative work by professionals into local inequalities in access to health care;
   - training and development events to raise awareness of, and identify possible solutions to, health inequalities and inequities in access;
   - exploring ways of breaking down barriers in access to health care services e.g. cards for homeless people with information on local services; providing support and interpretation to help Somali women gain access to maternity services.

12. In response to this positive evaluation, the Assembly is considering taking forward this approach in three ways:
   - disseminating widely the findings and lessons of the pilot programme so that the experiences gained can be exploited in other settings;
   - a strategic approach to encouraging advocacy and equity by professionals through initial training and continuing professional development: the new National Leadership and Innovations Agency for Healthcare will be charged with leading this;
   - developing a programme based on learning from the pilot.

Wider strategic action

13. Well Being in Wales set out the Assembly’s proposals to improve health and reduce health inequalities. It included commitments for action based on the principle that responsibility for people’s health did not belong to the health service, but was shared between all organisations and individuals in Wales.

14. Box 2.1 summarises the five strands of Well-Being in Wales.

Box 2.1 - Well-Being in Wales: action strands

- ensuring that all public policies and programmes contribute in some way to improving people’s health and well being;
- creating social and physical environments that encourage and support well-being;
- developing people’s personal skills and knowledge so that they can take greater responsibility for health and make informed choices for their health and their children’s health;
- strengthening communities as a critical factor in improving people’s well being;
- reorienting health and care services: ensuring effective, efficient and accessible services for all, with a stronger role in preventing illness and disease.

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2 Well Being in Wales: Consultation document, Assembly, 2002
Health Challenge Wales

15. Following the plenary debate on Well Being in Wales in December 2002, the Assembly adopted Health Challenge Wales as the national focus for improving health in Wales. This aims to raise public awareness of the need to do more to improve health in Wales, and to provide information, advice and support to help people to do this as part of a co-ordinated and sustained campaign.

16. Organisations and individuals have a role to play in addressing the factors that cause ill health and health inequalities. Organisations can help create the conditions that encourage and support good health, and provide advice and support to individuals, who need to do as much as they can to adjust their lifestyles to reduce the risks of ill health for themselves and their families.

17. Health Challenge Wales requires action to reach more people with help to improve their health. This will be done by improving people’s access to information and support, and by targeting such support more effectively. The Standing Committee has encouraged this targeting approach, which has already been applied to a number of existing programmes to promote health and well being. Health Challenge Wales will seek to involve disadvantaged groups in the development of its public awareness campaigns, again influenced by the work of the Standing Committee.

18. Health Challenge Wales is not a one-off campaign but a sustained effort that encompasses existing action and stimulates new action at national and local levels. The Assembly’s own response to the challenge will extend beyond its existing programmes. That includes £37 million in the Assembly’s 2004 Budget for action that will contribute to the aims of Health Challenge Wales. Plans include:

- £24.5 million in the health portfolio (£10 million in 2006-07 and £14.5 million in 2007-08);
- £12.5 million for action in the Assembly’s other policy areas in 2007-08.

Inequalities in Health Fund

19. The Inequalities in Health Fund was established in 2001 to stimulate and support local action to address inequalities in health and the factors that contribute to it, including inequities in access to health services. The fund is currently supporting 62 projects in disadvantaged communities across Wales - through joint action by the NHS, local authorities and the voluntary sector, with a budget of £6.750 million for 2005-06. Box 2.2 gives some examples of the work supported by the Fund.
20. The Fund has targeted coronary heart disease as a first priority and is contributing to the implementation of the standards set by the National Service Framework. Separately, the Fund has also provided £1 million a year to reduce inequalities in oral health.

**Box 2.2 - Inequalities in Health Fund: examples of action**

**Travellers, Wrexham**: 200 gypsy travellers offered screening, advice and support. Over 95% of the community now registered with a GP;

**Plas Madoc, Wrexham**: outreach clinic used by 1,800 patients - reported 40% reduction in smoking in the target group and a 64% increase in cholesterol monitoring;

**Calon Lan, Gwynedd and Ynys Môn**: screening, smoking cessation, nutrition advice and cardiac rehabilitation, over 1,000 people screened in Gwynedd and over 1,500 have benefited from services in Ynys Môn;

**Carmarthenshire**: all 26 GP practices involved in project to implement the National Service Framework for CHD including setting up CHD registers and regular clinics;

**Pembrokeshire**: screening, nutrition and lifestyle change advice. Estimated that 6,500 patients will be screened by September 2005. Many clinics held in the evenings and at weekends to be more accessible;

Projects in Cardiff and Newport have engaged successfully with ethnic minority communities. The Barefoot project in Cardiff Bay has delivered advice and support to over 800 people. The Dharkan project in Newport has produced health promotion literature in several minority languages;

**Torfaen**: CHD registers validated and audited in each of the local health boards 14 GP surgeries and robust call and recall systems now well established. The project’s innovative ‘Make it Fit’ exercise referral scheme has been adopted as a national pilot site by the British Association of Cardiac Rehabilitation;

**Rhondda Cynon Taf**: the ‘Heart Attack’ project has established screening & intervention, exercise referral, lifestyle change and cardiac rehabilitation programmes in seventeen of the most deprived wards in Wales;

Royal Glamorgan Hospital’s ‘Nursing Service for Heart Failure Patients’ has reduced both readmission rates and length of stay;

**Merthyr Tydfil**: the CHD Risk Factor Intervention project screened over 2,000 people with a 90% attendance rate at clinics. Further projects include: the ‘Diabetes Peer Support Programme’ and ‘Promoting Health In Small Workplaces’ which is helping the employees of 14 small businesses to improve their health.
21. The Standing Committee's work has underlined the importance of the kinds of projects supported by the Inequalities in Health Fund in stimulating action targeted directly at preventing ill-health, particularly through out-reach, screening and joint action with other agencies. The Fund's projects are engaging more local people in action to prevent ill-health, and providing support to help them to do it, and improving access to health services and other forms of support. The Fund's design reflected the need to target action effectively. As a result, there are many links between the Fund's projects and Communities First areas (paragraph 58 below).

22. In addition to the direct benefits of the projects it supports, the Fund demonstrates the scope for more preventive action, which is advocated throughout this report, and which is also underlined in the *Review of Health and Social Care*. The case for a more preventative approach is well recognised - this needs to be translated into more action as part of the everyday business of health and social care, as discussed in Chapter 6.

**Health promotion**

23. In addition to the Health Inequalities Fund, the Assembly has initiated a range of health promotion programmes which have given priority to the most disadvantaged communities in Wales, for example:

- the Food and Fitness Health Promotion Grant Scheme which provides support for community projects that encourage more active lifestyles and/or healthier eating. The scheme gives priority to infants, children and young people, and older people, within socially disadvantaged communities;

- a pilot scheme to introduce food co-operatives across Wales which aims to supply, from locally produced sources as far as possible, quality, affordable fruit and vegetables to disadvantaged communities through the development of sustainable local food distribution networks;

- the installation of water coolers in 330 schools in Communities First areas - part of a joint initiative between the health and education departments of the Assembly and Welsh Water;

- the launch in April 2004 of the All Wales Smoking Cessation Service, run by the National Public Health Service, which targets smokers from disadvantaged communities;

- the Sustainable Health Action Research Programme (SHARP) which seeks to demonstrate the most effective ways of breaking the cycle of poor health through a programme of research to strengthen the evidence in addressing the determinants of health. Seven partnership projects have been funded for a five-year period in communities such as Holway (Flintshire), Bettws (Newport) and Butetown/Grangetown (Cardiff).
24. The Assembly has provided additional funding from 2006 to help people to improve their health as part of its own response to *Health Challenge Wales*. The planning of this new activity is underway with the Assembly’s partners.

**Children**

25. Economic status in childhood is a key determinant of health in later life⁴. Children born into poorer families experience poorer childhood health, lower investments in human capital and poorer health in early adulthood, all of which are associated with lower earnings in middle age - the years in which they themselves become parents. This underlines the importance of action to improve childhood experience and promote children’s health and development, as advocated by the Child Poverty Task Group established by the Assembly to inform a new strategy on child poverty in Wales⁵. Its report sets out the evidence on the impact of poverty on children’s health, for example through increased risk of accident and injury, as well as reduced chances of healthy life later.

26. The Task Group also lists⁶ specific actions that should be taken to improve children’s health - including by the health and social care services. It advocates making children’s issues a priority in the implementation of the Review of Health and Social Care. This is to be developed in the draft National Service Framework for Children, Young People and Maternity Services, published for consultation in October 2004⁷. The standards required to establish an equitable and effective network of mental health services for children and young people have been set out in the 10 year strategy for Child and Adolescent Mental Health Services.

27. These messages are of crucial importance for the planning and delivery of health and social care as discussed in later chapters. The financial information available does not yet allow us to quantify precisely the amount of health services expenditure on children, but this is an objective of the Financial Information Strategy (Chapter 3). Building on this to develop more effective services to support of children’s early physical and mental development should form part of an equity-driven commissioning strategy by local health boards (Chapter 6).

28. The Assembly’s allocation, in the 2004 Budget, of £15 million in 2006-07, and £35 million in 2007-08, for interventions to support the youngest children in deprived areas (including through integrated centres for children which bring together education, health and social care services) will also support this preventative approach.

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⁶ ibid p.81-84

⁷ See also Children and Young People: Rights to Action, Welsh Assembly Government, February 2004.
Older people

29. The Assembly’s Strategy for Older People\(^8\) is designed to improve the health and wellbeing of older people in Wales by tackling: low income, poor housing, barriers to employment, learning and training, age discrimination and social isolation. Implementation was supported by investment of £10 million over the four years to 2006-07, mainly for local government and the voluntary sector. The health and social care contribution to the strategy will be delivered by remodelling services for older people: to promote re-ablement and independence, by making services more responsive to individual needs, and by reducing variations in standards of care.

30. National standards will be set out in the National Service Framework for Older People which is being consulted on during the Summer and Autumn of 2005. The Health Promotion Action Plan for Older People, on which consultation ended in November 2004, will provide guidance on evidence based interventions to improve older people’s health and wellbeing, and will also seek to improve the infrastructure for such initiatives.

31. Improvements in non-devolved services affecting older people are expected to be set out in a UK Government strategy which is being developed for publication in 2005. The Department of Work and Pensions LinkAge programme will develop a ‘one-stop’ approach for older people’s services by training front line staff to advise on eligibility and other requirements across the local government and centrally administered benefits systems. The aim is to improve the take-up of: pensions, disability, housing and other benefits, which will contribute to the objective of reducing poverty amongst older people in Wales.

Housing

32. The Assembly’s housing strategy Better Homes for People in Wales recognises the contribution of housing to improving health. It aims to ensure that everyone in Wales is able to live in a safe, suitable and adequately heated home. The Assembly is working with partners to ensure that all homes meet the Welsh Housing Quality Standard, with all social housing meeting the standard by 2012. The standard requires homes to be in a good state of repair, safe and secure, adequately heated and well insulated, located in safe environments and suited as far as possible to the specific requirements of the household (including, for example, adaptations for people with disabilities).

33. Specific measures include:

- eliminating fuel poverty in vulnerable households by 2010, in non-vulnerable households in social housing by 2012, and as far as reasonably practical to ensure that no households in Wales should live in fuel poverty beyond 2018;

\(^8\) The Strategy for Older People in Wales, Welsh Assembly Government, January 2003
- eliminating the need for rough sleeping and reducing homelessness, through implementation of the National Homelessness Strategy, and ending the use of bed and breakfast accommodation for homeless people;

- providing a framework for the provision and funding of supported accommodation for vulnerable people, including people with disabilities and health problems, through the Supporting People programme;

- enabling older and disabled people to remain in their own homes through Disabled Facilities Grants, the Rapid Response Adaptations Programme and Care and Repair Services;

- researching the health needs of homeless and other vulnerable people.

**Employment**

34. Poor health is recognised as a barrier to employment and economic development but perhaps not to the extent that it should be. Its effects include the loss of income, skills and experience - to individuals and to the economy. Absence from work due to ill health affects the productivity and competitiveness of businesses and public sector organisations. Broadly speaking, people in work are healthier than people who are unemployed, and there is a direct link between ill health, life expectancy and long periods of unemployment.

35. Employment policy, which includes the Welfare to Work programmes, is reserved to the UK Government (Department of Work and Pensions) who lead in the funding and delivery of programmes which make an important contribution to social and economic strategies in Wales.

36. *Well Being in Wales* emphasised the need for better links between employment services and local health services, and the selection of Wales for one of the UK pilot projects for the DWP’s *Pathways to Work* initiative provided the initial focus for action. The pilot, which is set in the Bridgend and Rhondda Cynon Taff areas, is aimed at people making new claims for incapacity benefit, and comprises advice, guidance and financial incentives to help people to get back into work. This includes a Condition Management Programme, which provides a peripatetic service across the area with tailored support from a team of health professionals.

37. Working in conjunction with Jobcentre Plus, the Assembly has also developed a health component to the *Want2Work* initiative, which is designed to help people to get back into work. It will be introduced in parts of Merthyr Tydfil, Cardiff and Neath Port Talbot, and is supported by the European Structural Funds programme. Health professionals will work alongside Jobcentre staff to provide advice and support on health through Jobcentre Plus outreach services, and in Jobcentres.
38. Many people who are economically inactive want to return to work, but often have complex and difficult barriers to overcome before they can do so. Early findings from the *Pathways to Work* pilots show that with the right level of support, the move into employment can be made successfully. DWP plan therefore to focus support to:

- help people on incapacity benefits to get the support they need to return to work;
- break down the barriers that prevent disabled people, older workers and ethnic minorities from participating in the workplace;
- support children and families, including helping lone parents into work.

39. DWP plan to work closely with health services to:

- give support to medical practitioners (primarily GPs but including other health therapists) to do more to help patients remain in or return to work;
- pilot the placement of employment advisers in GP surgeries;
- develop better training materials to ensure GPs with special interest are able to provide early support on fitness for work;
- from October 2005, in new *Pathways to Work* areas, build enhanced relationships with local GPs, local health boards and other parts of the NHS.

40. In 2005 there is widespread controversy about the changes in incapacity benefit proposed by the UK Government. Because of the relatively large numbers of disabled people in Wales, the Assembly will need to make representations for rightful monetary compensation for disablement to be distinguished from the creation of better opportunities for the less severely disabled to obtain appropriate employment. In principle, income compensation according to severity of disability has to be kept distinct from actual or potential capacity to earn a living. Even when moderately disabled people obtain opportunities of paid employment, they are often obliged to accept earnings considerably below those of non-disabled people.

**Making the Connections: delivering better services for Wales**

41. This policy statement, published in October 2004, sets out the Assembly’s vision for public services in Wales. It underlines the importance of putting the citizen centre-stage in improving quality and effectiveness in public services. This means responding to the needs of individuals and communities in order to fulfil the Assembly’s commitment to equality and social justice. Its theme of maximising impact from available resources, with an emphasis on working collaboratively, is entirely consistent with the Standing Committee’s approach to the distribution and application of the health service budget.
42. The *Making the Connections* thinking has the potential to contribute significantly to the aims of the dual strategy - provided it keeps a strong focus on the determinants of inequalities, on mainstreaming preventative and supportive services and addressing unmet needs.

The voluntary sector

43. The role of the voluntary sector in the health and social care wellbeing strategy process has provided an opportunity to strengthen the engagement of disadvantaged groups in both needs assessment and planning. The *Building Strong Bridges* report recommended funding health and social care facilitators, appointed by the County Voluntary Councils, in each of the 22 local health board areas, and this was accepted by the Assembly. During 2004, these facilitators helped to increase the representation of disadvantaged and potentially excluded groups in the health and social care network. At the national level, the WCVA has contributed to the preparation of health and social care policy guidance on the needs of minority groups, and to the process of implementing *The Review of Health and Social Care*.

44. This engagement by the voluntary sector, drawing on their direct experience of the needs of disadvantaged people, should support local health boards and their partners in identifying the priorities for action to promote equity within their areas as discussed further in Chapter 6.

Local government - corporate ownership of health and well-being

45. The potentially powerful role of local authorities, in improving health and tackling the determinants of poor health, is well recognised and extends to almost all local authority services. Local authority social care services are largely targeted on people with specific needs, ranging from families at risk to those with disabilities who rely on social care in their day to day lives. However, audit and review has identified significant variation and inequity in the way services are provided: this is being tackled through the performance improvement process.

46. From a local authority perspective, improving social care and reducing inequalities in health need to be seen in the context of a much wider effort to improve outcomes for individuals and reduce poverty and disadvantage. The main components of this work are summarised in Box 2.3 below.

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9 Building Strong Bridges: Welsh Assembly Government, 2002
Box 2.3 - The range of local authority activity which contributes to reducing inequalities

**planning and co-ordinating**
This is crucial to achieving consistent and complementary action, with the Community Plan bringing together the local partnership strategies for: health, social care and wellbeing, children and young people, older people, community safety and economic development, as well as local authorities’ anti-poverty, housing and regeneration strategies, all of which play a part in tackling inequalities.

Local authorities are increasingly aligning linked activities aimed at redressing disadvantage, through these mechanisms and an authority corporate plan

**promoting rights**
Direct engagement by local authorities in providing information and advocacy and funding to voluntary groups is important. Social care helps clients in getting treatment and dealing with difficulties with the system. Local councillors represent communities in proposals for service change.

**optimising income**
Charging policies affect access to services that promote health and wellbeing, like leisure centres and events: local authorities often offer concessions to low income groups. Finance and benefits advice is provided through social services, housing departments and the voluntary sector.

**training and employment**
Optimising educational achievement and lifelong learning in formal education services and employment training schemes. For disabled people - special placements schemes and some sheltered workshops. Special needs education is key to life chances and health for children and this continues in adults through day and residential care.

**improving the environment**
Providing decent housing and regulating HMOs is vital. Social Housing Grant, tackling fuel poverty and energy conservation make a big contribution to health. Health and Safety and accident reduction is partly led by Environmental Health departments. Community development programmes, Communities First, and providing facilities for groups, support health and community cohesion.

Road safety, accident prevention, safe access to schools, cycleways, footpaths and other health promotion activity.

**health and wellbeing**
Health promotion and smoking cessation is provided through schools and for communities. Substance misuse prevention programmes are provided directly, or through voluntary sector groups. Support to sports clubs and allotments also contribute to healthy life.
Care
Care services respond directly to health needs through assessment and referral and in the way services are delivered in residential and day services. In practice, social services are targeted on low income and socially excluded groups. Increasingly emphasis is on re-ablement and rehabilitation to restore independence and employment. This is important for all, but especially in mental health where it can affect recurrence, and learning disability where the aim is to promote quality of life and provide lifelong care.

In the case of looked after children, economic and personal disadvantage have combined with, until now, high rates of homelessness, imprisonment, ill health and under-employment in adult life. Services are improving, with greater attention to continued support and responding to health needs.

47. The scale of local authority expenditure that contributes to health is substantial, as recognised in the recent Valuing our Activities study by the Welsh Local Government Association. This study attempted to understand and communicate the contribution of local authorities to protecting and improving health in their areas. It estimated that the 16 participating authorities, representing two thirds of the population of Wales, commit in excess of £934 million on health activity (defined as; ‘activity which has as its primary purpose the prevention or management of accidents, injury, chronic or acute ill-health, death or the transmission of disease’). This represents 38% of the total budget for those authorities, who employ just over 12,000 whole time equivalent staff directly in health related activity.

48. Extending this effort, and strengthening its impact, is the focus of work led by local government itself and supported by the Assembly. There are many examples of good practice and imaginative approaches, for example through the community planning process. Some local authorities have also developed innovative proposals for improving health in the current round of policy agreements.

49. There are also barriers to realising the full potential of existing activity - these include organisational structures and targets that are too narrowly focused on specific service responsibilities and outcomes. There remains a tendency for health promotion to be seen as a project, linked to specific funding, rather than an objective to which the great majority of services can contribute. As with health services, the key issue is to work towards making the promotion of health and well-being part of the mainstream business, and to develop stronger partnership working to that end.

10 Valuing our Activities: local authority activity towards health improvement, Welsh Local Government Association, October 2004
Integrating policies to address the underlying determinants of inequality

50. Through better policy integration, and health impact assessment, the Assembly is seeking to help local authorities, and all the responsible agencies, to think more systematically about the potential impact (positive or negative) of all their activities - on health, on poverty and the other determinants of health. Its policy integration tool is a screening mechanism to ensure that developments that could contribute to priorities such as health are not overlooked. It complements, and can be a trigger for, the use of health impact assessment as a systematic means of considering health impacts in more detail. Both are designed to ensure that the strategic objectives of Wales: a Better Country\(^\text{11}\), including health, are pursued more effectively through all funding streams. The Assembly has also published new national guidance on the use of health impact assessment\(^\text{12}\).

Reducing the prosperity gap between disadvantaged communities and the rest of Wales

51. The Assembly’s Communities First programme aims to reduce poverty and improve the lives of people in the most disadvantaged areas in Wales. Each of the 142 Communities First areas has already set up, or is in process of setting up, a partnership. These may be made up of community groups and local people, statutory organisations such as health and local authorities, voluntary organisations and businesses.

52. The aim of the partnerships is to identify the community’s priorities for improving their areas and to draw up action plans to implement them. Targeting services and funding schemes at these areas is key to the programme. The Communities First vision framework identifies six themes as a guide for action plans - jobs and business, education and training, environment, health and wellbeing, active community, community safety.

53. The programme has the potential to contribute directly to greater equity in the provision of health care services, as well as contributing to better health outcomes by improving the social determinants of health. The programme aims to put the residents of the Communities First areas in a position to articulate their needs to service providers, including local health boards. These areas represent a substantial proportion of the population of some local health boards: their needs should feature prominently in the commissioning and planning process discussed in Chapter 6.


Advocacy by the Assembly in respect of UK Government responsibilities which impact on health and inequalities in health

54. In recognising the breadth of existing and potential action by the Assembly, a realistic appraisal must take account of the major role of non-devolved policy areas on the material and social deprivation which lies at the heart of unequal health. Child poverty is a crucial example. The report of the Child Poverty Task Group discussed above highlights as a key issue that ‘current benefit levels do not ensure a decent standard of living for children’ and that ‘universal services have the best chance of impacting positively on children in poverty’.

55. Within a multi-dimensional programme of work to reduce child poverty, the single change which would have the most impact would be to improve substantially the levels of child benefit. The Chancellor of the Exchequer has stated that child benefit and child tax credits are the “twin foundations” of anti-child poverty policies. In recent years the latter has attracted larger increases in funding than the former. In the next years it will be beneficial to give greater weight to child benefit - partly because of its better coverage and less discriminatory status, as well as its cheaper and more easily accepted administration.

56. The Assembly can take a leading advocacy role on this issue of child benefit, and also on incapacity benefit (as discussed above) where the responsibility for effective action lies outside the devolved powers, but there is a direct link with the Assembly’s ability to achieve its health objectives.

Conclusions

57. The chapter reports on progress in respect of a number of strands of the dual strategy endorsed by the Assembly in 2002, including:

- the potential for action on poor health across devolved services is increasingly recognised by the Assembly and its partners;

- progress made has put Wales ahead of the rest of the UK in tackling health inequalities through joint action across policy areas - as reported by Derek Wanless in his Review of Health and Social Care in Wales;

- the Inequalities in Health Fund and the Equity Training and Advocacy pilot programme provide evidence of what can be achieved at local level to tackle inequities in access and increase prevention;

- the Government, local authorities and the voluntary sector are using the levers available to them to promote a coherent approach - both to maximise the impact of existing activity and to direct new activity effectively at groups such as children whose potential health gain is greatest.
58. Consideration of the targeted investment discussed in this chapter (for health promotion and improvement, tackling inequalities in health, investing in children and older people) raises issues of definition and scale:

- **definition** - the chapter highlights important developments in the Assembly’s budget proposals for 2005-06 and subsequent years, but it is not a systematic review of all Assembly expenditure that is relevant to health - this would require a separate study and difficult questions of definition would need to be resolved;

- **scale** - the sums seem modest in relation to the £3.5 billion allocated to local health boards (discussed in subsequent chapters), and the overall Assembly budget of £11 billion in 2005-06, but they are significant bearing in mind the pressures of responding to ill-health and the difficulty of switching from reactive to preventative expenditure. The aim now must be to continue to increase both the scale and effectiveness of this investment in prevention across the Assembly’s responsibilities.

59. In addition, the Standing Committee underlines the potential impact on health inequalities of the following existing initiatives by the Assembly and its partners:

- co-ordinated action by local authorities across service areas in response to *Health Challenge Wales* (para 15);

- tackling variations in standards and access to social care services through the performance improvement programme (para 52);

- the equal opportunities, quality of life and personal development dimensions of the strategies for children and young people (para 25) and for older people (para 29);

- the equality, access and responsiveness dimensions of *Making the Connections* (para 48);

- supporting the contribution of the voluntary sector to health and social care (para 50);

- health impact assessment and policy integration to ensure that opportunities to improve health are grasped across government action (para 57).

60. It is vital now to capitalise on these opportunities for effective action and to:

- ensure that the goal of reducing inequalities is not lost in the breadth of health and wellbeing activity;

- harness the full potential of *Health Challenge Wales* to engage all organisations, and all parts of the population, in action, and to help people take steps to improve their health through existing action and new developments;
• focus on achieving a stronger impact, and examining the scope for re-directing budgets, or changing the balance of activity, to improve health impact, learning from and developing the Inequalities in Health and Equity Training and Advocacy Grant approaches more widely across service provision. This is discussed in detail in chapter 6 in respect of health budgets - but the principles apply to other services as well;

• monitoring and evaluating the impact of both strands of the dual strategy.

61. This programme of action on devolved matters needs to be supported by a strong advocacy role by the Assembly, calling for action by the UK Government on poverty and the material and social deprivation that lie at the heart of unequal health. This would add momentum to the Welsh Assembly’s statutory equality duty\textsuperscript{13}. A clear message on the links between child poverty and poor health in Wales, and the positive impact of raising levels of child benefit, would provide a coherent platform for such advocacy, linked closely to the Assembly’s own accountability for improving health.

Chapter 3: Constructing a health and social care budget for Wales: the Financial Information Strategy

1. In moving towards a better disposition of resources in relation to need, the first step is to understand how the present budget is spent. This chapter considers what is meant by constructing a health and social care budget at national and local level, and why the present system does not yet achieve this. The chapter goes on to propose how a better system can be put in place.

2. Targeting Poor Health emphasised that the quality and coverage of financial information in the NHS in Wales required radical and urgent improvement.

   “Our concern to track where money actually goes has raised specific issues to do with poor, scarce or absent information. First there are major concerns about the quality and consistency of the information which is currently collected by the Assembly. Addressing this is crucial for effective stewardship and accountability. It is now also of great practical relevance since the new approach to the formula proposed in this report will require accurate and up to date expenditure figures by service and disease category. Second, there needs to be a clear strategy for using financial information effectively to inform the Assembly’s future budget decisions.” (Para 3.77)

Context: scale of the health and social care budget envelope

3. The scale of expenditure by the Assembly and local authorities is set out in Table 3.1 below. The process for distributing health resources to local areas through the HCHS, prescribing and GMS allocation models is described in Chapter 4. The purpose of the NHS Wales Financial Information Strategy is to establish:

   - how this money is spent
   - what are the options for changing the balance of investment to improve health.
4. Chapter 6 considers the role of local health boards in ensuring that the resources delegated to them as commissioners are spent effectively, to secure improvements in health. The first requirement is for local health boards to have an accurate and comprehensible up-to-date account of how their budget is spent. This will help them to reduce spending where this can be done with relatively least harm to health status, and to invest more where the potential health gain is significant.

5. Unfortunately, the financial information available, at central and local level, continues to be a long way away from providing local health boards with the data they need to carry out this task.

6. The total allocation by the Assembly is split into three main compartments - HCHS, primary care prescribing and General Medical Services (Chapter 4). Although these three are not ring-fenced, there are constraints on the ability of local health boards to change the balance of expenditure between them.

7. In the case of the HCHS budget, which represents the lion’s share of resources, the local health board allocation is largely tied into large contracts with individual provider NHS trusts. In the main, these contracts represent the cost to the NHS trust of providing the range of specialties to the population of the local health board. Generally, the data which the NHS trust provides to the board are in the form of volume of services provided e.g. number of physiotherapy sessions, which does not give any indication of the effect of the service on different categories of people in health need or the options for providing it in other ways.
8. If we define a budget as a disposition of a fixed sum of resources between services, governed by the objectives and priorities of the commissioning body - at present local health boards do not have the data to set a budget in this sense. The way financial data are collected and presented simply does not allow this budgeting process to happen. To do so would demand information both about cost of providing services to the individual and about the benefits that the individual, categorised by need, actually receives.

9. The same is true at the national level. The Assembly does not plan for a particular level of NHS spending on individual conditions, or groups of patients - it allocates resources to local health boards who then commission services from NHS trusts in order to respond to the needs of patients. The actual level of spending on each category at an all-Wales level is an aggregation of thousands of individual treatment decisions and service planning decisions.

10. The creation of local health boards, and the model of partnership working underpinning the local health, social care and well-being strategies, demonstrates that the Assembly has endorsed a model of locally led commissioning and prioritisation. This means that it is not seeking to determine the precise balance of services at a national level, for example between cancer and coronary heart disease, or between mental health and diabetes, although it might want to see a change in the balance over time.

11. The Assembly does however need to know what the balance is, between clinical categories, between expenditure benefiting particular groups of patients and between geographical areas. At present, it has only limited information on this, for a number of reasons:

- financial accounting has traditionally been carried out by function at provider NHS trust level (e.g. nursing, pharmacy, radiography etc);
- planning has traditionally been done by disease or client group at different geographical levels (e.g. elderly, children, cancer services, renal services etc);
- data about the utilisation of different services by a wide range of units and organisations has not been consistently nor reliably representative, and the costs of utilisation by the individual have not been accumulated routinely and related to that individual’s health need;
- action taken every day over many years by staff working in hospitals and other facilities has been justified by category of service, and the total costs in each unit of organisation, rather than by cost and degree of service to different individuals, according to their need for service and health condition.

12. Thus, local health boards have inherited a particular pattern of expenditure on services to their populations, and at present have only limited data on the impact of that pattern of spending and the options for changing it in order to have a greater impact on health. This is being addressed through the Financial Information Strategy, as discussed below. How such data might be
used as part of a strategy to optimise the use of health resources, including the use of techniques such as equity audit and marginal analysis, is discussed further in Chapter 6.

**Local government: social care and other budgets**

13. The context in which local health boards try to plan services is also deeply influenced by the decisions of local authorities on the scale and disposition of the social care budget for their area. Similarly, the provision of services for older people by the health sector has a considerable impact on the relative demand for services made upon local government. The interaction between services is particularly evident in the case of older people, but the connections between health and local government services also impact on other age groups, for example, children’s progress in school may be affected by speech and language problems which need attention from therapists employed by the health service.

14. Table 3.2 sets out the main categories of expenditure in the social care budget. Annex 3.1 shows the more detailed analysis that is available from out-turn expenditure returns provided each year.

15. Local authority financial data are more accessible at local health board level than are health service data, because local authorities have been in place for longer and already plan and audit their budgets on a service and client basis. Nevertheless local authorities also experience some of the same challenges as local health boards and NHS trusts, in obtaining and presenting service and financial information in ways which enable meaningful analysis of benefits and options for change.

**Table 3.2 - Budgeted revenue expenditure by service, 2004-05**

<table>
<thead>
<tr>
<th>Service strategy</th>
<th>Total Unitary Authorities £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children’s and families services</td>
<td>256</td>
</tr>
<tr>
<td>Older people (aged 65 and over) including older mentally ill</td>
<td>415</td>
</tr>
<tr>
<td>Adults aged under 65 with a physical disability or sensory impairment</td>
<td>61</td>
</tr>
<tr>
<td>Adults aged under 65 with learning disabilities</td>
<td>205</td>
</tr>
<tr>
<td>Adults aged under 65 with mental health needs</td>
<td>50</td>
</tr>
<tr>
<td>Asylum seekers</td>
<td>1</td>
</tr>
<tr>
<td>Supported employment</td>
<td>7</td>
</tr>
<tr>
<td>Other adult social services</td>
<td>13</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,015</strong></td>
</tr>
</tbody>
</table>
In constructing a health and social care budget, it is therefore crucial to obtain the core data on how resources for health and social care are spent locally. This would allow priorities between one and the other to be established, based on measuring the benefits of the present pattern of expenditure and identifying options for redistribution to improve outcomes.

**How the local health board budgets are spent: the Financial Information Strategy**

Traditionally, the NHS has reported expenditure on the basis of inputs (e.g. pay and non-pay items) and outputs (e.g. spend by speciality and patient group). An analysis of 2003-04 NHS trust expenditure by main specialty groups is detailed in Table 3.3 (this is an aggregate of more detailed analysis by specialty). Whilst this type of information is useful for short-term decision making, it does not provide local health boards with the information they need to construct their budgets in a way that will allow resources to be targeted towards priority client groups or health care conditions.

**Table 3.3 - Welsh NHS trust Specialty Cost Analysis 2003-04**

<table>
<thead>
<tr>
<th>Specialty</th>
<th>£m</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital Medical Services</td>
<td>632</td>
<td>28</td>
</tr>
<tr>
<td>Hospital Surgical Services</td>
<td>622</td>
<td>27</td>
</tr>
<tr>
<td>Hospital Maternity Services</td>
<td>84</td>
<td>4</td>
</tr>
<tr>
<td>Hospital Psychiatric Services</td>
<td>224</td>
<td>10</td>
</tr>
<tr>
<td>Other Hospital Services</td>
<td>93</td>
<td>3</td>
</tr>
<tr>
<td>Regional Hospital Services</td>
<td>107</td>
<td>5</td>
</tr>
<tr>
<td>A&amp;E Services</td>
<td>70</td>
<td>3</td>
</tr>
<tr>
<td>Daycare and Community Services</td>
<td>454</td>
<td>20</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2,286</td>
<td>100</td>
</tr>
</tbody>
</table>

*Source: Welsh NHS trusts’ 2003-04 TFR2 returns*

**Targeting Poor Health** identified the need for a clear strategy for using financial information effectively to inform future budget decisions at both a national and local level. It raised important concerns about the quality and consistency of information: this is crucial for effective stewardship which requires understanding how the considerable resources applied to health are being used. This information is also vital for the implementation of the direct needs model which requires up to date expenditure figures by service and disease category.
19. These concerns were echoed in the Wanless report which recommended that there needed to be greater commitment to public debate and published information on how public money was being applied, and the outcomes expected and achieved for that investment.

20. In response to these concerns, the Assembly is developing a Financial Information Strategy for health and social care. The strategy will address the range and quality of financial information required by the Assembly, the NHS, and local authorities for service planning and performance management. A key component of the strategy is the programme budgeting project.

**Programme budgeting**

21. Programme budgeting analyses expenditure by outcome, rather than by inputs or outputs. Information will be provided about how resources are currently being applied. This will:

- show how expenditure patterns map to local populations and identify differences in investment between comparable areas;
- enable changes in expenditure patterns to be tracked over time;
- demonstrate what is received from investments by comparing expenditure information with information on outcomes;
- enable the benchmarking of services, and in particular commissioning;
- allow, most importantly, unmet health care needs to be reached and the amount and quality of service to be better tailored to health care needs.

22. The programme budgeting project has focused initially on analysing health care expenditure over 23 programme budget categories (with 12 further sub-categories) that reflect the major health conditions. The categories have been developed in conjunction with public health professionals and are defined by reference to the International Classification of Diseases (ICD). Most categories reflect the main ICD headings, for example cancer, hearing and vision problems.

**Programme budgeting - process and milestones**

23. The programme budgeting project is being taken forward by a project board consisting of NHS finance and information staff, Assembly policy leads, public health professionals and a representative of the Welsh forum of health economists. In addition, sub-groups have been established covering acute care, mental health and community care and primary care to provide the technical costing support to the project.

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1 Review of Health and Social Care, Chapter 2
24. To achieve the project’s aim of analysing health expenditure by programme category, all health care activity needs to be allocated to the programme categories, allowing activity costs to be attributed accurately to individuals in each relevant category. The allocation of activity to programme category depends on patient’s particular health condition, so it is essential for this to be recorded.

25. There are many different systems currently being used to record health care activity, and many of them do not record much about the patient’s health condition. Although the patient’s condition is normally recorded for in-patient and day case activity, this is often not the case for out-patients or patients treated in the community. For example, when a community nurse visits a patient in their home to administer new dressings, the community information system will not always record the health condition which generated the need for the nurse’s visit. So, to be able to attribute all health care expenditure to programmes, the project currently needs to apply assumptions about the types of conditions to which different activity generally relates.

26. The Assembly commissioned NHS trusts, local health boards and Health Commission Wales to undertake a programme budgeting exercise for 2003-04 expenditure. This was based on analysing total local health board and Health Commission Wales expenditure in 2003-04 of £3.6 billion, which includes expenditure on the following types of activity:
   - Hospital admitted patient care
   - Outpatients
   - Community services
   - Primary care services
   - Primary care prescribing.

27. The exercise allocated the majority of costs associated with these activities to programmes through a combination of direct allocation based on individual activity records or apportionment between programmes based on summary information. It was not possible to allocate a significant proportion of primary care expenditure to programmes in this exercise, so these costs were recorded in category 23 “Other”.

28. The summary results are in Table 3.4 below. The detailed results were published in March 2005 on the Assembly internet site. The site provides information by local health board area on spend against each programme, with further sub-analysis indicating the distribution of spend between primary, secondary and tertiary care. The link is http://www.statswales.wales.gov.uk
Table 3.4 - Analysis of NHS expenditure 2003-04 by programme

<table>
<thead>
<tr>
<th>Programme budget categories</th>
<th>Total £m</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Infectious diseases</td>
<td>51</td>
<td>1.4</td>
</tr>
<tr>
<td>2 Cancers &amp; tumours</td>
<td>226</td>
<td>6.2</td>
</tr>
<tr>
<td>3 Blood disorders</td>
<td>36</td>
<td>1.0</td>
</tr>
<tr>
<td>4 Endocrine, nutritional &amp; metabolic problems</td>
<td>112</td>
<td>3.1</td>
</tr>
<tr>
<td>5 Mental health problems</td>
<td>429</td>
<td>11.8</td>
</tr>
<tr>
<td>6 Learning disability problems</td>
<td>75</td>
<td>2.1</td>
</tr>
<tr>
<td>7 Neurological system problems</td>
<td>107</td>
<td>2.9</td>
</tr>
<tr>
<td>8 Eye/vision problems</td>
<td>79</td>
<td>2.2</td>
</tr>
<tr>
<td>9 Hearing problems</td>
<td>20</td>
<td>0.5</td>
</tr>
<tr>
<td>10 Circulation problems</td>
<td>382</td>
<td>10.5</td>
</tr>
<tr>
<td>11 Respiratory problems</td>
<td>241</td>
<td>6.6</td>
</tr>
<tr>
<td>12 Dental problems</td>
<td>137</td>
<td>3.8</td>
</tr>
<tr>
<td>13 Gastro intestinal problems</td>
<td>240</td>
<td>6.6</td>
</tr>
<tr>
<td>14 Skin problems</td>
<td>81</td>
<td>2.2</td>
</tr>
<tr>
<td>15 Musculo skeletal system problems</td>
<td>164</td>
<td>4.5</td>
</tr>
<tr>
<td>16 Trauma &amp; injuries</td>
<td>222</td>
<td>6.1</td>
</tr>
<tr>
<td>17 Genito Urinary system disorders</td>
<td>159</td>
<td>4.4</td>
</tr>
<tr>
<td>18 Maternity &amp; reproductive health</td>
<td>152</td>
<td>4.2</td>
</tr>
<tr>
<td>19 Neonates</td>
<td>27</td>
<td>0.7</td>
</tr>
<tr>
<td>20 Poisoning</td>
<td>34</td>
<td>1.0</td>
</tr>
<tr>
<td>21 Healthy individuals</td>
<td>89</td>
<td>2.5</td>
</tr>
<tr>
<td>22 Social care needs</td>
<td>45</td>
<td>1.2</td>
</tr>
<tr>
<td>23 Other</td>
<td>518</td>
<td>14.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3,626</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

*Source: Local health board and NHS trust Programme Budgeting Returns 2003-04*

29. The project is continuing, building on the experience of the 2003-04 exercise, with the aim of improving the allocation of costs to health care programmes and attempting to cover types of activity that were not allocated in 2003-04. The project will also consider the development of supplementary analysis of expenditure by age and client group, such as children or older people. The aim is to develop a patient-based system, which looks at individuals’ diagnosis to identify resource use against health condition, and thus support needs-led service planning across the
health and social care interface. However, there remains the problem of aggregating the costs of different services used by the same individuals and comparing total costs per annum with measured individual need. Information about costs of using health care services, and measures of health care need, for the same individuals, must be the agreed objective. It may take time to reach this objective and confidentiality must be preserved. Tracking the right information must also be seen as offering opportunities to stop collecting information that can be less well applied to the reduction of poor health.

**Using programme budgeting information**

30. Whilst the 2003-04 exercise has a number of limitations, as discussed above, it nevertheless provides local health boards, for the first time, with information which allows them to benchmark their patterns of investment with other boards. **In England, the results of a similar exercise undertaken by Primary Care trusts for 2003-04 were published in early 2005.** These provide information on how PCTs’ per capita spend by programme compares with the Strategic Health Authority average. An example of this analysis applied to a Welsh local health board is at Annex 3.2

31. In Wales, the development of the direct needs model will allow comparisons between boards to show how per capita spend by programme compares with their needs-based expected spend per capita. This will allow boards to identify those conditions where their current investment patterns exceed, or fall short of, that expected to meet the needs of their population. This information will be particularly useful for those boards that are at the extreme distance from target, and will inform the commissioning decisions they will need to make as they move towards target share. Annex 3.3 demonstrates how local health boards’ distances between actual and target shares can be analysed by programme.

**Conclusions**

32. Obtaining accurate and meaningful information about how the health care budget is currently spent between health conditions and client groups is crucial in order to:

- find how far the scale and impact of the present pattern of investment is justified when set against data on health status;
- show what are the options for a different distribution of the budget to improve the application of appropriate services to individuals according to their degree of health care need, and prevent certain individual health problems from arising;
- provide the weightings to translate relative need between areas into needs led budget allocations through the financial model (as explained in the next chapter).
33. Data on health care investment at area level must also be set against data on local authority investment in social care in order to inform coherent client based strategies based on individual needs. The crucial developments in financial information set out in this chapter will provide local health boards and local authorities with the core elements of a virtual budget for health and social care for their area.

34. The key recommendation of this chapter is therefore to establish “a patient health care tracking costs model” for local health boards, which may also be linked to the social care cost model being developed by local authorities. What is envisaged is not another layer of data collection, but a rationalisation of existing methods so that the new model replaces, in the interests of better health, a miscellaneous assortment of practices that do not all serve the public well and are difficult for health professionals to justify and sometimes even to understand.

35. Data about the utilisation of different services by a wide range of units and organisations have not been consistently nor reliably representative, and the costs of utilisation by the individual have not been accumulated routinely and related to each individual’s health need. Strict confidentiality for the individual must be observed but, like the Census, data collected about the individual and the household must be the basis for local and national action as well as local and regional analysis.

36. This information needs to be widely available in order to promote informed debate on local plans. A sustained effort is needed to improve the quality and accessibility of this financial information and present it alongside information relevant to equity, for example: access to services, how individual needs are identified and assessed and how support and treatment is provided. This is discussed further in Chapter 6.
### Annex 3.1 - Analysis of Welsh local authority expenditure on social care by client group, 2003-04

#### Social services revenue expenditure, by client group (£ thousand)

<table>
<thead>
<tr>
<th>Column</th>
<th>Total Unitary Authorities</th>
<th>2003-04</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Children’s services – commissioning and social work</strong></td>
<td></td>
<td>67,346</td>
</tr>
<tr>
<td><strong>Children’s homes</strong></td>
<td></td>
<td>44,424</td>
</tr>
<tr>
<td><strong>Secure accommodation (welfare)</strong></td>
<td></td>
<td>610</td>
</tr>
<tr>
<td><strong>Fostering services</strong></td>
<td></td>
<td>54,001</td>
</tr>
<tr>
<td><strong>Other children looked after services</strong></td>
<td></td>
<td>7,625</td>
</tr>
<tr>
<td><strong>Family centres</strong></td>
<td></td>
<td>5,861</td>
</tr>
<tr>
<td><strong>Services for under 8s</strong></td>
<td></td>
<td>7,534</td>
</tr>
<tr>
<td><strong>Direct payments</strong></td>
<td></td>
<td>46</td>
</tr>
<tr>
<td><strong>Home care</strong></td>
<td></td>
<td>2,504</td>
</tr>
<tr>
<td><strong>Equipment and adaptations</strong></td>
<td></td>
<td>598</td>
</tr>
<tr>
<td><strong>Other family support services</strong></td>
<td></td>
<td>15,291</td>
</tr>
<tr>
<td><strong>Secure accommodation (justice)</strong></td>
<td></td>
<td>302</td>
</tr>
<tr>
<td><strong>Youth offender teams</strong></td>
<td></td>
<td>11,939</td>
</tr>
<tr>
<td><strong>Other youth justice services</strong></td>
<td></td>
<td>2,614</td>
</tr>
<tr>
<td><strong>Adoption services</strong></td>
<td></td>
<td>4,618</td>
</tr>
<tr>
<td><strong>Leaving care services</strong></td>
<td></td>
<td>8,723</td>
</tr>
<tr>
<td><strong>Other children’s and families’ services</strong></td>
<td></td>
<td>10,575</td>
</tr>
<tr>
<td><strong>Total children’s and families’ services</strong></td>
<td></td>
<td><strong>14,855</strong></td>
</tr>
<tr>
<td><strong>Assessment and care management</strong></td>
<td></td>
<td>42,904</td>
</tr>
<tr>
<td><strong>Nursing home placements</strong></td>
<td></td>
<td>75,613</td>
</tr>
<tr>
<td><strong>Residential care home placements</strong></td>
<td></td>
<td>134,363</td>
</tr>
<tr>
<td><strong>Supported and other accommodation</strong></td>
<td></td>
<td>4,522</td>
</tr>
<tr>
<td><strong>Direct payments</strong></td>
<td></td>
<td>759</td>
</tr>
<tr>
<td><strong>Home care</strong></td>
<td></td>
<td>114,004</td>
</tr>
<tr>
<td><strong>Day care</strong></td>
<td></td>
<td>17,254</td>
</tr>
<tr>
<td><strong>Equipment and adaptations</strong></td>
<td></td>
<td>3,274</td>
</tr>
<tr>
<td><strong>Meals</strong></td>
<td></td>
<td>5,738</td>
</tr>
<tr>
<td><strong>Other services to older people</strong></td>
<td></td>
<td>12,329</td>
</tr>
<tr>
<td><strong>Total older people (aged 65 and over)</strong></td>
<td></td>
<td><strong>410,759</strong></td>
</tr>
<tr>
<td><strong>Assessment and care management</strong></td>
<td></td>
<td>13,923</td>
</tr>
<tr>
<td><strong>Nursing home placements</strong></td>
<td></td>
<td>4,688</td>
</tr>
<tr>
<td><strong>Residential care home placements</strong></td>
<td></td>
<td>9,340</td>
</tr>
<tr>
<td><strong>Supported and other accommodation</strong></td>
<td></td>
<td>513</td>
</tr>
<tr>
<td><strong>Direct payments</strong></td>
<td></td>
<td>2,413</td>
</tr>
<tr>
<td><strong>Home care</strong></td>
<td></td>
<td>15,202</td>
</tr>
<tr>
<td><strong>Day care</strong></td>
<td></td>
<td>4,223</td>
</tr>
<tr>
<td><strong>Equipment and adaptations</strong></td>
<td></td>
<td>5,113</td>
</tr>
<tr>
<td><strong>Meals</strong></td>
<td></td>
<td>308</td>
</tr>
<tr>
<td><strong>Other services to adults aged under 65 with a physical disability or sensory impairment</strong></td>
<td></td>
<td>4,237</td>
</tr>
<tr>
<td><strong>Total adults aged under 65 with a physical disability</strong></td>
<td></td>
<td><strong>59,959</strong></td>
</tr>
<tr>
<td>Year</td>
<td>Column</td>
<td>Total Unitary Authorities</td>
</tr>
<tr>
<td>------</td>
<td>--------</td>
<td>--------------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2003-04</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Net current expenditure</td>
</tr>
<tr>
<td></td>
<td>Assessment and care management</td>
<td>15,021</td>
</tr>
<tr>
<td></td>
<td>Nursing home placements</td>
<td>2,906</td>
</tr>
<tr>
<td></td>
<td>Residential care home placements</td>
<td>59,334</td>
</tr>
<tr>
<td></td>
<td>Supported and other accommodation</td>
<td>41,364</td>
</tr>
<tr>
<td></td>
<td>Direct payments</td>
<td>403</td>
</tr>
<tr>
<td></td>
<td>Home care</td>
<td>28,060</td>
</tr>
<tr>
<td></td>
<td>Day care</td>
<td>42,548</td>
</tr>
<tr>
<td></td>
<td>Equipment and adaptations</td>
<td>71</td>
</tr>
<tr>
<td></td>
<td>Meals</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>Other services to adults aged under 65 with learning disabilities</td>
<td>6,036</td>
</tr>
<tr>
<td></td>
<td><strong>Total adults aged under 65 with learning disabilities</strong></td>
<td><strong>195,803</strong></td>
</tr>
<tr>
<td></td>
<td>Assessment and care management</td>
<td>14,615</td>
</tr>
<tr>
<td></td>
<td>Nursing home placements</td>
<td>5,043</td>
</tr>
<tr>
<td></td>
<td>Residential care home placements</td>
<td>11,068</td>
</tr>
<tr>
<td></td>
<td>Supported and other accommodation</td>
<td>2,804</td>
</tr>
<tr>
<td></td>
<td>Direct payments</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Home care</td>
<td>2,908</td>
</tr>
<tr>
<td></td>
<td>Day care</td>
<td>6,016</td>
</tr>
<tr>
<td></td>
<td>Equipment and adaptations</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>Meals</td>
<td>117</td>
</tr>
<tr>
<td></td>
<td>Other services to adults aged under 65 with mental health needs</td>
<td>4,238</td>
</tr>
<tr>
<td></td>
<td><strong>Total adults aged under 65 with mental health needs</strong></td>
<td><strong>46,875</strong></td>
</tr>
<tr>
<td></td>
<td>Assessment and care management</td>
<td>3,958</td>
</tr>
<tr>
<td></td>
<td>HIV/AIDS</td>
<td>84</td>
</tr>
<tr>
<td></td>
<td>Substance abuse (addictions)</td>
<td>3,513</td>
</tr>
<tr>
<td></td>
<td>Supported employment</td>
<td>7,343</td>
</tr>
<tr>
<td></td>
<td>Other adult services</td>
<td>8,819</td>
</tr>
<tr>
<td></td>
<td><strong>Total adults aged under 65 – other services</strong></td>
<td><strong>23,718</strong></td>
</tr>
<tr>
<td></td>
<td>Assessment and care management</td>
<td>268</td>
</tr>
<tr>
<td></td>
<td>Unaccompanied children</td>
<td>618</td>
</tr>
<tr>
<td></td>
<td>Families</td>
<td>137</td>
</tr>
<tr>
<td></td>
<td>Lone adults</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td><strong>Total asylum seekers</strong></td>
<td><strong>1,093</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Total service strategy</strong>*</td>
<td><strong>4,485</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Total personal social services</strong></td>
<td><strong>987,304</strong></td>
</tr>
</tbody>
</table>

* Breakdown of data not available for 2003-04
Annex 3.2 - Analysis of LHB expenditure per head by health programme compared with the Wales average and with Wales average adjusted for need
Annex 3.3 - Analysis of LHB expenditure showing divergence from target share by health programme
Chapter 4: Achieving a fair distribution of the health budget across Wales - the direct needs allocation model

1. This chapter explains how the resources allocated to local health boards to commission health services are distributed across Wales, and how they would be distributed under the direct needs model. It shows how the model works to ensure that each area receives a fair share of the budget - one that is determined by its health needs relative to the rest of Wales.

2. The direct needs model requires continuing development and refinement in consultation with the Service. A series of roadshows involving local health boards, NHS trusts, local authorities, and other interested parties, were held in March 2003 and September 2004 - the issues raised are considered in Chapter 5.

3. The present distribution system produces a variation in the allocation per head between the local health board areas: the key objective is to validate these differentials - to ensure that they are consistent with underlying health need and, if they are not, to move towards a more equitable distribution.

Background: how health care resources are currently distributed

4. The resources allocated to local health boards for health care provision in their areas fall into three separate budgets with different methods of allocation, explained below:
   a. HCHS: for hospital and community health services
   b. GMS: for GP services
   c. prescribing: for drugs prescribed by GPs.

5. The amounts allocated to local health boards under each budget head in 2005-06 are set out in Table 4.1 below. So far, the new model has been applied only to the HCHS budget, but achieving an equitable distribution system for the primary care components of the budget is equally important. The resource allocation model that underpins the new GMS contract includes
both a needs and a performance element: further analysis is needed to determine its implications for equity, as discussed below.

Table 4.1: the distribution of health service resources to local health boards 2005-06

Table 4.1: the distribution of health service resources to local health boards 2005-06

<table>
<thead>
<tr>
<th>Budget</th>
<th>£million</th>
<th>Basis of allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCHS – discretionary allocation to local health boards and HCW</td>
<td>2,567</td>
<td>2004-05 allocation uprated</td>
</tr>
<tr>
<td>HCHS (Wanless/Townsend)</td>
<td>31</td>
<td>local health board needs formula target shares</td>
</tr>
<tr>
<td>HCHS – ring fenced allocations</td>
<td>329</td>
<td>estimated spend on protected services</td>
</tr>
<tr>
<td>primary care – GP services</td>
<td>410</td>
<td>new GP contract</td>
</tr>
<tr>
<td>primary care - prescribing</td>
<td>491</td>
<td>2004-05 allocation uprated</td>
</tr>
<tr>
<td>Total</td>
<td>3,828</td>
<td></td>
</tr>
</tbody>
</table>

Hospital and Community Health Services (HCHS)

6. The HCHS budget is by far the largest component of the total - it funds the vast majority of hospital and community services. At present it is distributed to local health boards on the basis of an estimate of the cost of the existing services in each area, as explained below. This produces a range of allocations per head across Wales as shown in Table 4.2.

Table 4.2 - Allocation per head for Hospital and Community Health Services

<table>
<thead>
<tr>
<th>HCHS budgets 2005-06</th>
<th>£ per head (cf average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wales average</td>
<td>884</td>
</tr>
<tr>
<td>highest local health board</td>
<td>1,043 (+18%)</td>
</tr>
<tr>
<td>lowest local health board</td>
<td>758 (-14%)</td>
</tr>
</tbody>
</table>

7. Thus, under the existing distribution, the local health board with the largest per capita allocation receives £159 per head more than the average and the lowest receives £126 less than the average. These existing differentials illustrate why it is essential to put in place a needs led

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model - without it we have no basis for validating these differences and ensuring that they are consistent with need.

8. The effect of the direct needs model is to widen this range as shown in Table 4.3. This illustrates the impact of distributing the same amount of money using the direct needs formula so that each local health board’s allocation is the same as its target share. Under the model, the variation from the average would be validated by need. Implementation would change the position of individual local health boards in the distribution and bring each board’s allocation into line with its relative needs share.

Table 4.3 - Allocation per head implied by direct needs model target shares

<table>
<thead>
<tr>
<th>HCHS budgets 2005-06 had model been applied</th>
<th>£ per head (cf average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wales average</td>
<td>884</td>
</tr>
<tr>
<td>highest local health board</td>
<td>1,059 (+20%)</td>
</tr>
<tr>
<td>lowest local health board</td>
<td>723 (-18%)</td>
</tr>
</tbody>
</table>

9. The present distribution can be expressed as a per capita index ranking each local health board according to its existing share of the budget, which can be compared with the shares produced by the direct needs model. The two indices are shown in Annex 4.1.

10. The difference between each local health board’s position on these indices is a measure of its distance from target share. Some boards’ ranking on both indices is very similar - this indicates that their present share of resources is already close to the share indicated by the needs model.

Wanless/equity action plans

11. In February 2004 £30\(^2\) million was allocated to support action by the NHS in Wales to implement new plans for service reconfiguration as recommended in the Review of Health and Social Care in Wales advised by Derek Wanless\(^3\) (and see Townsend: Targeting Poor Health). This was allocated in accordance with the aim of moving towards target shares as explained in para 28 below.

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\(^2\) The formula allocations amounted to £28.2m with remaining £1.8m held as contingency, and subsequently allocated for mental health purposes.

\(^3\) The Review of Health and Social Care in Wales: report of the Project Team advised by Derek Wanless, commissioned by the Assembly, June 2003.
Primary care - GP services

12. The 2005-06 allocation for General Medical Services produces an average per capita spend across Wales, and a range across local health boards, as shown in Table 4.4.

Table 4.4 - The GMS allocation per head

<table>
<thead>
<tr>
<th>GMS allocation 2005-06</th>
<th>£ per head (cf average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wales average</td>
<td>117</td>
</tr>
<tr>
<td>highest local health board</td>
<td>133 (+14%)</td>
</tr>
<tr>
<td>lowest local health board</td>
<td>107 (-9%)</td>
</tr>
</tbody>
</table>

13. The allocation is based on the forecast cost in each local health board area of implementing the new GP contract. Under the new contract, each GP practice budget will include a common core element, for the cost of the practice infrastructure, and a variable element which will combine a needs element, determined by the Carr Hill needs formula, and a performance element determined by a range of quality measures.

14. As part of the UK deal on the new GMS contract, there was an agreement that the funding formula would be reviewed starting in October 2004. This work is now underway and the intention is to agree changes that will be implemented by 1 April 2006. The work is being undertaken by an expert group working with the BMA and NHS Employers on behalf of the four UK health ministers. Therefore the GMS budget was not included in the consultation sessions.

Primary care - prescribing

15. At present, each local health board’s allocation is based on the actual spend in the previous year uplifted by the Treasury’s forecast of the annual increase in the cost of drugs. It is not based on a needs index. Allocating the 2005-06 budget of £491 million on the present basis produces a variation between local health boards within the range shown in Table 4.5. The average allocation for GP prescribed drugs per head across Wales is £181, this is around 20 per cent above the comparable figure for England.

Table 4.5 - The prescribing allocation per head

<table>
<thead>
<tr>
<th>Prescribing allocation 2005-06</th>
<th>£ per head (cf average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wales average</td>
<td>181</td>
</tr>
<tr>
<td>highest local health board</td>
<td>228 (+26%)</td>
</tr>
<tr>
<td>lowest local health board</td>
<td>148 (-18%)</td>
</tr>
</tbody>
</table>

---

4 Allocation adjusted for dispensing practices
5 Allocation adjusted for dispensing practices
16. *Targeting Poor Health* presented a needs based model for prescribing, but implementation has been held back until more reliable data linking prescribing to need can be agreed. The technical work is now in hand, and a revised model is planned to be developed by Summer 2005.

**The direct needs resource allocation model**

17. Before the local health boards came into being in April 2003, the HCHS budget was shared out between the five previous health authorities on the basis of an indirect method of capturing relative health need. The disadvantages of this method were set out in Chapter 5 of *Targeting Poor Health*.

18. In creating the new boards it was necessary both to:
   a. establish budgets to be operational from April 2003 when the new boards assumed responsibility (boards’ actual allocation) and
   b. introduce a new methodology for calculating each board’s fair share of total resources based on its needs relative to the rest of Wales (boards’ target allocation).

19. The new methodology recommended in *Targeting Poor Health* was the direct needs approach developed by the research team headed by Dr David Gordon of Bristol University. It works by measuring the relative health needs of the local health boards’ populations and multiplying those needs by the health care costs incurred in meeting them.

20. The report advocated the new model of equitable resource allocation as a first enabling step in a comprehensive strategy to promote equity in health care and address health inequalities in Wales, through action within and beyond health and social care, and this was agreed by the Assembly in 2002. The role of local action to promote equity through the health service commissioning process is considered in Chapter 6.

**How the initial budgets for local health boards and Health Commission Wales were created**

21. In planning for the new structure, it was recognised that the boards, and HCW, needed to be allocated an initial budget which would allow them to take over responsibility for commissioning services with the minimum of disruption.

22. The initial 2003-04 allocation to local health boards was based on the best available estimate of actual expenditure on health care services for the local health board population.

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in 2002-03. This estimate was derived from the resource mapping work carried out by health authorities and NHS trusts. Although every effort was made to produce an accurate baseline, this work did not produce a precise calculation of the actual spend on the local health board’s population - because services and budgets had previously been planned and accounted for only at health authority level and the financial information systems reflected this.

23. Thus, the starting point for creating the HCHS budgets for local health boards was the best available estimate of actual expenditure on services for their populations. It was not based on a calculation of each Board’s relative health care needs. This needs calculation is the basis of the local health board target shares.

24. The resource mapping exercise may have over or under-stated the local health board’s share of actual health spending - this will have an impact on the estimate of a local health board’s actual position relative to its target share of the budget on a needs basis.

25. Local health boards’ relative positions are also affected by their estimated share of the HCW budget (£329 million in 2005-06 - Table 4.1). When local health boards’ budgets were identified initially, it was necessary to derive a budget for HCW by estimating expenditure on specialist services by each area and deducting these amounts from the local health board budgets. Over time, it is likely that HCW’s commissioning decisions will result in changes in the pattern of investment by area. This will affect the estimate of boards’ shares of expenditure which could make a difference to the distance from target shares calculations in Annex 4.1. It will be important to ensure that these estimates are updated by using the annual expenditure returns from HCW to revise the board expenditure shares.

26. The local health boards’ and HCW allocation for 2005-06 (£2,567 million) was based on the 2004-05 allocation, increased by an uplift of 2.5% for cost pressures. Annex 4.2 shows the 2004-05 HCHS allocation, the supplementary £30 million allocation for Wanless/equity action plans in February 2004, and the 2005-06 allocation distributed by local health board area (including local health board allocations plus the distribution of the HCW allocation by local health board area) and expresses the amount of the distribution for each local health board as a percentage of its target distribution share.

27. This illustrates how local health boards’ distance from target share has moved as a result of changes in the allocation, and of changes in the resource mapped shares for each area. The range of divergence from target has reduced from: 87.8 - 118.8 to 90.9 - 115.8, and

- of the 5 local health boards whose 2004-05 original allocation was more than 5% above target share, all but one have moved closer to target;
- of the 4 local health boards whose 2004-05 allocation was more than 5% below target share, all have moved closer to target.
28. The Assembly’s objective is to bring local health board allocations into line with their target shares (within a range reflecting data certainty) within a timescale dependent on the total amount of resources available. The Assembly decided in 2002 that progress towards target shares will be achieved through differential growth - therefore all local health boards will receive a common amount needed to maintain service stability, and any additional growth monies will be distributed to those boards furthest from target share. The allocation in February 2004 followed this principle.

**Principles of the direct needs model**

29. The underlying principles of the direct needs model can be summarised as follows:
   - it seeks to measure need expressed independently of demand;
   - it allocates resources where need is greatest not utilisation highest;
   - it is relative - it aims to distribute fairly a pre-determined total allocation;
   - it accepts the national pattern of investment between programmes.

**How the model is constructed**

30. The model divides the total budget between local health boards in proportion to their population, weighted for their share of health need, weighted by the cost of meeting that need, ie:

   **Construction of the needs model**

   local health board share = population x health need index (as measured by a range of health needs indicators x cost of meeting those needs) x additional cost indices

**How the needs index is built up**

31. The following illustration shows how the overall needs index is built up from each health condition. For simplicity, the 22 local health boards are shown combined into three regions:

   - Stage 1 shows how overall expenditure on cancer services is distributed: first each region’s share of cancer registrations is calculated and these shares are applied to total expenditure on cancer treatment derived from NHS trust expenditure returns. This determines each area’s needs share for cancer.
Stage 1 of target calculations

<table>
<thead>
<tr>
<th>Area</th>
<th>Cancer registrations</th>
<th>Share of registrations</th>
<th>Share of total cancer spend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mid &amp; West</td>
<td>5,388</td>
<td>35.26%</td>
<td>£42.8m</td>
</tr>
<tr>
<td>South East</td>
<td>6,061</td>
<td>39.67%</td>
<td>£48.2m</td>
</tr>
<tr>
<td>North</td>
<td>3,831</td>
<td>25.07%</td>
<td>£30.5m</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15,280</strong></td>
<td><strong>100%</strong></td>
<td><strong>£121.5m</strong></td>
</tr>
</tbody>
</table>

- Stage 2 shows how this share is combined with the needs share for coronary heart disease and other conditions calculated in the same way to provide an overall needs share.

Stage 2 of target calculations

<table>
<thead>
<tr>
<th>Area</th>
<th>Cancer (inc others)</th>
<th>CHD (inc others)</th>
<th>Total (inc others)</th>
<th>Share of total spend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mid &amp; West</td>
<td>£42.8m</td>
<td>£45.6m</td>
<td>£652.3m</td>
<td>33.48%</td>
</tr>
<tr>
<td>South East</td>
<td>£42.2m</td>
<td>£57.4m</td>
<td>£872.3m</td>
<td>44.78%</td>
</tr>
<tr>
<td>North</td>
<td>£30.5m</td>
<td>£28.9m</td>
<td>£423.5m</td>
<td>21.74%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>£121.5m</strong></td>
<td><strong>£131.9m</strong></td>
<td><strong>£1,948.1m</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

- Stage 3 shows how the needs shares are combined with the area’s share of population to produce an overall needs index.

Stage 3 of target calculations

<table>
<thead>
<tr>
<th>Area</th>
<th>Share of total</th>
<th>Share of population</th>
<th>Regional needs index (range of local health board values)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mid &amp; West</td>
<td>33.48%</td>
<td>33.88%</td>
<td>100.30 (90 to 110)</td>
</tr>
<tr>
<td>South East</td>
<td>44.78%</td>
<td>44.21%</td>
<td>101.29 (89 to 118)</td>
</tr>
<tr>
<td>North</td>
<td>21.74%</td>
<td>22.41%</td>
<td>97.01 (91 to 106)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

32. Finally, the needs index is combined with 2 additional cost weightings:

a. the rural costs index which is applied to community services expenditure (7.5% of the total)

b. the age costs index which is applied to 65% of expenditure

and the product of the three indices is applied to the local health board’s population.
33. The main data source for measuring health need is the Welsh Health Survey, supplemented by other data on specific conditions. The full list of conditions, needs indicators and expenditure weightings is shown in Annex 4.3.

Main data sources for health needs

**WHS**
- the 1998 Welsh Health Survey which provides estimates of the number of residents in each local health board area by health condition eg heart disease, respiratory disease, arthritis, accidents, mental illness etc

**other direct needs data**
- number of people registered with cancer
- number of births
- people with learning disabilities

34. Annex 4.4 shows a worked example of how the allocation for one local health board (Gwynedd) is calculated for each expenditure programme by multiplying the needs indicator for that programme (eg for cancer the number of cancer registrations) by the cost of treatment (average expenditure per case). The programme allocations are then added up and the total calculated as a share of the Welsh share of overall expenditure. This is the area’s needs share which is then compared with its population share in the reference year to produce a needs index value for that area. This value is then combined with the current population share, the age index and the rural costs index to provide the area’s final needs index figure of 96.164.

Development and refinement of needs data

35. The WHS is the main source of needs information used in the model, it is supplemented by other indicators which are specifically relevant to individual expenditure items - as shown in Annex 4.3. The research team report published in 2001 recommended that the WHS was a robust measure of overall health need - since then the Survey has been developed to further strengthen its reliability in resource allocation.

Better needs data: the new Welsh Health Survey

36. Following a review of its methodology, the WHS has been expanded greatly. The key changes are:

- an increase in sample size to provide data for each local health board area with at least 1,800 people per area by the third year of data collection;
• the Survey is based on a household interview, and self completion questionnaire, previously it was just a postal survey;

• the new methodology is expected to produce an improvement in the response rate and will enable the researchers to identify bias in the responses eg in respect of social class or age, and weight the results accordingly;

• it is a cumulative, year round, continuous survey, no longer a snapshot: the previous survey was done in the summer which risked a bias in the results;

• it includes questions on children’s health.

37. In the autumn of 2005, the Survey will have produced an 18-month data file which will be built in to the resource allocation model to calculate 2006-07 target shares. Earlier data files will be representative at an all-Wales level but will not contain sufficient numbers of cases for each local health board to be built into the allocation model. For example, the 6-month data file available in autumn 2004 will contain approximately 8,000 cases (350-400 in each local health board area).

38. The new Survey now includes a questionnaire on children’s health covering the most common children’s ailments. In addition the Assembly has commissioned a feasibility study of a wider separate survey of children’s health and wellbeing which could be used for resource allocation and more widely.

39. In respect of the non- WHS needs data incorporated in the model, data are generally available on an annual basis, in some cases as a rolling average, and can be incorporated to inform each round of budget allocations.

Better cost data: the Programme Budgeting Strategy

40. The model works by linking need for each type of health care with the cost of meeting that need. This allows each local health board’s share of need to be weighted by the cost of meeting that need. For example, in the Stage 2 calculation above, a local health board’s relative share of cancer registrations will have a smaller weighting than its share of coronary heart disease because expenditure on CHD is greater than cancer. The full list of expenditure weights are in Annex 4.3.

41. The process of combining needs and costs data is similar to the construction of the local government distribution model, where specific needs indicators are applied to the main local government expenditure blocks such as education and transport. The needs indicators for the larger expenditure blocks have a greater impact on the distribution than those for smaller budgets.
42. Thus the categorisation of NHS trust expenditure in effect creates, for the purposes of the model, proxy all-Wales budgets for the relevant conditions. This is necessary because the expenditure allocated to local health boards is unhypothecated: resources are not allocated nationally to specific programmes. The totals are therefore the aggregation of local decision making on the relative needs of each treatment programme. The parallels between the health and local government models are discussed in Chapter 5.

43. It was recognised in Targeting Poor Health that improving the costing information was vital for formula development. This is being pursued through the Programme Budgeting Project which is working to increase the share of health expenditure which can be tracked to specific conditions, as discussed in Chapter 3.

44. At present, only about 58% of expenditure is directly attributed to categories matching needs indicators in the model and therefore allocated on the basis of the needs indicators. The remainder is allocated on a pro rata basis or by average service usage applied to needs indicators. Although there is no evidence to suggest that it discriminates against any local health board, or group of local health boards, it is a high priority to reduce this pro-rata element.

45. The 2001 target shares were based on costing information from 1998-99. Since then the Programme Budgeting work has produced more up to date costing information which has been incorporated into the 2005-06 formula shares.

**Linking expenditure and needs data**

46. The need for more accurate financial information linking expenditure to health conditions and underlying need is urgent not only for the purposes of the resource allocation model. It is needed even more by local health boards and NHS trusts to analyse and plan their expenditure against a needs led distribution - as discussed in Chapter 6.

47. The model uses NHS trusts’ expenditure returns to construct the boards’ target shares of the total HCHS budget of £2.567 million (Table 4.1). NHS trusts’ costs are broken down into the health programme categories which are then linked to the direct needs indicators shown in Annex 4.3. Of the total:

- 38% is apportioned on WHS data - as shown in Chart 4.1 below
- 20% is apportioned on other needs data - as shown in Chart 4.2 below
- 22% is apportioned pro rata to the relevant direct needs data
- 15% is out-patients costs which are apportioned on WHS data
- 5% is community nursing and chiropody costs which are apportioned on WHS data.
49. The breakdown of expenditure apportioned on WHS data is shown in Chart 4.1.

**Chart 4.1**

**Expenditure apportioned using WHS data**
**(38% of the total allocated)**

- Heart & Circulatory Disease * 18%
- Respiratory illness * 12%
- Arthritis * 5%
- Stroke * 5%
- Accidents: A&E and inpatients 24%
- Mental illness & other psychiatric conditions 32%
- Other ** 4%

* inpatient treatment

** includes inpatient treatment for diabetes, back pain, epilepsy, varicose veins, hearing and dental problems

50. The breakdown of the 20% apportioned on other needs data is shown in Chart 4.2.

**Chart 4.2**

**Expenditure apportioned using other needs data**
**(20% of the total allocated)**

- Cancer 31%
- Maternity and neonatal costs 28%
- Children’s physical health 25%
- Learning disability 13%
- Child and adolescent psychiatry 3%

- Mental illness & other psychiatric conditions 32%
Cost factors

51. Combining each local health board’s share of health need by specific condition with the costs data on treating this condition produces an overall weighted needs share. In addition the model adjusts these shares to take account of two specific costs factors supported by evidence - relating to age and rurality.

Age

52. An age-adjustment is applied to 65% of expenditure reflecting the in-patient share of costs (the research team has recommended enhancing this cost factor to make it more sensitive to the longer lengths of stay experienced by older people as discussed in Chapter 5).

53. Thus the model reflects the impact of the needs of older people in two separate steps:

• their health needs are captured directly in the WHS and other needs indicators;

• the additional costs of treating an older person (compared with a younger person with the same condition) is captured by the age cost weighting which is derived from an evidence based study of the additional hospital costs per case for older people, reflecting their greater chances of developing a combination of health problems with more expensive treatment and/or needing a longer period of recuperation following illness.

Rurality

54. The new model includes a rural cost adjustment applied to 7.5% of expenditure, reflecting the travel-intensive community services such as district nursing. This is calculated applying a methodology developed in Scotland to the Welsh population distribution. This uses settlement patterns and assumptions about travelling time and nurse workload. The research team recommended reviewing the assumptions and the sensitivity of the model and this is included in the planned work programme. In tandem, it should also be possible to take account of new information on settlement patterns from the 2001 census.
Conclusion

55. This chapter has provided a summary of the direct needs model, how it works, why it was needed and how it has already been developed since it was agreed in 2002. After its inception two decisions were taken in applying the model:

1) because information from the Welsh Health Survey about children and some special groups was inexact or indirect the Standing Committee recommended, and the Minister confirmed, that attention should be directed in the first instance only at those Boards that were 5 per cent above or below target (after measurement of direct needs). This recommendation made an allowance therefore, in allocating resources, for possible variations between areas in the needs of children or of special minorities;

2) as a further precaution in adopting a new model, the Minister for Health decided to give priority to those local health boards furthest below target - where needs were self-evidently greatest. For 2004-05 an additional tranche of £30 million was directed predominantly to four local health boards with resources more than 5 per cent below target. As described in paragraph 8 this was a modest first step.

56. In implementing the model substantial efforts have been made to improve the representativeness and reliability of the information on which it is based. During 2004-05 the Welsh Health Survey was imaginatively expanded (to a sample of 30,000) to cover children and provide more representative information about each local health board population (reaching 1800 persons per local health board). Together with improved information on costs, this will strengthen the case for implementing the model and extending its coverage.

57. Experience since 2002 suggests that two key ongoing issues now require early consideration by the Assembly if resources are to be allocated as fairly as possible to areas. One is that the principle, agreed in 2002, that target shares are to be achieved by differential growth should be re-examined in relation to speed of implementation. Because of rapid improvements in technology and styles of treatment, “growth” in resources available to health and social care services is variable in interpretation, and can be contentious. Without clarification and agreement about how it is to be applied, there may be long delays in fulfilling the agreed objectives for greater equity.
The second issue is how to trace health and social care expenditure more effectively. The technical aspects of gathering and analysing this data were considered in Chapter 3 - this chapter explains how the data need to be used to improve resource allocation in relation to need. Fairness both in access to services and in estimating potential needs are principles that depend on administrative capacity to apportion costs to individuals as well as households and area locations. Deprived and non-deprived people, and the ill and the well, often live in the same location. Who uses services and who has need for services are questions the answers to which depend ultimately on reliable information about individuals - protected where necessary by confidentiality. The problem is to track different uses by individuals and aggregate both costs and needs - for small and large areas - in a way that could lead to substantial savings in current unnecessary expenditure.

However, the aim to allocate resources fairly to each area through improved central or statistical planning is not the whole story. Much more significant action to achieve equity can be taken by local health boards themselves. Earlier in this chapter we found that the HCHS budget per person varied across boards from plus 18 per cent to minus 14 per cent in 2004-05 and the GMS allocation per person varied from plus 14 per cent to minus 9 per cent. The prescribing allocation varied from plus 26 per cent to minus 18 per cent (and because prescribing is already 20 per cent higher on average in Wales than in England - see para 15 above - special measures by boards spending more than the Welsh average may be called for). There are other extreme variations by service and by diagnostic category. There are also variations by sub-area within the locations. In achieving the control over budgets which is essential to improve services, such variations have to be explained and addressed, as discussed further in Chapter 6.

The issues which have been raised, in relation to both the core principles and the detailed operation of the model described in this chapter, are considered in Chapter 5.
## Annex 4.1 - 2005-06 HCHS budgets and needs shares expressed as indices

<table>
<thead>
<tr>
<th>Local Health Board</th>
<th>Needs Index (DN share/popn share)</th>
<th>Funding Index (RM share/popn share)</th>
<th>Needs/funding variance %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caerphilly local health board</td>
<td>1.11</td>
<td>1.00</td>
<td>(9.65)</td>
</tr>
<tr>
<td>Blaenau Gwent local health board</td>
<td>1.20</td>
<td>1.18</td>
<td>(1.48)</td>
</tr>
<tr>
<td>Torfaen local health board</td>
<td>1.15</td>
<td>1.04</td>
<td>(9.07)</td>
</tr>
<tr>
<td>Monmouthshire local health board</td>
<td>0.82</td>
<td>0.91</td>
<td>10.75</td>
</tr>
<tr>
<td>Newport local health board</td>
<td>0.97</td>
<td>0.93</td>
<td>(3.91)</td>
</tr>
<tr>
<td>Vale of Glamorgan local health board</td>
<td>0.89</td>
<td>0.88</td>
<td>(1.52)</td>
</tr>
<tr>
<td>Rhondda Cynon Taff local health board</td>
<td>1.09</td>
<td>1.12</td>
<td>3.12</td>
</tr>
<tr>
<td>Merthyr Tydfil local health board</td>
<td>1.19</td>
<td>1.16</td>
<td>(2.16)</td>
</tr>
<tr>
<td>Cardiff local health board</td>
<td>0.89</td>
<td>0.86</td>
<td>(3.25)</td>
</tr>
<tr>
<td><strong>South-East Wales Region</strong></td>
<td><strong>1.01</strong></td>
<td><strong>0.98</strong></td>
<td><strong>(2.40)</strong></td>
</tr>
<tr>
<td>Powys local health board</td>
<td>0.92</td>
<td>0.94</td>
<td>2.33</td>
</tr>
<tr>
<td>Ceredigion local health board</td>
<td>0.92</td>
<td>0.98</td>
<td>6.76</td>
</tr>
<tr>
<td>Pembrokeshire local health board</td>
<td>0.97</td>
<td>1.00</td>
<td>3.30</td>
</tr>
<tr>
<td>Carmarthenshire local health board</td>
<td>1.10</td>
<td>1.03</td>
<td>(6.89)</td>
</tr>
<tr>
<td>Swansea local health board</td>
<td>0.99</td>
<td>0.98</td>
<td>(0.41)</td>
</tr>
<tr>
<td>Neath Port Talbot local health board</td>
<td>1.10</td>
<td>1.09</td>
<td>(1.51)</td>
</tr>
<tr>
<td>Bridgend local health board</td>
<td>0.99</td>
<td>1.06</td>
<td>7.27</td>
</tr>
<tr>
<td><strong>Mid and West Wales Region</strong></td>
<td><strong>1.01</strong></td>
<td><strong>1.01</strong></td>
<td><strong>0.40</strong></td>
</tr>
<tr>
<td>Anglesey local health board</td>
<td>0.99</td>
<td>1.00</td>
<td>1.58</td>
</tr>
<tr>
<td>Gwynedd local health board</td>
<td>0.97</td>
<td>1.12</td>
<td>15.83</td>
</tr>
<tr>
<td>Conwy local health board</td>
<td>1.09</td>
<td>1.09</td>
<td>0.14</td>
</tr>
<tr>
<td>Denbighshire local health board</td>
<td>0.99</td>
<td>1.14</td>
<td>14.76</td>
</tr>
<tr>
<td>Flintshire local health board</td>
<td>0.91</td>
<td>0.86</td>
<td>(6.24)</td>
</tr>
<tr>
<td>Wrexham local health board</td>
<td>0.96</td>
<td>0.97</td>
<td>1.87</td>
</tr>
<tr>
<td><strong>North Wales Region</strong></td>
<td><strong>0.98</strong></td>
<td><strong>1.02</strong></td>
<td><strong>4.10</strong></td>
</tr>
<tr>
<td><strong>All Wales Total</strong></td>
<td><strong>1.00</strong></td>
<td><strong>1.00</strong></td>
<td><strong>0.00</strong></td>
</tr>
</tbody>
</table>
### Annex 4.2 - Movement in distance from target shares 2004-05 to 2005-06

<table>
<thead>
<tr>
<th>LHB</th>
<th>2004-05 original Distance (over) under target</th>
<th>2004-05 resource mapped shares</th>
<th>2004-05 original Allocation as a % of target</th>
<th>Additional £30m allocation</th>
<th>2004-05 direct needs shares after £30m</th>
<th>2004-05 Revised allocation</th>
<th>2004-05 Revised allocation as % of revised target</th>
<th>2005-06 Resource Mapped Shares</th>
<th>2005-06 Direct Needs Shares</th>
<th>2005-06 Allocation as a % of target</th>
<th>Movement from 2004-05 original</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gwynedd LHB</td>
<td>(18.833)</td>
<td>114.424</td>
<td>118.8</td>
<td>0.413</td>
<td>97.377</td>
<td>114.837</td>
<td>117.9</td>
<td>116.150</td>
<td>100.276</td>
<td>115.8</td>
<td>(3.0)</td>
</tr>
<tr>
<td>Monmouthshire LHB</td>
<td>(15.732)</td>
<td>69.288</td>
<td>115.7</td>
<td>0.156</td>
<td>60.545</td>
<td>69.444</td>
<td>114.7</td>
<td>69.050</td>
<td>62.348</td>
<td>110.7</td>
<td>(5.0)</td>
</tr>
<tr>
<td>Denbighshire LHB</td>
<td>(11.235)</td>
<td>88.794</td>
<td>111.2</td>
<td>0.147</td>
<td>80.727</td>
<td>88.941</td>
<td>110.2</td>
<td>95.405</td>
<td>83.311</td>
<td>114.8</td>
<td>3.5</td>
</tr>
<tr>
<td>Bridgend LHB</td>
<td>(7.834)</td>
<td>117.283</td>
<td>107.8</td>
<td>0.163</td>
<td>109.991</td>
<td>117.446</td>
<td>106.8</td>
<td>121.501</td>
<td>113.266</td>
<td>107.3</td>
<td>(0.6)</td>
</tr>
<tr>
<td>Ceredigion LHB</td>
<td>(7.680)</td>
<td>64.736</td>
<td>107.7</td>
<td>0.192</td>
<td>60.798</td>
<td>64.928</td>
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<td>66.842</td>
<td>62.608</td>
<td>106.8</td>
<td>(0.9)</td>
</tr>
<tr>
<td>Anglesey LHB</td>
<td>(4.154)</td>
<td>59.758</td>
<td>104.2</td>
<td>0.167</td>
<td>58.023</td>
<td>59.925</td>
<td>103.3</td>
<td>60.697</td>
<td>59.750</td>
<td>101.6</td>
<td>(2.6)</td>
</tr>
<tr>
<td>Rhondda Cynon Taff LHB</td>
<td>(4.067)</td>
<td>222.217</td>
<td>104.1</td>
<td>0.654</td>
<td>215.945</td>
<td>222.871</td>
<td>103.2</td>
<td>229.309</td>
<td>222.375</td>
<td>103.1</td>
<td>(0.9)</td>
</tr>
<tr>
<td>Wrexham LHB</td>
<td>(4.040)</td>
<td>109.523</td>
<td>104.0</td>
<td>0.361</td>
<td>106.459</td>
<td>109.884</td>
<td>103.2</td>
<td>111.678</td>
<td>109.629</td>
<td>101.9</td>
<td>(2.2)</td>
</tr>
<tr>
<td>Pembrokeshire LHB</td>
<td>(2.725)</td>
<td>98.402</td>
<td>102.7</td>
<td>0.178</td>
<td>96.873</td>
<td>98.580</td>
<td>101.8</td>
<td>103.049</td>
<td>99.757</td>
<td>103.3</td>
<td>0.6</td>
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<td>(2.406)</td>
<td>102.949</td>
<td>102.4</td>
<td>0.181</td>
<td>101.666</td>
<td>103.330</td>
<td>101.4</td>
<td>107.129</td>
<td>104.693</td>
<td>102.3</td>
<td>(0.1)</td>
</tr>
<tr>
<td>Vale of Glamorgan LHB</td>
<td>(0.283)</td>
<td>91.810</td>
<td>100.3</td>
<td>0.337</td>
<td>92.584</td>
<td>92.347</td>
<td>99.5</td>
<td>93.889</td>
<td>95.341</td>
<td>98.5</td>
<td>(1.8)</td>
</tr>
<tr>
<td>Merthyr Tydfil LHB</td>
<td>(0.098)</td>
<td>56.183</td>
<td>100.1</td>
<td>0.344</td>
<td>56.761</td>
<td>56.527</td>
<td>99.6</td>
<td>57.189</td>
<td>58.451</td>
<td>97.8</td>
<td>(2.3)</td>
</tr>
<tr>
<td>Swansea LHB</td>
<td>(0.046)</td>
<td>187.926</td>
<td>100.0</td>
<td>0.621</td>
<td>189.961</td>
<td>188.547</td>
<td>99.3</td>
<td>194.809</td>
<td>195.617</td>
<td>99.6</td>
<td>(0.5)</td>
</tr>
<tr>
<td>Conwy LHB</td>
<td>1.251</td>
<td>100.998</td>
<td>98.7</td>
<td>1.123</td>
<td>103.432</td>
<td>102.121</td>
<td>98.7</td>
<td>106.665</td>
<td>106.511</td>
<td>100.1</td>
<td>1.4</td>
</tr>
<tr>
<td>Neath Port Talbot LHB</td>
<td>1.783</td>
<td>124.709</td>
<td>98.2</td>
<td>1.369</td>
<td>128.407</td>
<td>126.078</td>
<td>98.2</td>
<td>130.231</td>
<td>132.230</td>
<td>98.5</td>
<td>0.3</td>
</tr>
<tr>
<td>Blaenau Gwent LHB</td>
<td>1.801</td>
<td>68.834</td>
<td>98.2</td>
<td>1.053</td>
<td>70.888</td>
<td>69.887</td>
<td>98.6</td>
<td>71.922</td>
<td>72.999</td>
<td>98.5</td>
<td>0.3</td>
</tr>
<tr>
<td>Newport LHB</td>
<td>4.034</td>
<td>109.881</td>
<td>96.0</td>
<td>1.481</td>
<td>115.793</td>
<td>111.362</td>
<td>96.2</td>
<td>114.576</td>
<td>119.241</td>
<td>96.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Cardiff LHB</td>
<td>4.046</td>
<td>228.830</td>
<td>96.0</td>
<td>2.660</td>
<td>241.172</td>
<td>231.490</td>
<td>96.0</td>
<td>240.284</td>
<td>248.353</td>
<td>96.8</td>
<td>0.8</td>
</tr>
<tr>
<td>Carmarthenshire LHB</td>
<td>8.239</td>
<td>151.304</td>
<td>91.8</td>
<td>3.785</td>
<td>166.752</td>
<td>155.089</td>
<td>93.0</td>
<td>159.880</td>
<td>171.717</td>
<td>93.1</td>
<td>1.3</td>
</tr>
<tr>
<td>Flintshire LHB</td>
<td>8.381</td>
<td>106.276</td>
<td>91.6</td>
<td>3.672</td>
<td>117.307</td>
<td>109.948</td>
<td>93.7</td>
<td>113.265</td>
<td>120.799</td>
<td>93.8</td>
<td>2.1</td>
</tr>
<tr>
<td>Caerphilly LHB</td>
<td>10.755</td>
<td>142.927</td>
<td>89.2</td>
<td>5.254</td>
<td>161.959</td>
<td>148.181</td>
<td>91.5</td>
<td>150.688</td>
<td>166.781</td>
<td>90.4</td>
<td>1.1</td>
</tr>
<tr>
<td>Torfaen LHB</td>
<td>12.233</td>
<td>77.505</td>
<td>87.8</td>
<td>3.854</td>
<td>89.304</td>
<td>81.359</td>
<td>91.1</td>
<td>83.627</td>
<td>91.963</td>
<td>90.9</td>
<td>3.2</td>
</tr>
</tbody>
</table>
### Annex 4.3 - The resource allocation model expenditure programmes and needs indicators

<table>
<thead>
<tr>
<th>Hospital and Community Health Services expenditure programmes</th>
<th>% Share of total expenditure</th>
<th>2004-05 Needs indicator description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart &amp; Circulatory Disease</td>
<td>6.77</td>
<td>Heart disease (1)</td>
</tr>
<tr>
<td>Cancer</td>
<td>6.24</td>
<td>Average number of all malignancies, 1999-2001</td>
</tr>
<tr>
<td>Respiratory illness</td>
<td>4.71</td>
<td>Respiratory disease (1)</td>
</tr>
<tr>
<td>Arthritis</td>
<td>1.78</td>
<td>Arthritis (1)</td>
</tr>
<tr>
<td>Back pain</td>
<td>0.30</td>
<td>Back pain (1)</td>
</tr>
<tr>
<td>Epilepsy</td>
<td>0.21</td>
<td>Epilepsy (1)</td>
</tr>
<tr>
<td>Stroke</td>
<td>1.96</td>
<td>Stroke (1)</td>
</tr>
<tr>
<td>Accidents</td>
<td>5.42</td>
<td>Accident/injury (1)</td>
</tr>
<tr>
<td>Diabetes</td>
<td>0.50</td>
<td>Diabetes (1)</td>
</tr>
<tr>
<td>Varicose veins</td>
<td>0.14</td>
<td>Varicose veins (1)</td>
</tr>
<tr>
<td>Hearing impairment</td>
<td>0.03</td>
<td>Hearing impairment (1)</td>
</tr>
<tr>
<td>Dental health</td>
<td>0.24</td>
<td>Dental problems (1)</td>
</tr>
<tr>
<td>Food poisoning</td>
<td>0.01</td>
<td>Total number of incidents of food poisoning, 1999-2002</td>
</tr>
<tr>
<td>Other In-patient medical/surgical</td>
<td>21.67</td>
<td>Allocated pro-rata to previous 13 programmes</td>
</tr>
<tr>
<td>Accident &amp; Emergency</td>
<td>3.68</td>
<td>Accident/injury (1)</td>
</tr>
<tr>
<td>Non-maternity costs: Normal Birth Weight</td>
<td>0.29</td>
<td>Average normal weight births, 1997-2001</td>
</tr>
<tr>
<td>Non-maternity costs: Low Birth Weight</td>
<td>0.24</td>
<td>Average low weight births, 1997-2001</td>
</tr>
<tr>
<td>Children's dental health</td>
<td>0.65</td>
<td>Estimated number of children with some decayed and missing teeth, 2002-03 (based on BASCD survey)</td>
</tr>
<tr>
<td>Children's physical disability</td>
<td>0.02</td>
<td>Pupils with statements of SEN with physical or profound multiple learning disabilities, Jan 2002</td>
</tr>
<tr>
<td>Other children's health costs</td>
<td>4.39</td>
<td>Population aged under 16, 2002, 000s</td>
</tr>
<tr>
<td>Maternity costs</td>
<td>5.12</td>
<td>Average births 1997-2001</td>
</tr>
<tr>
<td>Learning disability</td>
<td>2.73</td>
<td>People on local authority Learning Disabilities Registers, all ages, March 2002</td>
</tr>
<tr>
<td>Child and adolescent psychiatry</td>
<td>0.71</td>
<td>All pupils with statements of SEN, Jan 2002</td>
</tr>
<tr>
<td>Mental Illness &amp; other psychiatric</td>
<td>12.24</td>
<td>Mental illness (1)</td>
</tr>
<tr>
<td>Outpatient, Open Access and (part) Day Care allocation</td>
<td>14.72</td>
<td>Estimated number using outpatient services (2)</td>
</tr>
<tr>
<td>Community nursing</td>
<td>4.78</td>
<td>Estimated number using community nursing services (2)</td>
</tr>
<tr>
<td>Chiropody allocation</td>
<td>0.46</td>
<td>Estimated number using chiropody services (2)</td>
</tr>
</tbody>
</table>

(1) Numbers of people reporting treatment for this condition in the Welsh Health Survey 1998

(2) From the Welsh Health Survey 1998: estimated by combining numbers of people by condition for each local health board with the all-Wales proportions using services
### Annex 4.4 - An example of calculating the target share of the HCHS allocation: Gwynedd local health board

<table>
<thead>
<tr>
<th>Hospital and Community Health Services (HCHS) expenditure programmes</th>
<th>Needs indicator (NI) value</th>
<th>Expenditure per NI (£)</th>
<th>NI x Exp per NI (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart &amp; Circulatory Disease</td>
<td>226.3</td>
<td>22,183</td>
<td>5,020,084</td>
</tr>
<tr>
<td>Cancer</td>
<td>682.0</td>
<td>7,951</td>
<td>5,422,608</td>
</tr>
<tr>
<td>Respiratory illness</td>
<td>246.0</td>
<td>13,861</td>
<td>3,409,732</td>
</tr>
<tr>
<td>Arthritis</td>
<td>270.8</td>
<td>4,804</td>
<td>1,301,034</td>
</tr>
<tr>
<td>Back pain</td>
<td>321.8</td>
<td>661</td>
<td>212,804</td>
</tr>
<tr>
<td>Epilepsy</td>
<td>3.8</td>
<td>15,680</td>
<td>59,092</td>
</tr>
<tr>
<td>Stroke</td>
<td>12.3</td>
<td>109,267</td>
<td>1,347,444</td>
</tr>
<tr>
<td>Accidents</td>
<td>90.8</td>
<td>48,245</td>
<td>4,379,895</td>
</tr>
<tr>
<td>Diabetes</td>
<td>44.8</td>
<td>9,148</td>
<td>409,749</td>
</tr>
<tr>
<td>Varicose veins</td>
<td>135.0</td>
<td>840</td>
<td>113,357</td>
</tr>
<tr>
<td>Hearing impairment</td>
<td>125.7</td>
<td>173</td>
<td>21,723</td>
</tr>
<tr>
<td>Dental health</td>
<td>283.6</td>
<td>537</td>
<td>152,298</td>
</tr>
<tr>
<td>Food poisoning</td>
<td>841.0</td>
<td>7</td>
<td>5,576</td>
</tr>
<tr>
<td><strong>Sum of above programmes</strong></td>
<td></td>
<td></td>
<td><strong>21,855,396</strong></td>
</tr>
<tr>
<td>In-patient medical/surgical allocated pro-rata to above</td>
<td></td>
<td></td>
<td><strong>16,733,348</strong></td>
</tr>
<tr>
<td>Accident &amp; Emergency</td>
<td>90.8</td>
<td>32,809</td>
<td>2,978,557</td>
</tr>
<tr>
<td>Non-maternity costs: Normal Birth Weight</td>
<td>1,200.8</td>
<td>186</td>
<td>223,219</td>
</tr>
<tr>
<td>Non-maternity costs: Low Birth Weight</td>
<td>85.6</td>
<td>1,891</td>
<td>161,825</td>
</tr>
<tr>
<td>Children’s dental health</td>
<td>6,448.3</td>
<td>75</td>
<td>482,569</td>
</tr>
<tr>
<td>Children’s physical disability</td>
<td>93.0</td>
<td>255</td>
<td>23,739</td>
</tr>
<tr>
<td>Other children’s health costs</td>
<td>22.7</td>
<td>147,118</td>
<td>3,339,580</td>
</tr>
<tr>
<td>Maternity costs</td>
<td>1,286.4</td>
<td>3,066</td>
<td>3,944,566</td>
</tr>
<tr>
<td>Learning disability</td>
<td>640.0</td>
<td>4,315</td>
<td>2,761,274</td>
</tr>
<tr>
<td>Child and adolescent psychiatry</td>
<td>889.0</td>
<td>829</td>
<td>736,631</td>
</tr>
<tr>
<td>Mental Illness &amp; other psychiatric</td>
<td>115.8</td>
<td>61,210</td>
<td>7,087,444</td>
</tr>
<tr>
<td>Outpatient, Open Access and (part) Day Care allocation</td>
<td>770.9</td>
<td>13,455</td>
<td>10,371,988</td>
</tr>
<tr>
<td>Community nursing</td>
<td>283.7</td>
<td>11,847</td>
<td>3,361,425</td>
</tr>
<tr>
<td>Chiropody allocation</td>
<td>393.8</td>
<td>824</td>
<td>324,596</td>
</tr>
<tr>
<td><strong>HCHS total (sum of all programmes)</strong></td>
<td></td>
<td></td>
<td><strong>74,386,157</strong></td>
</tr>
</tbody>
</table>
Indicators are divided by 100 in this calculation. The weights of 65% for the age index and 7.5% for the rural costs index represent relevant shares of expenditure.

Normalising is the process of adjusting the local health board values by a constant factor so that the Wales total is correct (in this case 100).
Chapter 5: The development of the direct needs model: research based information and lessons from regional consultations

1. This chapter examines in more detail the resource allocation model described in Chapter 4, and considers the issues raised in consultation with local health boards, NHS trusts, local authorities and other interested parties. In planning a second stage of development of the model, it will be important to report reactions in different parts of Wales during the first stage.

2. The chapter has four parts:
   - Part 1: overview of the model;
   - Part 2: contributions of the research team’s report\(^1\) on urban and rural issues affecting the model;
   - Part 3: contributions arising from the consultation roadshows;
   - Part 4: recommendations to implement the model at a second stage.

Part 1: the direct needs model

3. The principle which underpins the model is that the resources available for health care services should be allocated between local health boards in proportion to the needs of their populations, relative to those of the other boards in Wales. This is the basis of an equitable resource allocation on which each local health board can build a more equitable distribution of health care resources within its area, as discussed in Chapter 6.

\(^1\) Review of rural and urban factors affecting the costs of health services and other implementation issues, Assembly, July 2004.
4. The objective is to distribute resources on the basis of a measure of need for health care which is more sensitive to different health conditions than was previous practice. This was examined in detail by the Gordon research team in their 2001 report \(^2\) - they concluded that the best available measure was the Welsh Health Survey, supplemented by other direct data on health need, such as cancer registrations. Although the survey does not cover all health conditions, the team’s advice was that the group of conditions measured were a robust proxy for overall health status. Using the WHS data for resource allocation would represent an improvement on previous formulae that had relied too heavily on measures of service utilisation. They also concluded that the 17 conditions included were likely to provide the same overall results as any other combination of conditions \(^3\).

5. The data are not entirely independent of access to health care services: for example, the WHS questions ask recipients whether they have been treated for specific conditions. This is because the existence of the condition needs to be confirmed by professional diagnosis. It is hard to see how a measure of health need could avoid this link entirely, unless it was replaced by a proxy indicator for health such as socio-economic status or multiple deprivation - as discussed below.

6. In addition, because the model is constructed from needs indicators for specific conditions, which are then combined in proportion to the budget for each condition (or pro-rata to other budgets where specific data are not available - see Chapter 4) it is influenced by the present balance of expenditure at an all Wales level between e.g. acute and community services, or services for mental illness compared with services for respiratory disease.

7. The model produces a needs index which is used to distribute the overall budget for hospital and community services in Wales. The effect of the index is to redistribute resources compared with a distribution which gave every area the same per capita amount, thus the area with the lowest relative need would receive 82% of the average, and the area with the highest need would receive 120% (Chapter 4, Annex 4.1).

How does the direct needs health model compare with the local government distribution model?

8. The design of the health and local government allocation models is similar. Both share the objective of achieving an equitable, needs led distribution of resources between populations. Both break down the overall amount for distribution in proportion to the main expenditure programmes, and then share them between areas according to a number of selected needs indicators.

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\(^3\) Ibid p.142.
9. The allocation of the total to expenditure programmes (such as education, social services and transport), and their sub-categories, is straightforward in the local government model because local authorities plan and budget according to these programmes. This is not the case in health so the construction of the model has depended on the development of programme budgeting, as explained in Chapter 3.

10. The result of both models is to combine needs and costs into an overall index of expenditure per head of population, compared with the average for Wales. The health model is more redistributive i.e. it produces a wider range compared to the average than the local government model, as shown in Table 5.1. The range produced by local authority budgets, which includes locally financed spending, is slightly wider than the SSA index.

Table 5.1 - The range of area rankings in the health and local government resource allocation models

<table>
<thead>
<tr>
<th>Indices (2005-06 figures)</th>
<th>Lowest value</th>
<th>Highest value</th>
</tr>
</thead>
<tbody>
<tr>
<td>health needs model</td>
<td>82</td>
<td>120</td>
</tr>
<tr>
<td>SSA total (SSA PSS)</td>
<td>92 (82)</td>
<td>108 (118)</td>
</tr>
<tr>
<td>local government budgets total (PSS budgets)</td>
<td>85 (82)</td>
<td>114 (122)</td>
</tr>
</tbody>
</table>

(1) 2004-05 budgets

The health needs and the SSA indices are produced by combining a large number of needs indicators and cost weightings. The two models relate to a different set of budgets, with different needs and service responses. We would not therefore expect a close fit in their results and we need to be cautious in comparing them.

11. The fact that one index has a different range from the other, and that individual areas are located differently on the index, could be driven by a number of possible factors:

- the range of needs captured by the indicators;
- the impact of the cost weightings for each needs indicator;
- the impact of cost factors such as sparsity.

12. The way these factors interact will account for the different rankings of individual areas under the two models. The rural areas have higher rankings in the SSA model and the Valleys areas score more highly under the health model. Sparsity is a significant cost weighting in the SSA model, and in addition the transport SSA is generally skewed towards rural areas. In the health model, a rurality weighting is applied to community services, but not to acute services which account for the lion’s share of the HCHS budget.
13. Recognising the differences in the services they cover, there is a case for more exchange of data and expertise between the health and local government models, both to inform future development centrally and to improve our understanding of the impact of the model on local allocations year on year - this is included in the recommendations in Chapter 7.

Is the health allocation model linked too closely to existing patterns of expenditure?

14. During the roadshows some respondents focused on the way the model is constructed by combining data about health conditions with the related HCHS expenditure on those conditions. Some felt that this was a weakness and that we should aim for a distribution that was completely independent of existing health service spend. Others argued that there should continue to be a link with the pattern of health spending, but that the link should reflect the strategic direction of travel rather than the status quo.

15. If we wanted to create an index which was completely independent of health spend we would need to find a set of indicators and weightings - the challenge would be to combine them in an evidence based way.

16. The 17 WHS conditions were devised independently as an overall measure of the health of an area. The resource allocation model uses 14 of these conditions as needs indicators for the health expenditure programmes. If the rankings on each indicator were simply combined, the effect would be to give e.g. the prevalence of varicose veins the same weighting as the prevalence of respiratory disease. By weighting each condition by the cost of treating it, the model aims to translate health need into an evidence based health resource index.

17. Similarly, if it was proposed to move away from health condition indicators and instead distribute resources on the basis of another needs index such as the Welsh Index of Multiple Deprivation, we would face the same problem - how to translate the needs index into a budget index. For example if an area X has twice as many deprived wards as area Y should it receive twice as much funding in per capita terms or some other ratio? Without a link between need and cost it is not possible to produce an evidence based index.

18. As discussed in Chapters 3 and 4, it is important to make early progress in improving the accuracy and coverage of the cost weightings but, in principle, they are important in providing the crucial link between need and the cost of meeting that need. Without this building block it would be difficult to reach agreement on the relationship between need and allocation.
Should the model include desired instead of actual cost weightings?

19. Some respondents argued that, because it uses weightings derived from existing expenditure, the model appears to conflict with the direction of health strategy which is to change the balance of investment. On this argument, the model should adjust the actual expenditure weightings and replace them with others.

20. This proposal would hit a practical obstacle: how would you decide on the precise weightings to be applied once you moved away from the actual expenditure distribution? If the intention was to expand some services’ share of the budget and reduce others’ - what pace of change would be assumed and what would be the end point?

21. This approach would confuse the role of resource allocation with that of strategic or performance management. The role of the model is simply to allocate the overall budget equitably, in line with needs indicators and cost weightings which are as far as possible objective and transparent. The model does not prescribe the distribution of resources between services - aligning services more closely with needs is essential, but it is not the role of the model’s expenditure weightings to achieve this.

Part 2: contributions to the model of the research team report on urban and rural issues

22. The consultation roadshows were informed by this report, and its consideration by the Standing Committee. The research team examined whether the resource allocation model should be modified in respect of the following issues, grouped under the broad heading of ‘rural and urban factors’.

Age

23. The research team concluded that rural areas have an older age profile than urban areas (so a larger proportion of their residents will require more expensive hospital treatments) and that the model may not fully reflect these age-related influences. The team also noted that although this would impact disproportionately on rural areas, the urban areas have more children and young people and would therefore be disadvantaged if the model failed to capture sufficiently the needs of the younger population.

4 Review of rural and urban factors affecting the costs of health services and other implementation issues, Assembly, July 2004
24. The model proposed in August 2001 did use age-banded costs but this was based on data from NHS trusts that didn’t reflect the differential length of stay of older patients. The research team recommended that more age sensitive costings should be incorporated into the model and the Standing Committee accepted this. A methodology for improving costings was developed by the NHS Information Authority and exemplifications show this would produce an adjustment of up to 1% of the target share for some local health boards. This more sensitive costing could be implemented along with other revisions, although there could be a case for review of the methodology: this is an example of the kind of technical issue that needs to be reviewed by an Expert Group as proposed below.

**Diseconomies of scale**

25. The model already includes a rural weighting in respect of community nursing services and the research team recommended that further work should be done to validate this. In respect of hospital services, the team concluded that it may not be feasible to produce an analysis which can identify the unavoidable costs of provision in rural areas because of the poor availability and quality of cost data in Wales.

**Temporary residents**

26. The research team considered the impact of tourists and other temporary residents who are likely to be more numerous in rural areas and in Cardiff. The team concluded that this was an issue for both GMS\(^5\) and prescribing, but did not recommend an adjustment for the HCHS model.

**HIV Aids and infectious diseases**

27. The research team concluded that adjusting the model for these diseases would be difficult because the number of cases each year in Wales are very small and the incidence fluctuates between areas. Overall the total expenditure involved is less than 1.5% of inpatient and day case expenditure.

**Translation and literacy costs**

28. The research team identified a number of possible additional ‘literature and communication’ costs including:

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\(^5\) The care of temporary residents was included in the new GMS contract as part of a single allocation together with fees for emergency treatment within the global sum and calculated on the basis of the average number of claims within the practice over the previous five years.
- translation into Welsh
- translation into other languages
- responding to functional illiteracy in English.

29. The costs are likely to be higher in Wales than in the rest of the UK but form a small part of the budget. One or more of these are likely to affect all local health boards to some extent. The Standing Committee felt that the scale of the expenditure was not sufficient to require adjusting the model.

Haemophilia

30. The research team recommended that the costs of treating haemophilia should be excluded from the resource allocation model and this was endorsed by the Standing Committee.

Asylum seekers and refugees

31. The research team concluded that the model could be adjusted to reflect the needs of this group and suggested that this could be done by an assumption that two thirds will have significant mental health needs. The Standing Committee felt that the relatively modest level of expenditure overall, and its disproportionate impact on a few local health boards, pointed to a specific ring fenced allocation for this group, rather than an adjustment to the model.

Homelessness

32. The research team concluded that there is consistent evidence that the homeless population has greater health needs than the rest of the population, but recommended further work to measure the extent of homelessness in Wales.

33. The definition of homeless used in the research team report\(^6\) is sufficiently broad to include many people whose needs will have been captured by the WHS. Precise figures for those not captured by the model, (mainly rough sleepers) are not available but on the assumption that they amount to around 10% of the homeless numbers quoted by the team, the Standing Committee took the view that the impact on target shares of making an adjustment for rough sleepers would be too small to be justified.

\(^6\) Review of rural and urban factors affecting the costs of health services and other implementation issues, op.cit p.45
Substance misuse

34. The research team concluded that an adjustment to the formula could be made to allocate expenditure on alcoholism, but that further research would be required to identify the treatment costs for associated health conditions. There are currently no reliable data on the distribution of drug addiction at local health board level. The Standing Committee noted that 0.4% of local health board allocations are currently ring-fenced for responding to substance misuse and felt therefore that no adjustments to the model were required.

35. The recommendations of the research team and the Standing Committee’s responses outlined above are summarised in Table 5.1 below:

Table 5.1 - Summary of Standing Committee response to Research Team report on Urban and Rural Issues

<table>
<thead>
<tr>
<th>Issue</th>
<th>Research team</th>
<th>Standing Committee</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Enhanced age sensitivity to be built into model</td>
<td>Accepted for HCHS model</td>
<td>Implementation by Expert Group</td>
</tr>
<tr>
<td>Rurality</td>
<td>Validation of existing methodology</td>
<td>Accepted for HCHS model</td>
<td>Implementation by Expert Group</td>
</tr>
<tr>
<td>Temporary residents</td>
<td>Is an issue for GMS and prescribing but did not recommend HCHS adjustment</td>
<td>Accepted for GMS and prescribing model</td>
<td>Local evidence on implications for HCHS to be presented to Expert Group</td>
</tr>
<tr>
<td>HIV AIDS</td>
<td>No of cases too small to adjust model</td>
<td>Accepted</td>
<td>No adjustment</td>
</tr>
<tr>
<td>Translation/ literacy</td>
<td>Costs higher than rest of UK but still small part of budget – did not recommend adjustment</td>
<td>Agreed</td>
<td>No adjustment</td>
</tr>
<tr>
<td>Haemophilia</td>
<td>Funding outside model</td>
<td>Accepted</td>
<td>Already in place</td>
</tr>
<tr>
<td>Homelessness</td>
<td>Need more evidence on impact of rough sleepers on HCHS</td>
<td>Numbers too small to justify adjustment</td>
<td>No adjustment</td>
</tr>
<tr>
<td>Substance misuse</td>
<td>Further research needed on impact on HCHS</td>
<td>board allocations already ring-fenced for substance misuse</td>
<td>Already in place</td>
</tr>
</tbody>
</table>
The needs of the non-household population

36. Following the report of the research team, the Standing Committee also looked at the health needs of specific groups including:

- residents of residential and care homes
- prisoners
- military personnel.

Residents of care homes

37. Residents of care homes are counted in the Census population estimates and will therefore be included in the population figures underpinning the resource allocation model. But care homes are not included in the Welsh Health Survey although their residents would be counted in other direct measures of health need, such as cancer registrations, which are also used in the resource allocation model.

38. According to the 2001 Census, the population of residential or care homes in Wales amounted to 19,000 which is 0.6% of the population of Wales. This is such a small proportion that, in order to have a significant impact on target shares, it would be necessary to demonstrate that the needs of these residents for HCHS services were significantly greater than those of people in their age group living at home - whose needs are already measured in the model.

39. There is a lack of evidence in Wales specifically comparing the needs of care home residents for HCHS services with those of their peers living in their own homes. This issue was raised by a number of contributors to the roadshows and is discussed further below.

Prisoners

40. Two separate questions have been raised in relation to the resource allocation model and the prisoner population in four local health boards. The first relates to the health care needs of prisoners, and the second relates to the accuracy of the Census estimates of the prisoner population (and hence of the relevant board population) this is discussed in para 47 below.

41. On prisoner needs, the evidence suggests that the range and frequency of physical health problems experienced by prisoners is similar to that of young adults in the community, but that prisoners have a very high incidence of mental health problems. The first response to this is provided by the primary health care facilities within the prison and prison services in Wales have been allocated specific funds for a mental health in-reach programme.
42. Prison inmates are admitted to NHS hospitals as frequently as young adults in the community, therefore the implications of the prisoner population for the inpatient services component of the resource allocation model should be neutral.

43. However there is some evidence that outpatient referrals from one Welsh prison (HMP Parc) are relatively high and this needs to be kept under review, in the light of the experience of the new primary health care provider at the prison, as well as the results of the audit of prison referrals to secondary care being carried out by the prison service in England.

44. The potential impact of the prison population on the model was raised in the roadshows as discussed below.

**Military personnel**

45. Military personnel living in barracks are not captured by the WHS. The advice received from the military services confirms that their needs for health care services are unlikely to be different from those of other young adults living in the community.

**Children’s needs**

46. At present only about 6% of HCHS expenditure is specifically attributed to children: this is distributed according to indicators such as population aged under 16 and numbers of pupils with statements of Special Educational Need. Where children are treated for specific conditions, such as respiratory disease, the expenditure is counted under that condition and allocated according to the needs identified by the WHS (or the other needs indicators built in to the model - which in general do not include children).

47. Therefore, the model assumes for these conditions that the pattern of population morbidity for children matches that for adults. Improvements to the way the model captures the health needs of children will be secured through both the improved Survey evidence and improvements to the costings information through the Programme Budgeting Project (Chapter 3) which plans to attribute costs both by health condition and by age category. This will enable the model to capture both the needs of children and the costs of responding to their needs.

**Reliability of the population estimates used in the model**

48. Any resource allocation model must be based on a consistent population estimate available for all areas. Accordingly, the source of the population estimates used in the direct needs model is the Office of National Statistics, the national population estimating authority responsible for the conduct of the Census.
49. Although there are other administrative sources that are sometimes considered as alternatives to the Census, there are differences of coverage and definition that make them less suitable for resource allocation purposes. For example people (e.g. students, people with more than one home) may be registered to vote at more than one address, although they may only vote at one of them. British citizens who live abroad may still be on the electoral register - but will not be included in the Census figures. People who are not eligible to vote, such as prisoners, will not be on the electoral register, but will be included in the Census.

50. Where the definition of residents used by the Census risks excluding a significant number of local residents in a way which impacts disproportionately on any one local health board, or group of boards, there could be a case for adjusting population shares.

51. An example has arisen in respect of the prisoner population where the Census estimates (counting only prisoners resident more than 6 months) are below the Home Office estimates of average residents counting all prisoners. In the Census estimates, these short-term prisoners will be counted against their previous address - which may be outside the area of the local health board where the prison is situated.

52. An initial study of the potential impact of adjusting for this factor suggests it could be significant for two local health boards: Bridgend and Swansea. In respect of Cardiff and Usk prisons the adjustment would be very small.

53. Students studying away from home are counted as resident at their term-time address - they will therefore be included in the local health board population estimates. We do not have sufficient data to investigate whether students who need elective surgery return home or receive treatment in their term time area of residence. The case for any adjustment for this factor would require evidence that a board is disproportionately affected by the net flows of students coming in or out of their area for HCHS funded treatments.

**Resident or registered populations and cross border issues**

54. The model uses the ONS estimates of resident populations. It is recognised that this is not a precise fit with local health board commissioning responsibilities, which is based on GP practice populations for community services and there may be a case for an adjustment where this impacts disproportionately on a local health board.

55. Where a board’s practice population includes patients resident in England (or vice versa), this is an issue not for the resource allocation model (which is concerned with a local health board’s share of the Welsh population) but for the distribution of resources between the overall budgets for England and Wales. Where a board in one country is commissioning services for patients in another, adjustments are made between the two health departments - this is reviewed on a regular basis.
Part 3: contributions to the model arising from the consultation roadshows

56. The issues discussed above formed the agenda for a series of consultation roadshows held in September 2004. These were held in the National Botanic Garden of Wales, Cwmbran and Mold. The objective of the sessions was to present to local health boards, NHS trusts and local authorities a detailed account of the allocation model and how it has been developed since its introduction in 2002. The sessions included presentations on the new Welsh Health Survey, the way the model is constructed and the links with the Financial Information Strategy and the programme budgeting project. The following is a summary of the issues raised.

Needs

57. Following a presentation about the new Welsh Health Survey and ways in which it will increase the response rate and enable the identification of bias in the results contributors felt reassured that there was a clear timetable for the incorporation of the new data into target shares. This would improve confidence in the results of the Survey as an indicator of broad health needs across an area.

58. The main concerns raised where whether the Survey captured adequately the needs of specific groups which local health boards felt had greater needs than the average, for example:

- residents of long term care homes;
- the prisoner population;
- members of ethnic minorities.

59. A number of points need to be borne in mind in responding to concerns about the needs of specific groups:

- the WHS is designed specifically and scientifically to provide a representative sample of the health status of the household population of an area;
- therefore the results of the Survey will provide an indication of the average health status of an area - this is the product of both above average and below average needs in an area;
- the results are relative - the question is not whether a specific board population has particular needs, but whether their needs overall are greater or smaller than the average;
- if an adjustment is made to the model to increase its sensitivity to particular needs, this will benefit one or a group of local health boards at the expense of the rest, therefore in considering adjustments there is a need to safeguard the interests of all boards.

Criteria for adjustment in response to needs of specific groups

60. Accordingly the criteria for considering an adjustment to the model are as follows:

a. what is the evidence that the distribution between local health boards of the specific needs identified is significantly different from those already captured in the model (either by the WHS data or the other needs indicators)?

b. what is the evidence that any particular board, or group of boards, has a disproportionate share of these needs?

c. what is the likely scale of any adjustments which might need to be made to correct for a. and b.?

d. does the scale of the adjustment justify the cost and expense of the research and administrative work involved?

e. what possible new distortions could be created by this adjustment?

61. If a particular group in the population is not covered by the Survey it would be necessary for it to have substantially greater needs for Hospital and Community Services in order to make a significant difference to the board’s overall share - see Box 5.1.

Box 5.1 - The non-household population

- various sub-groups in the population (e.g. prisoners, the homeless, care home residents) will not be picked up by a household survey like the Welsh Health Survey

- if their needs are similar to the rest of the population this will not matter, if their needs are different and their numbers vary across Wales the accuracy of the formula could be affected

- although differential needs are usually not known, modelling was carried out on the numbers of these sub-groups assuming a higher level of need

- the size of these sub-groups was generally too small to result in a significant effect on target shares.
62. Box 5.2 shows this as a worked example.

**Box 5.2 - Modelling for sub-groups with extra needs**

- estimate the number in the sub-group: say 1,000 out of a total population of 90,000 for local health board A
- if there is no hard information on extra needs, assume a value for sensitivity testing: say 50% more than the average needs index for local health board A of 1.10
- calculate a new set of local health board shares using the enhanced needs
- e.g. local health board A's needs weighted population is 89,000 \(\times 1.10\) + 1,000 \(\times 1.15\) or 99,050 compared to the original 99,000
- this will result in a small increase in local health board A's share of the Wales total needs weighted population.

63. In response to the points raised in the roadshows the Standing Committee's view is that at present we do not have sufficient evidence of the scale of the additional needs for HCHS services attributable to these groups. The evidence should be kept under review by the Expert Group tasked with the development of the model as discussed below.

**Residents of care homes**

64. The needs of residents of care homes are relevant to all local health boards and therefore we recommend that the Assembly should fund a specific research project to evaluate this and make recommendations on whether and how a specific adjustment should be made.

**Prisoners**

65. The evidence on the additional needs of prisoners for hospital services (as opposed to primary care services which are provided within the prison setting) is inconclusive (para 43 above). The number of prisoners treated in hospital would need to be substantially higher than the average for their peer group who are not prisoners, in order to have a significant impact on the local health board's target share.

**Members of ethnic minorities**

66. In respect of the health needs of ethnic minorities, concern was raised on two counts:
a. Is the health status of members of ethnic minority communities captured by the model?
b. Are the costs of responding to the needs of ethnic minorities captured by the model?

67. It is recognised that members of ethnic minority communities demonstrate a higher prevalence of some health conditions - with specific conditions associated with specific groups within the ethnic minority population. The numbers are likely to be too small to be captured by the Welsh Health Survey and in order to have a significant impact on the financial model it would be necessary for the incidence of disease, and its impact on hospital and community services, to be much greater than the average across a number of the disease categories included in the model. (The ethnic minority communities comprise 2% of the population of Wales, 8% of the population of Cardiff and 5% of Newport’s population - the local health boards with the highest concentrations of these populations).

68. In relation to the cost of providing services to these communities, the model does not make adjustments for the cost of treating specific sub-groups of the population - apart from two specific cost adjustments (for age and for rurality in respect of community services). Local health boards receive an allocation based on the measured health status of their population, weighted by the Wales average treatment costs (Chapter 4). To introduce further cost adjustments for specific sub-groups of the population would be complex because the cost data are not readily available and would require disaggregating to very small numbers of cases. Within any local health board population there will be people with above and below average needs, or who require services at above or below average costs. The model cannot be refined to capture all these variations - the process of responding effectively to the pattern of local needs is the role of the commissioning process as discussed in Chapter 6.

Connecting needs and costs

69. The main concern raised in the roadshows was about the data limitations which constrain our ability to connect each health care expenditure programme with a needs indicator for the relevant condition. Chapter 4 explains that at present only about 60% of the budget can be linked directly to specific needs indicators. The rest is allocated on a pro rata basis or by average service usage applied to needs indicators. Although there is no evidence to suggest that this pro-rata element discriminates against any local health board, it would increase confidence in the model if this element could be reduced and ultimately eliminated.

70. This process of refining the model has two complementary strands:
   - increasing the coverage of programme budgeting so that all local health boards’ expenditure is allocated to the 23 health condition categories - as discussed in Chapter 3;
   - linking each budget category to a robust needs indicator from the Welsh Health Survey or an alternative data source.
71. For example, it was pointed out in the roadshows that the model does not include a specific needs indicator or cost weighting for renal services. One way of tackling this would be to consider adding a question on this disease to the WHS - in addition to or instead of one of the other questions. Strengthening the complementary development of the WHS and the Financial Information Strategy is included in our recommendations in Chapter 7.

Population

72. The basis for each area's allocation is its resident population as measured by the Census, adjusted for its relative share of weighted health need. It is therefore essential that the model uses accurate and up to date population figures. Three concerns about the population figures were raised in the roadshows:

- that specific groups might not have been counted - notably prisoners and temporary residents as discussed above;
- discrepancies between 'resident' and 'registered' population figures;
- possible inaccuracies in the Census figures.

73. Particular concern was expressed about the potential impact of large caravan parks in some local health boards where it was suggested people were increasingly taking up occupancy for up to 9 months of the year. It was felt that the numbers concerned could be in the thousands, which would be sufficient to have a significant impact on the board's population estimate.

74. On these issues the Standing Committee's response is:

- there may be a case for adjusting the population figures to take account of short-term prison sentences - this would involve redistributing the population between the local health boards receiving prisoners and a pro-rata reduction in the population numbers of all other local health boards;
- the model uses resident population numbers because these are more stable and reliable than the figures for patients registered with GPs. In all local health boards there will be flows in and out of the area as a result of differences in boundaries between boards and GP practices - overall these are likely may balance out but the figures need to be reviewed to ensure that no board is disadvantaged. Where there is evidence that a board has significant differences between its registered and resident populations, the Standing Committee recommends that an adjustment is made to its resource mapping allocation (see Chapter 4, paragraph 22) used to compare distances between actual and target shares. The direct needs model should remain a resident population based model;
- concerns about the accuracy of the Census figures need to be taken up between individual local health boards and the Office of National Statistics;

- on long term caravan occupancy, the key issue is to establish the extent of such temporary residence, how it is captured in the Census estimates and the pattern of access to hospital and community services of such residents - this would suggest a collaborative research project between those local health boards affected who could then present evidence to the Expert Group proposed below.

**Process**

75. The roadshows also raised the question of the process for considering technical issues which impact on the model and the resource distribution it produces, as well as possible modifications which may be proposed.

76. The objective is to establish an Expert Group, reporting to the senior team responsible for health and social care strategy as recommended in Chapter 7, which provides:

- the technical expertise to understand the model and the implications of data and other changes for local health boards;

- stakeholder input to ensure that the interests of all boards and other stakeholders are protected;

- the capacity to respond clearly to specific concerns within a clearly understood timescale.

77. The Group will need to establish a process for incorporation of new data to inform target shares. The aim is to ensure that the model is based on the most up to date and accurate information on both needs and costs. However, updating sometimes produces large changes in target shares which may or may not reflect real changes in relative need. Accordingly there may be a case for smoothing out large fluctuations, for example by basing the target shares on a 3 or 5 year rolling average, and by capturing as many changes as possible in each update so that changes in opposite directions are cancelled out.

**Future work programme**

78. Box 5.3 sets out the development issues which will need to be taken forward by the Expert Group.
Box 5.3 - The resource allocation model: development work programme

**Population and other data** - accuracy and updating; process for incorporating new data into revised target shares, balancing stability and responsiveness;

**Needs measures** - validation for each expenditure programme plus on-going overview validation against other indices; incorporation of new WHS data as it becomes available;

**Cost weights** - improve mapping of expenditure to needs by incorporating extended Programme Budgeting data;

**Coverage of the model** - extension to primary care prescribing (Task and Finish Group to report by summer 2005) and consideration of UK review of impact of GMS model.

Summary of response to roadshows

79. Table 5.2 below summarises the points raised in the roadshows and the Standing Committee’s response.

Table 5.2 - Summary of points raised and the Standing Committee’s response

<table>
<thead>
<tr>
<th>Broad issue</th>
<th>Specific</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>needs</td>
<td>robustness of the WHS as general measure of health need</td>
<td>detailed timetable for incorporation of data from new improved Survey proposal for local health board engagement with WHS steering group</td>
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<tr>
<td></td>
<td>possible specific adjustment for needs of prisoners, temporary residents and residents of care homes</td>
<td>Assembly to consider funding research study of care home residents, local health boards to research prisoner and temporary resident needs</td>
</tr>
<tr>
<td>costs</td>
<td>improve reliability of cost data and linkage with needs indicators; reduce pro rata element</td>
<td>agreed milestones for Programme Budgeting project</td>
</tr>
<tr>
<td>population</td>
<td>consider population adjustments for temporary residents and prisoners</td>
<td>to be considered by Formula Development Expert Group in light of local evidence presented by local health boards</td>
</tr>
<tr>
<td></td>
<td>need to audit differences between registered and resident population numbers</td>
<td>to be reviewed by expert group to ensure that use of resident population does not disadvantage any local health board</td>
</tr>
<tr>
<td></td>
<td>concern about accuracy of census figures</td>
<td>local health boards to pursue with ONS: Census is best available source of population data</td>
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</tbody>
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Part 4: Conclusions for stage 2 of the implementation of the model

80. This chapter reports on the detailed work that has been done since 2001 to refine and develop the model, and the data on which it is based and to respond to detailed concerns raised by local health boards and others. Throughout, the aim has been to follow a process that is objective and fair to all parts of Wales.

81. Much of the debate about the model has focused on the case for specific adjustments to capture the needs of particular groups within one or more board areas. As discussed above, some deserve to be investigated more fully, but it is vital not to lose sight of the overall principles and structure of the model nor the scale of impact of each potential adjustment. The impact of adjustments that are vigorously advocated by some participants can be extremely small.

82. The approach underpinning the model, in common with all needs based area resource allocation formulae, is to use a set of broad indicators to measure relative need between areas. It is not practicable to devise a system which captures all aspects of need in every area. The needs of individuals and areas change over time and a methodology which attempted to measure the needs of every individual would be highly complex and impossible to keep up to date. But careful selection of representative small populations or communities for extended and comprehensive enquiry to allow the model to be applied in depth as well as in breadth, must become the key to scientific progress.

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<th>Broad issue</th>
<th>Specific</th>
<th>Response</th>
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<tbody>
<tr>
<td>validation</td>
<td>need to compare results of model with others e.g. local government SSA model and the Welsh Index of Multiple Deprivation</td>
<td>models relate to different services and client groups and we would not expect close fit, but need for exchange of data and expertise to understand effects linkage with costs is robust in principle – will be refined as programme budgeting completed</td>
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<tr>
<td></td>
<td>need to review linkage of needs with costs and consider feasibility of creating needs index which is independent of existing expenditure</td>
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<tr>
<td>coverage</td>
<td>application of needs model to GMS and prescribing</td>
<td>Prescribing Task and Finish Group to report by summer 2005</td>
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<td></td>
<td></td>
<td>review of GMS model planned (Chapter 4)</td>
</tr>
<tr>
<td>process</td>
<td>need clearer and quicker process for considering and responding to specific issues raised by local health boards</td>
<td>Formula Development Expert Group proposed</td>
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Individual local health boards tend to focus on groups within their area with above average needs, but care has to be taken to balance those groups with others with below average needs and what are the needs of the local population as a whole. The model is designed to capture the relative overall needs of a local health board population and as such it combines above and below average needs.

The model is concerned with relative need and the equitable distribution of a fixed sum. Therefore to justify an adjustment it is necessary not simply to demonstrate that a specific need exists in an area, but that the local health board’s share of that need is likely to be significantly different from its needs share determined by the indicators already included in the model.

It is also vital to consider the needs of all local health boards - each adjustment in favour of a board or group of boards must result in a downward adjustment elsewhere. Introducing adjustments to deal with detailed potential differences in relative need risks introducing excessive complexity and creating unforeseen anomalies. In considering the case for specific adjustments we must not lose sight of the goals of broad fairness over time, simplicity, transparency and stability.

By far the most important practical issue is to develop the model into a comprehensible and practical tool to help local health boards in the vital work of prioritisation at local level - this is discussed further in the following chapter.
Chapter 6: Translating equitable budgets into equitable action: the major role of local health boards

1. *Targeting Poor Health* summarised the consensus that, although health and social care services can have only a limited impact on the incidence of disease, access to effective care and treatment can have a major impact on its severity and impact.

2. Thus, action to reduce inequalities in health must focus on the key objective of prevention - including early intervention to prevent or minimise the disabling effects of disease. The aim is to reconfigure services to do a better job of identifying need and directing action in response.

3. As explained in the preceding chapters, the direct needs health resource allocation model is designed to ensure a fair distribution of financial resources in relation to need between local health boards. This will provide a platform for action by boards to ensure that the way their budget is actually spent is fully aligned with the needs of their population. The model will not ensure equity at local level - this can be achieved only if local health boards and NHS trusts take the necessary innovative action themselves.

4. This chapter attempts to illustrate what is meant by equity in the commissioning process and explains the links between equity and:
   - effectiveness
   - prevention, and
   - value for money.

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1 *Targeting Poor Health*, (2001), para 2.4
Equity of service

The principle of equity requires ensuring that:

a. health care services provided for “disadvantaged” populations are neither of poorer quality nor less accessible than for “advantaged” populations;

b. the allocation and application of resources is related to need and not to income; and

c. all those in poor health, and especially those in extreme ill-health, can in fact be reached, and are reached, by services that are both available and appropriate for their needs.

All three of these elements require special planning and extra efforts on the part of administrators, managers and professional participants.2

5. The chapter explains how local health boards can have greater scope in future years in promoting equity of service. It acknowledges the barriers to joining up the financial and service analysis which needs to underpin action, and identifies the tools available to help local health boards in taking this forward. In 2004 local health boards had already gained experience of their key role in steering developments. In a very short time they prepared local action plans. Many of these are impressive, but they vary greatly in treatment and comprehensiveness. Thus, extensive reports were prepared by some local health boards, especially by those with a history of funding below target needs, like Torfaen and Caerphilly, but in other cases reports were more summary and less analytical, though invariably interesting.

6. The Annex provides illustrative examples of the initial local action plans prepared in 2004. Summarising them here is designed to show the value of constructing local plans that share certain common ingredients but call attention to special local needs and developments.

Equity led commissioning: the analysis

Linking needs and expenditure data

There are three features of the approach that local health boards can take:

• board receives equitable share of national cake - needs based budget

• board analyses local health need data underpinning the resource allocation model (plus other relevant data on sub-local health board distribution)

• board analyses local expenditure by health condition data underpinning model - to examine fit with needs data and comparisons with all Wales average.

7. The national objective is funding for local health boards that reflects the needs of their areas. Therefore, in preparing budgets, boards will want to reflect the same principle - as shown in the box above. They will also want to build constructively in their planning on good local precedents. There were some imaginative examples among the local action plans prepared in 2004. Some examples include:

- project to tackle child poverty in Townhill, (Swansea LAP p.25)
- food and nutrition strategy co-ordinator (Ceredigion LAP p.15)
- action to reduce smoking in pregnancy especially among disadvantaged groups (Flintshire LAP p. 20).

8. The box below suggests the kinds of questions that local health boards need to ask in analysing the existing distribution of their budget.

**Starter questions for local health board development planning**

- How is our budget currently spent?
- What are the largest expenditure items? Do they reflect standard priorities and do they fit the patterns of data about needs? What value for money are we getting from each service/budget line? How many people are served and what is the benefit to them? Is the service intervening early enough/targeting those at greatest risk?
- How does the cost of the service compare with all Wales average - is the service relatively expensive or relatively cheap - what does other data tell us about its quality and effectiveness?
- If spend is above average, is this justified by higher needs, is the service too expensive or are we providing a higher quality service and is this justified by its impact?
- What are the fastest growing components - what is driving this and what needs to be done to increase preventive and reduce reactive spend?
- If spend is below average, does this reflect need, what quality/impact are we getting, what would be the impact of increased spend - how does this compare with existing investment elsewhere?
- What opportunities could we create to spend the money differently with greater impact?

9. To apply the principles of equity in commissioning, local health boards need to pull together two types of analysis:

- financial analysis - how the budget is currently spent, what the money buys and options for better vfm, lower or higher spend, opportunity costs;
- quality/effectiveness analysis - people reached, needs, outcomes - life/health expectancy/quality of life impact.
10. These are not new issues - they are already addressed by, for example, audit, benchmarking and value for money studies. The challenge is applying value for money analysis to budget planning, and making the linkage between quality, effectiveness and resource allocation. The tools for translating these data into proposals for local action are considered below: the starting point is to identify the values of equity and effectiveness which should guide the process.

**Values: why should commissioning be driven by equity?**

11. Health and social care services in Wales are engaged in significant reconfiguration and modernisation, designed to address the performance and sustainability issues identified in the Review of Health and Social Care.

12. During this process of organisational change, local health boards have a unique role in ensuring that fairness, and responsiveness to individual need, are at the top of the agenda. This means re-evaluating the way services are delivered and, in particular, concentrating on reaching people who have complex multiple needs and can be the most difficult to help.

13. This is important for two reasons:

- fairness - it is unfair that some people have better access to health and social care services than others whose needs are greater;
- effectiveness - increasing equity is essential in order to help us make a real impact in reducing ill-health; some groups of the population will improve their health and expectation of healthy life through their own efforts, others face far greater obstacles of environment and opportunity - their relative position will deteriorate unless services become more effective in meeting their needs.

14. Local health boards have an opportunity to champion equity and to ensure that the process of service change is guided more sharply in the direction of fairness and meeting the greatest needs.

**Equity, effectiveness and prevention**

15. The evidence suggests that, for any given level of service provision, people with higher income will succeed in getting the best service. Unless we set out deliberately to correct this, the poorest sections of the population, including a disproportionately large number at risk of severe ill-health and disability, will not receive the services they need to prevent ill health and improve quality of life. This well established problem was described as the ‘inverse care law’ by Dr Julian Tudor Hart in 1971.³

16. Although many of the determinants of ill-health are outside the scope of local health board action, the way services are commissioned, planned and delivered has a major impact on how people receive care and on whether treatment is as effective as possible.

17. The focus on effectiveness brings together

- the imperative for service change which is driven by the pressures on the health and social care system;
- the imperative for greater equality which is driven by growing inequalities in health.

18. Both imperatives point clearly to greater responsiveness, at an earlier stage, to individual needs. From both perspectives, the present pattern of services must change:

- from the perspective of affordability and sustainability, we have the wrong sorts of services: we are investing too much in the acute sector and not enough in community support and prevention;
- from an individual perspective, we have the wrong sorts of services: we are reaching some people too late e.g. when they need acute care because the earlier interventions either are not in place or are not accessible to them, and we are not meeting the needs of many long-term ill and disabled people who require enlightened continuing support.

19. In the process of change, local health boards must ensure that the new patterns of services are designed to reach the most disadvantaged people in their areas. Working with them to provide effective support and preventative services offers the prospect of substantial gains in health and in years of healthy life.

**What can local health boards do - the next phase of local action**

20. Because needs will always be greater than available resources, local health boards need to approach equity of service from two complementary starting points:

- identifying needs which are currently not met and prioritising them from the perspective of equity - whose needs are greatest, and effectiveness - where could additional investment achieve the greatest benefit in reducing inequalities in health within the area?
- identifying services where spending is above average, to find whether that is justified, in terms of either equity or effectiveness, so that resources can be switched more easily to particular priorities.

21. Some would argue that encouraging local health boards to seek out unmet needs is unrealistic, when services are struggling to meet already existing demands. But the evidence from the consultation roadshows, as well as discussions with individual local health boards, is that they
are fully convinced of the case for more proactive and preventative action to reach those most in need - on grounds of both equity and effectiveness.

22. What they find difficult is how to do this - how to scrutinise their existing baselines effectively and develop plans which over time will enable more needs to be met more effectively.

A possible toolkit for local health boards

23. Because so much of health service resources appears to be tied up in the cost of existing services, and meeting apparently limitless demands, it is vital that we help boards to examine the effectiveness of existing patterns of investment and identify the scope for redirecting resources to areas of greatest need.

24. This is a very challenging task but boards do have access to a number of different resources which need to be brought together to inform local decision making:

- financial analysis - programme budgeting and marginal analysis;
- needs analysis, including the new primary care disease registers;
- professional experience;
- national service frameworks;
- equity audit;
- local concerns and priorities.

Financial analysis

25. One of the most powerful tools is to understand better how the local health boards’ budgets are being spent, how the distribution compares with the pattern of need, where expenditure is growing fastest and why, which budgets are most generously funded and what benefits are derived from them.

26. The improvements in financial data planned through the Programme Budgeting Strategy will, within the next two years, provide each board with a detailed breakdown of its budget by health condition, compared with the average level of expenditure by local health boards in Wales. Chapter 3, Annex 3.2 shows the kind of analysis which will be available.

27. This will help local health boards to check whether relatively high or low expenditure reflects genuine differences in need, excessive costs, or other factors which offer scope for action either to improve the service or redistribute resources to other areas.
28. To analyse individual service areas in more detail, boards will need to commission further research on patterns of admission and treatment between localities and population groups. These data may be readily available from NHS trusts, or may require specific research linked to the needs data discussed below.

29. As set out in Chapter 3, the aim of programme budgeting is to provide boards, and other stakeholders, with financial information in a form which will allow them to analyse how their current budget is being spent, and how it could be better spent to improve health outcomes. This will allow the application of techniques such as marginal analysis which have been developed to facilitate changing the balance of the budget to increase health gain. Professor David Cohen has described a process for applying this which uses financial information and local knowledge to identify options for change⁴.

Programme budgeting and marginal analysis

30. The marginal analysis approach is resource neutral and concerned with increasing impact from a given budget, by identifying improvements in services which will increase equity and effectiveness within the overall budget envelope determined by the needs model. It can be applied most easily by identifying changes in budget from year to year, and specifying what results have been brought about by these “marginal” changes.

<table>
<thead>
<tr>
<th>Marginal Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>- a framework based on principles of economics used to examine a current balance of expenditure between programmes or within a programme</td>
</tr>
<tr>
<td>- focus on the benefits of expansion weighed against the impact of contraction</td>
</tr>
<tr>
<td>- the analysis examines the effects of altering the existing pattern of expenditure</td>
</tr>
<tr>
<td>- for every candidate for investment, a candidate for dis-investment must be identified</td>
</tr>
<tr>
<td>- if gain from investment exceeds disbenefit from disinvestment then a resource neutral improvement is achieved.</td>
</tr>
</tbody>
</table>

Needs analysis

31. The needs analysis which underpins the local health, social care and wellbeing strategies has already identified unmet needs in each area. A clearer focus on equity will help boards to prioritise these, and identify those changes in service which could make the most difference.

32. The needs data provided by the Welsh Health Survey which underpins the resource allocation model, is readily available [http://www.wales.gov.uk/keypubstatisticsforwalesheadline/content/health/2005/hdw200507271-e.htm](http://www.wales.gov.uk/keypubstatisticsforwalesheadline/content/health/2005/hdw200507271-e.htm) The challenge for boards is to distil this, and other relevant data, to identify how to respond, drawing on the expert advice of the Directors of Public Health on the action which can be taken most effectively at local level.

33. During the consultation roadshows on the new health allocation model, summarised in Chapter 5, some local health boards emphasised specific groups with above average needs but were not able to quantify their impact. This suggests that, to inform their commissioning decisions, boards need to quantify these needs more precisely, item by item, and to establish how they impact on the different tiers of health and social care. Where there are specific issues which affect a group of local health boards, there needs to be collaboration to support modest research projects for example into the impact of long term caravan dwellers, or those leaving prison.

34. Where there are indications of differential needs which apply more widely, there is a case for on-going research at a national level, for example, into the health needs of residents of long term care homes - to inform both the national resource allocation model and local planning, as proposed in Chapter 5. There is also a case for collaborative research by local health boards and national research departments to resolve local issues of major consequence - for the local population but for other localities in Wales too.

**Professional experience**

35. The evidence from the Inequalities in Health Fund and the Equity and Advocacy Grant pilot programme (Chapter 2) suggests that there is a wealth of experience and ideas amongst professionals of ways in which services, both within and beyond health and social care, need to improve to meet people's needs more effectively. These include changes which may or may not involve significant extra cost. Local health boards need to create opportunities for these ideas to be encouraged, considered and acted upon - through systems which take account of the day-to-day pressures on professional time.

**National Service Frameworks**

36. The entire rationale of the national service frameworks is to reduce inequalities in access to services across Wales. Through evidence based standards for clinically effective services, they provide an action plan to lever up standards across and within local health board areas. Each NSF starts from a baseline audit of services which shows the starting point for improvement.
37. The NSF documents underline:

- why an inequalities focus is essential to improving effectiveness of care and treatment
- why local health boards need to focus on inequalities within their areas, as well as how their areas compare with others.

38. The Diabetes NSF illustrates this.

**Aims of Diabetes NSF**

This NSF aims to empower people with diabetes, through skills, knowledge and access to services, to manage their own diabetes, with support, and fulfil their potential to live long lives free of the complications that can accompany diabetes.\(^5\)

**Diabetes does not affect everyone equally: how services need to respond to unequal risks and life circumstances\(^6\)**

There are significant inequalities in the risk of developing diabetes, in access to health services, the quality of those services, and in health outcomes, particularly with regard to Type 2 diabetes.

Type 2 diabetes is up to six times more common in people of South Asian descent and up to three times more common in those of African and Afro Caribbean descent, compared with the white population.

The prevalence rises steeply with age - older people may experience discrimination in the degree of active management offered compared with younger people, this is clearly unacceptable.

Type 2 diabetes is more prevalent among less affluent populations: those in the most deprived fifth of the population are one-and-a-half times more likely than average to have diabetes at any given age; both mortality and morbidity are increased by socio-economic deprivation and morbidity resulting from diabetes complications is three and half times higher in social class 5 than social class 1.

\(^5\) *National Service Framework for Diabetes in Wales Delivery Strategy, Assembly March 2003 p13*

\(^6\) ibid. p9 et seq
Thus the Diabetes NSF should be a strategy for addressing inequalities in both service and outcomes - this is equally true of the other NSFs already published and those in preparation. The key issue is whether implementation will succeed in establishing the systematic and standardised approaches advocated in the baseline review of services, based on population based registers to help patients manage their own diabetes and to target treatment to those individuals with poor control and higher risk of developing complications.

The baseline shows significant variations both in specialist staffing levels across Wales, and in the numbers of patients seen in specialist clinics. The review cautions against drawing firm conclusions from these data because there are no evidence based guidelines on optimum staffing levels in relation to population or at diabetes clinics. However the conclusion is that they indicate: 'a very uneven picture and one which will require urgent attention in some areas if the appropriate level of patient contact is to be achieved.'

**Equity audit**

An “equity audit” is a process for checking that the pattern of access to care and treatment is consistent with underlying need. The box shows the steps in the process.

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**Matching needs with real changes in service or health provision**

**Step 1**: identify a broad issue: starting with a well-known inequity, like relatively low utilisation by low-income unskilled workers or by the mentally ill, or an issue given high profile in national or local reports;

**Step 2**: choose a particular topic believed to demonstrate potential health gain, financial savings, pin-pointed additions or re-configuration of service to meet need in a more balanced way. One illustration would be a specific inquiry to locate individuals and families with health problems not hitherto perceived or not sufficiently treated professionally;

**Step 3**: confirm and quantify inequity: by evaluating the relationship between provision and need;

**Step 4**: set standards or targets for achievement in terms of equity, and identify the stages, necessary costs and adaptations of service organisation to bring about the desired improvement;

**Step 5**: monitor progress rigorously year by year.

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7 Diabetes services in Wales: *a baseline review of service provision by the Audit Commission in Wales*, Audit Commission 2003.

8 Ibid p65

9 based on *Introduction to Health Equity Audit*, West Midlands Public Health Observatory.
Local concerns and priorities

43. Local health boards are in the unique position of being able to set expert professional advice in the context of local concerns and priorities to determine an agenda and set of priority actions. This is a two way process - local health boards can explain the budget available to them and how it takes account of local needs, and engage the public in the debate about how to respond more effectively to local need within this overall envelope. Ensuring that vulnerable and disadvantaged people are engaged in this process will be vital for both effectiveness and equity.

The local action plans

44. In the local action plans prepared in 2004, the local health boards have set out their priorities for more preventative services, which include proposals for responding more effectively to the most needy and vulnerable patients. Local health boards know where more resources are needed. The challenge they face is to redirect resources within their allocation to meet these priorities. This means using the tools set out above to identify budgets where investing less would have a smaller impact than the gains expected from the development proposals set out in the local action plan.

45. The plans reveal that all local health boards have identified areas where action is needed to change the pattern of investment - this is required regardless of local health boards’ relative funding position. The implementation of the direct needs resource allocation model over time will mean that local health boards whose budgets are below their relative needs share will be expected to carry out this budget restructuring within an overall envelope which is growing at a faster rate than the Wales average.

46. However, the scale of the needs in their areas means that they will be unlikely to make sufficient progress simply through investing their share of differential growth - they will also need to re-invest from existing resources. Local health boards whose budgets are significantly above relative need will be required to restructure with a lower level of growth.

47. The Annex to this chapter illustrates approaches to development being pursued by local health boards. The Townsend/Wanless allocation of £30 million for 2004-05 contributed to these plans according to the relative needs of each board as measured by the model, but there must be a continuing process of local development and re-allocation to ensure a better match between the core budget and local needs. This will mean giving a lot more thought to the percentages of budget to be allocated to different spheres of service, as well as to shortfalls in meeting individual need for health care.
48. Although this is a very challenging exercise for local health boards, the scale of their plans needs to be seen in perspective, in the context of their overall budgets. For example, the Denbighshire Local Action Plan identified two top development priorities costed at £965,000, towards which they received £466,000 from the 2004-05 Townsend/Wanless allocation, leaving a balance of around £0.5 million, which is around 0.5% of the 2005-06 allocation of £95 million.

Conclusions

49. Implementation of the direct needs resource allocation model will mean that the quantum of resources coming in to local health boards will be determined on an equitable area basis. This difficult process in attaining a national objective must now be matched by corresponding local initiatives. Local health boards can seize the opportunity to develop a programme to:

- analyse in detail the balance of expenditure and the pattern of growth between services, areas and client groups;
- evaluate the status quo distribution against the evidence of need and unmet need;
- test this balance of expenditure against an equitable distribution by identifying unmet needs and measuring the benefits of increased investment to meet those needs against disinvestment elsewhere; and
- review the percentage of the budget allocated to different types of service, in relation both to the national average and to the pattern of health and health care need nationally and locally.

50. The local health boards’ 2004 local action plans already include examples of proposals to respond better to inequality and disadvantage - the dimension which needs to be strengthened is to identify specific inequalities in health within the local health board area and to shift resources to reduce them. This does not always mean introducing new services, it can also mean looking at the way existing services are run, to ensure, for example, that the way tests are commissioned, and time with patients allocated, is equitable in relation to individual need.

51. To help local health boards and their partners achieve a more equitable distribution of resources, at every level of service, the priorities for health and social care nationally, and the performance management framework, need to be aligned with an equity strategy - as discussed in the next chapter.

52. A rolling healthcare development programme prepared and presented annually by local health boards is a vital step. After the allocation of targeted funding by the Assembly to tackle health inequalities, and on the basis of 1) extensive new information about health needs, and 2) an explicit, needs led, funding formula, local health boards have in 2005 an unprecedented opportunity to achieve equity for their communities and set priorities for the future that will gain universal approval in Wales.
Illustrative examples of local health boards’ development proposals, in the context of existing and target budgets.

**Merthyr Tydfil**

**2005-06 budget: £57.2 million, target share £58.5 million**

In 2005 Merthyr received 2 per cent less than estimated target needs (Annex 4.2). According to the direct needs model, funds were moving in the right direction, though not yet far enough. Compared with average hospital and community services expenditure per person in Wales, needs for resources in Merthyr had been estimated to be 19 per cent larger. Only one other local health board area (Blaenau Gwent) had higher needs (Annex 4.1).

The local action plan covers more than 100 pages. In 2001 the population was 56,000. There is “outward migration of younger people and a falling birth rate.” The population aged 80 and over is increasing. The area has high unemployment and “significant deprivation with associated poor health and well-being.” There are “above average levels of smoking, heavy drinking, low levels of exercise, poor diet and low social capital.” Life expectancy is significantly lower than the Welsh average, with relatively high levels of death from heart disease, stroke, chronic obstructive pulmonary disease and cancer. Self-reported anxiety and depression is 66 per cent higher than the Welsh average.

Among priorities picked up in a succession of workshops were the need to integrate quickly the primary care, social and community services to make “health promotion and ill-health management … core features of activity”; to introduce more screening but also “rapid response services” and fill the “gap” of rehabilitation. A “Primary Care Mental Health Liaison Service” had to be developed. Proposals (p.31) included “universal and faster access to health and well-being services.” Core services needed to include chronic disease management, child health surveillance, mini-surgery and shared care schemes. Enhanced services included community mental health services, sexual health services, drug and alcohol services, dental health services. The teams to be recruited for these services are specified and costed.

The plan set out 18 prioritised schemes with recurrent costs totalling £1.7 million (p. 62). The local health board received a contribution of £0.4 million from the 2004-05 Townsend/Wanless allocation in support of these plans.
Table 1 - Merthyr Tydfil local action plan proposals

<table>
<thead>
<tr>
<th>Scheme</th>
<th>cost £000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental health crisis resolution home treatment</td>
<td>357</td>
</tr>
<tr>
<td>Older people intermediate care team</td>
<td>228</td>
</tr>
<tr>
<td>Project manager</td>
<td>52</td>
</tr>
<tr>
<td>Primary care premises (£20,000)</td>
<td></td>
</tr>
<tr>
<td>Mental health assertive community support and recovery team</td>
<td>255</td>
</tr>
<tr>
<td>Primary care mental health teams</td>
<td>103</td>
</tr>
<tr>
<td>Phlebotomy service in primary care</td>
<td>63</td>
</tr>
<tr>
<td>Community physical activity programme</td>
<td>44</td>
</tr>
<tr>
<td>Heart failure nurse</td>
<td>30</td>
</tr>
<tr>
<td>Surgical assessment model</td>
<td>140</td>
</tr>
<tr>
<td>Extended roles for radiographers</td>
<td>26</td>
</tr>
<tr>
<td>Smoking cessation</td>
<td>64</td>
</tr>
<tr>
<td>MRI scanner - revenue costs</td>
<td>128</td>
</tr>
<tr>
<td>Population nutritional improvement team</td>
<td>95</td>
</tr>
<tr>
<td>CAMHS primary mental health team</td>
<td>66</td>
</tr>
<tr>
<td>Case management team</td>
<td>32</td>
</tr>
<tr>
<td>OD support (£30,000)</td>
<td></td>
</tr>
<tr>
<td>Project support (£66,000)</td>
<td></td>
</tr>
<tr>
<td><strong>Total recurrent costs</strong></td>
<td><strong>1,683</strong></td>
</tr>
</tbody>
</table>

In hospital care there were gaps in services - including 1) discharge support, 2) rapid response to avoid unnecessary admission, with “elements of a hospital at home service” and out-of-hours support, 3) care and support services for those with chronic diseases, with community nursing and primary care, especially in the case of respiratory problems, coronary heart disease and diabetes backed up by hospital and community specialist teams; 4) services to deal with falls, and 5) better planning and provision of respite care.

The plan accepts the need for extensive re-organisation of services and of patterns of professional work to meet needs. This is being taken forward by the local health board and its partners through a series of fundamental service reviews which highlight the need to integrate actions to:

- respond to underlying need through more flexible and responsive services;
- implement new models of care;
- restructure buildings and services to support the new care pathways.
Denbighshire

2005-06 budget: £95.4 million, target share £83.1 million

The local health board is estimated to be receiving 15 per cent more than targeted resources (the second highest in Wales) (Annex 4.2). Health inequalities within the local health board area are a key issue - with substantial variations between deprived areas such as Rhyl West, Rhyl South, Meliden and Upper Denbigh, and more prosperous parts of the county.

The 2004 action plan identified five priorities:

1) Older people
2) Children, young people and families
3) People with mental health problems
4) Key health outcomes, e.g. coronary heart disease, cancers, injuries
5) Areas of deprivation, especially in Rhyl.

Under each of four selected themes - prevention, optimising service delivery, involving people, and performance and accountability - four priorities, listed as “prevention,” “delayed transfers of care,” “remodelling and redesign,” and “referral from primary care,” were described, with estimated costs.

The first two priorities included the following specific measures (recurrent costs given):

Table 2 - Denbighshire Local Action Plan proposals

<table>
<thead>
<tr>
<th>Scheme</th>
<th>Cost £000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional places in the independent sector to reduce pressure on the continuing care system</td>
<td>41</td>
</tr>
<tr>
<td>A social worker for the Community Assessment Partnership team, targeted at vulnerable older people</td>
<td>32</td>
</tr>
<tr>
<td>Appointment of joint commissioner for mental health</td>
<td>37</td>
</tr>
<tr>
<td>Appointment of manager for modernisation of services</td>
<td>37</td>
</tr>
<tr>
<td>Mental health counselling service</td>
<td>100</td>
</tr>
<tr>
<td>Community assessment partnership money for management, care packages and targeted service for East Rhyl</td>
<td>150</td>
</tr>
<tr>
<td>Alternative house care service to reduce admissions to acute services</td>
<td>197</td>
</tr>
<tr>
<td>Rapid response team to prevent unnecessary admission, especially of older people</td>
<td>208</td>
</tr>
<tr>
<td>Full-time co-ordinator for hospital at home scheme</td>
<td>22</td>
</tr>
<tr>
<td>GP software to facilitate reduction of waiting time</td>
<td>40</td>
</tr>
<tr>
<td>Appointment of Intermediate Care manager to strengthen care of older people</td>
<td>40</td>
</tr>
<tr>
<td>Appointment of Care Co-ordinator for mental health</td>
<td>41</td>
</tr>
<tr>
<td>Total</td>
<td>965</td>
</tr>
</tbody>
</table>
The local health board received around half the total cost of these top two priorities in its Townsend/Wanless allocation of £466,000 for 2004-05.

At the 2001 Census, the population was 93,065, of whom 20.2 per cent were aged 65 and over. As in other areas the population 85+ is projected to rise quickly during the next years. The board is keenly aware of this feature of its future work.
Chapter 7: Unfinished business: conclusions and recommendations

1. The Assembly decided in 2000 to engage a team of research experts, representatives of the NHS and others to work to counteract the insidious and remorseless growth of inequalities in health. Trends in access to health and health care in the early years of the 21st Century have reinforced the wisdom of that decision.

2. Some of the latest evidence for 2000-2005, from international and national sources, forms a basis for this entire final report, following the first report Targeting Poor Health in 2001. Despite strong efforts in Wales to close health inequalities, they remain wide and, in some respects, have grown wider. Annual data about health since 2001 have not demonstrated the steady rate of improvement across conditions, and across communities, that had been hoped for.

3. In 2001, the more deprived the local authority, the lower the life expectancy of the population within that locality. This conclusion still stands. In the Chief Medical Officer’s report for 2004-05 the average number of expected years of life were three or four lower in Merthyr Tydfil and Blaenau Gwent than in Gwynedd, Flintshire and Monmouthshire. Reported poor health was nearly twice as high. Rates of limiting long term illness, which reflect mortality rates, were similarly unequal for these areas at the bottom and top of the scale.²

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2 Chief Medical Officer (2005), Health Status Wales 2004-5, Cardiff, Assembly.
4. Targeting Poor Health set out strong recommendations for policy and action. The progress that has been made, particularly in strengthening the direct needs model through survey research, allocating resources more equitably to local health boards, and conducting experiments to raise the public profile of the dual strategy of action, inside and outside the NHS, is reported in earlier pages. But, in extent and severity, the problem remains. Redoubled efforts have to be made in the next stages of joint planning to achieve:

- **equity in the funding of local health boards**: which means making more rapid progress to bring their allocations into line with their rightful share - as measured by their direct health care needs;

- **equity in commissioning by each local health board** - restructuring budgets locally to target resources on the needs of particular categories of the population: the mentally ill and disabled, other disabled people and the elderly, but also in general those individuals who are materially and socially deprived;

- there needs to be a **rolling 3-year national health improvement plan** - which sets out how the national health targets will be achieved, and provides an account of progress in matching effective investment to the greatest needs, together with:
  - **corresponding 3-year local health improvement plans**, updated annually, to complement the national plan, which provide an account of local action to improve equity by targeting resources on effective responses to need, including the mainstreaming of the Inequalities in Health Fund and the Equity Training and Advocacy Grant approaches;

  - **financial accountability in relation to individual health care need** - to show, in both the national and the local plans, how the present, and planned, budget allocations fit with the health needs of communities, and how different forms of investment can lead to better outcomes for their health.

5. A succession of new initiatives has been taken in Wales, and concentrating on these five measures would greatly enhance the Assembly’s strategy.

**How does action on equity fit with action on waiting times?**

6. The approach to tackling poor health followed in Wales is intended to be more broadly structured than believed to be the case in England.\(^3\) Sharp outside criticisms have been made of slow progress to bring down waiting times in Wales.\(^4\) But fastening on to some aspects of short-term efficiency can fail to address the bigger and more enduring picture of poor and unequal health. An assault on inequality in the UK has become the greatest priority.

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\(^3\) As noted by the National Audit Office: NAO (2004), NHS Waiting Times in Wales: Executive Summary, paragraph 4, p.3.

7. The 2005 National Audit Office report on NHS waiting times in Wales highlighted the long delays experienced by patients in parts of Wales who are waiting for some kinds of non-emergency treatment. The report seems to present a conflict of priorities for the NHS and social care services in Wales - with short term action to respond to long waiting lists competing with longer term action on poor health. The former is seen as an issue of NHS capacity and efficiency, and the latter as being concerned with prevention, screening and multi-disciplinary support and community development.

8. The issue is debatable. A study of the 2004 Townsend/Wanless local action plans prepared by local health boards demonstrates that there is in practice no real distinction between the requirements of effectiveness and equity. For example, in the Caerphilly plan, the action needed to address long waiting times is shown to be the improvement of primary care and community services in deprived parts of the borough. Such plans, when given effect, strike at the heart of the problem.

9. The plan quotes evidence that, of patients waiting for referral to a consultant orthopaedic surgeon, less than 40% will receive surgery - the remaining 60% need alternative forms of therapy from specialist nurses and physiotherapists, and with effective assessment should not be on the consultant’s waiting list at all. The focus of the action plan is on providing this infrastructure where it is most needed, along with other improvements in primary care to ensure that patients receive the most effective forms of treatment at the earliest possible stage.

10. Thus, action to target resources, existing and new, on areas and individuals with the greatest needs will not only improve waiting times, but will contribute to the longer term aim of promoting good health. Work on inequalities commits resources to areas and people where deficiencies are demonstrable, and usually undisputed. That is perhaps the highest mark of efficiency. Thus it is vital to continue, and accelerate, action on equity, at the all-Wales and within-local health board levels.

11. This chapter makes recommendations for continuing this momentum. They are identified according to the two arms of the dual strategy advocated in Targeting Poor Health: action within the health and social care system, and wider action. For clarity they are set out separately but in reality the two forms of action are, and have to be, knitted together.

**Overview of the Standing Committee’s work**

12. The aim of the Standing Committee’s work has been to make the dual strategy more effective: by collecting more coherent and consistent data, and by putting operational analysis into a wider context of the trends in inequalities of health, so that it becomes easier to specify priorities for action. Tracking health has to be matched by tracking financial inputs from national and local services to the individual patient.

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5 Caerphilly Local Action Plan, p.37
13. The Standing Committee has:
   • highlighted the links between needs data, financial data and service performance;
   • reinforced the efforts of the Assembly to bring greater coherence to health and social
care, and to the other devolved services which contribute to health;
   • called attention to other, non-devolved, policy areas which are necessarily involved in
tackling poor health but which are too often ignored or regarded as irrelevant to health.

14. The issues now requiring further attention are set out below.

A. Action by the health and social care system

The direct needs model

15. The first is action to implement the direct needs model which allocates resources to each
area according to its relative health status, measured by a number of indicators. This combines
the two core components of needs and costs, as explained in chapters 4 and 5.

16. At present the model applies only to the HCHS budget. As recommended in Chapter 5, it
should be extended to the primary care prescribing budget in time to begin implementation
in 2006-07.

17. A different needs model has been applied to the budget for General Medical Services
as part of the UK-wide GP contract. The impact of the new system on the distribution of
resources between local health boards should be monitored closely - as part of the current
UK wide review or, if necessary, through a study specific to Wales.

Needs and costs

18. In both national and local resource allocation models, it is necessary to seek the best
possible linkage between needs and cost indicators, at the area and individual patient level.
Because the direct needs model links specific elements of the health care budget to specific
needs indicators, it has brought to the fore the crucial requirement of analysing each element of
expenditure in the health budgets, as advocated in Targeting Poor Health. The appropriate further
development would be, as discussed later, “a patient tracking health care costs model.”

19. The conclusions reached, after investigation and consultation, in these pages will also
raise searching questions for the Health and Social Care Department, and for all local health
boards and local councils. The significance of local financial analysis and planning in relation
to health need was not so apparent at an earlier stage of the Standing Committee’s work, but
has become vital for the application of the model to local commissioning. It will become increasingly manageable through annual consultation about the 3-year rolling health improvement programme. Tracking needs and costs to areas and conditions will also improve decision making about work priorities.

**The Welsh Health Survey**

20. The major single data source on needs is the Welsh Health Survey. This continues to have considerable potential and is in the process of development with the present contract, which runs from October 2003 to September 2006.

21. The role of the Welsh Health Survey in resource allocation is already well recognised, but this needs to be demonstrably strengthened. This may require further investment in the Survey itself, as well as developing and changing it within the existing budget. There will also need to be an investment of time in a collaborative programme of work which we recommend as follows:

- greater involvement of local health boards and NHS trusts in the planning and development of the Survey through representation on the Survey board;

- closer collaboration in the Assembly between the Health Promotion Division, which sponsors the Survey and the Resources Directorate, which leads on the programme budgeting project;

- continued close involvement of the National Public Health Service, and of the Office for National Statistics, in the development of both the needs indicators and the financial data;

- review of the opportunities to improve the needs data e.g. through the design of the next WHS contract, and considering how to incorporate other relevant data from existing and new sources, in particular the GMS contract disease registers which will be available in 2005;

- progressing rapidly with the development of robust and comprehensive costs data through the programme budgeting project;

- devising a follow-up programme locally to the national survey, to enhance the information available, on the health and health care of the populations of particular local health board areas, and of particular groups, especially, disabled and elderly groups and children, in order to identify special needs, and the consequent action required;

- establishment of an Expert Group to be charged with the on-going development of the financial model, including tracking all the work strands suggested above, and with advising on the appointment of specific research teams;

- this Expert Group must report to, and collaborate closely with, the senior team responsible for health and social care strategy and implementation within the Assembly.
Implementation of the model at national level: equalisation of local health board allocations in relation to need

22. The budget allocations for 2005-06 mean that a number of local health board allocations continue to diverge significantly from target shares. This means that areas above target shares are benefiting from higher expenditure than is justified by their needs relative to the rest of Wales, and those below target share are receiving less than their needs require. In 2003 the Standing Committee recommended that, as a first step, local health boards in the least equitable situation should be brought within 5% of target shares - this has not yet been achieved (Chapter 4 Annex 2).

23. It is vital to take major early action to reduce the divergence between the present distribution of allocated funds to local health boards, and what the distribution should be, according to the measured health care needs of the different local populations. The gap has been closing, but there remain areas whose allocation is significantly below, and above, their needs share. Addressing this is essential, in tackling poor health in itself but also in symbolising for those at every level of service what can be achieved on behalf of equity. It is the basis for the successful, and publicly acceptable, operation of the entire service.

Application of the model at local level: financial analysis and commissioning

24. Applying the model from the perspective of local health boards is even more vital. Local action is foremost in treating poor health. Whatever the position of each local health board in relation to their target needs share, each faces a major challenge in ensuring that the balance of their expenditure is meeting the needs of people locally. This means scrutiny of the major forms and amounts of budgetary investment, and investigation to ensure that they are justified by the pattern of need in their area. It also means testing existing investment against other possibilities which might do more to improve health and meet needs (Chapter 6).

25. As explained in Targeting Poor Health, the nature of financial information in the NHS had hitherto made it impossible to analyse spending against need in any meaningful sense. The development of financial information set out in Chapter 3 means that we are moving to a position where local health boards will be able to analyse all of their spending by health condition, and compare this with data on health need in their area, with other areas, and with the Welsh average.

26. Making effective use of these data and translating them into action as part of local health improvement plans is challenging for local health boards who are still getting to grips with the commissioning role. The Assembly, and the National Public Health Service, needs to give local health boards every support in making sense of this crucial work, particularly through commissioning guidance. Equally, the central administrative role has to be adapted to an increasingly serious joint national/local examination of the distribution of services and costs. The process of joint work requires annual formulation, agreement and publication.

6 See Chapter 4, Annex 4.2
Performance management: ensuring effectiveness and accountability

27. Central to the analysis in this report is the recognition that at national level the financial model can only provide a framework for an equitable distribution of resource between areas - it cannot ensure that the resources then reach, in accordance with the principles of equity and maximising health gain, those individuals in greatest need.

28. To achieve this, the principles set out in Targeting Poor Health must be put into practice by the Health and Social Care Department Management Board, which is accountable to the Minister for the implementation of policy priorities, including the recommendations of the Standing Committee and those of the Review of Health and Social Care.

29. This system must operate to ensure that local health boards and NHS trusts work progressively to achieve equity, efficiency and quality of service. The principles of equity are already both implicit and explicit in the performance management framework, but must be strengthened by:

- providing a new vision to guide the implementation process - a national health improvement plan, including short term and longer term action supported by the Assembly's health investment plans and guided by research;
- requiring and helping local health boards to translate the national vision into local action plans which pull together action on equity, effectiveness and service reconfiguration;
- at both national and local level, demonstrating how the preventative thinking of the Inequalities in Health Fund and the Equity Training and Advocacy Grant pilots can be developed into mainstream action;
- considering how local health boards and NHS trusts can enhance their local capacity to take initiatives to increase equity;
- giving greater priority in the monitoring process to the urgent development of preventative health and health gain indicators in comparison with service access indicators;
- financial accountability directly in relation to individual health care need - at both national and local level - demonstrating that the costs of using different services by individual patients have to be identified and aggregated, so that they can be compared with the same individuals' health care needs. Action to track individual costs annually, with all-Wales consultation and support, to shift resources to those in greatest need, must drive the local health improvement plans.

Helping local health boards to translate policy priorities into action

30. An enhanced role for local health boards in establishing equity in health and health care deserves wider acknowledgement. The model that offers the right precedent, but has to be adopted systematically, is that of the local action plans, which were concerted on the basis of the
ideas canvassed in the Wanless report, the thinking behind *Health Challenge Wales* and elsewhere during 2004.

31. Prevention, reconfiguration of service, and equity, as agreed, must be the priorities. The challenge is that these can only be achieved if the particular difficulties of deprived individuals and communities are seriously addressed. In England, the report of the Prime Minister’s Strategy Unit on the prospects of people living in areas of multiple deprivation is not optimistic. This emphasises the need for public services, including health, to improve their performance in deprived areas, recognising that this may require a more focused and targeted approach than delivery of the same service in other areas, including responding to individuals who need sustained, in-depth or multi-agency interventions.

32. Many imaginative and important measures of this kind have been put forward by local health boards in Wales, and these need to be expanded. *In the local action plans, local health boards should be invited to work together in different parts of Wales, and with local authorities, to include specific actions to promote equity and access, supported by budget restructuring as set out in Chapter 6. It will be important to identify those core features that apply to every local health board, for example to deliver the national health targets (discussed further below) and service priorities, and those features, such as action to improve services for specific population groups, that will apply for individual local health board areas.*

33. We recognise the scale of the task required of local health boards to devise a programme of work to achieve this, including scrutiny of the health and equity impact of their budget allocations and setting priorities for action. This cannot be done comprehensively by 22 local health boards acting individually. *To take this forward a number of steps are needed:*

- those responsible for health and social care strategy need to set policies and targets which are designed to improve equity in health care delivery - so that, in following central guidance, local health board commissioning will be implementing an equity strategy;

- the Assembly, working closely with the National Public Health Service, must issue commissioning guidance to local health boards which:
  - sets out the processes, including financial and service analysis, which will allow them to achieve national priorities in partnership with NHS trusts and local authorities;
  - includes clear requirements for monitoring inequalities in health status and access to care and treatment, with developments towards the implementation of a patient tracking health care costs model;
  - establishes processes to identify and take forward local priorities and provides a strong steer for collaborative action;
  - identifies manageable work areas which will allow them to make an impact on key aspects of health inequalities in their area;

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- provides a more explicit inequalities focus in the next phase of the health and social care wellbeing strategy and needs assessment process.

**Health and social care needs assessment and commissioning**

34. Although initially the Standing Committee’s work was concerned principally with the funding and commissioning of health services, the connections between health and social care in meeting the needs of individuals has become increasingly apparent. In order to respond effectively, local health boards and local authorities must share accessible financial information as well as needs data. The sharpening up of financial information described in Chapter 3 will provide the basis for a virtual budget for health and social care.

35. There is scope for greater collaboration in allocating resources for health and local government. The operation of the respective mechanisms, the underlying need which each model tries to capture, and the impact of changes in target shares, need to be understood better, both at the centre and locally. **The systems operate in parallel but are in many respects inter-related. To achieve better joint understanding and practice, specific proposals about future initiatives for collaboration on either a large or small scale would be welcome.**

**B. Action beyond the health and social care system**

36. The wider public health input to the Standing Committee’s work is summarised in Chapter 2. One of the four principal issues, the future of the Welsh Health Survey, has been discussed earlier. The other three, the national health targets, *Health Challenge Wales* and wider contributions to an overall strategy, will be summarised below.

**(i) The National Health Targets**

37. The progress of the Assembly’s wider health strategy will be measured against the five national health targets (Chapter 1). These were developed through an expert process, taking into account expected developments in care and treatment as well as relevant policy and strategy. Each indicator consists of a general target and an inequalities target. In some areas, the inequalities indicator should be given priority in order to improve the situation of most deprived groups. That idea allows us to recommend for all local health boards that the top few priorities in reducing inequalities in health should be identified, together with the scale of their potential impact, and how progress on each of them may be monitored precisely each year, as a matter of urgency.

38. The work commissioned by the Assembly to identify the social determinants of health provides an opportunity to move towards this by:

- using sample survey data (for example from ONS and the Joseph Rowntree Foundation) which are readily available, and more up to date, than the direct administrative measures of health (collected in the Census and at registration of births and deaths) which change very slowly over time;
• making explicit links between health outcomes and socio-economic conditions which are the responsibility of non NHS agencies - this will strengthen ownership of the national health targets across a wide range of agencies.

39. This work is being done gradually, starting with a project to identify the social determinants of two of the health targets: those for coronary heart disease and mental health, with later projects envisaged to identify determinants for the other targets.

40. The Standing Committee underlines the importance of this work which should give a stronger focus to action at local level to achieve the national targets. As the determinant indicators become available, we recommend that local health boards and their partners use them to monitor progress towards the national health targets.

(ii) Health Challenge Wales

41. Health Challenge Wales has shown considerable potential as a means of stimulating joint action to help people to improve their health. As a national focus, it can maximise the contribution of all organisations and individuals in Welsh society to improving health, as part of a co-ordinated and sustained national effort. The approach makes an explicit link between narrowing the health inequality gap and improving health across the population.

42. In taking this forward, there is a need to ensure that action across Wales is directed effectively at the determinants of poor health, within an overall strategy for all parts of Welsh society. This requires a sustained effort to identify those activities and approaches in different policy areas that will have the greatest impact in reducing inequalities in health, and continued action to encourage take-up of the Challenge in all parts of Wales.

(iii) Maximising the potential of wider strategies

43. Assembly strategies, such as those for children and young people and for older people, reinforce the focus on effective prevention and support which contribute to the reduction of inequalities in health. These and other initiatives such as: A Winning Wales, Communities First and Better Homes for People in Wales, offer other potential means to attack disadvantage and the determinants of health inequalities. In principle, the contribution of various initiatives to the realisation of equity have to be assessed explicitly and the impact measured. That would make a lot easier the job of choosing priority policies to improve health.

Advocacy outside Wales as a key strategy

44. The measures we recommend in relation to devolved services have the potential to make a considerable impact in reducing inequalities in health in Wales if implemented effectively at every level. However, it is also important to be realistic about the limitations of what can be achieved by the Assembly and its partners in relation to the underlying determinants of health.
Many of the most important determinants of the socio-economic inequalities which underpin inequalities in health relate to income, on which tax and benefits policy is crucial. The key issue for Wales is poverty and growing income inequality across the UK.

For example, the Department of Work and Pensions announced in February 2005\(^8\) that it proposes to change the system of incapacity benefit. This could have very significant implications for many severely disabled and disadvantaged people. It is vital to underline the need for a fair recognition of the needs of people with serious disabling conditions for whom work is not a realistic option and who rely on state help for a reasonable standard of living. A number of the human rights instruments, including the Universal Declaration of Human Rights, include the fundamental right to social security - which certainly applies to people with disabilities.

On these issues, the Assembly must be an influential advocate at Westminster by both:

- **highlighting the multiple material and social deprivation that lies at the heart of unequal health**

- **arguing for equity in non-devolved policy fields which have a major impact on health in Wales, including for example the need to raise child benefit rates as a simple and effective way of raising family income and reducing poverty. Child Tax Credits are helpful but not as successful. The new research on the social determinants of health in Wales mentioned earlier is likely to provide powerful arguments on this. As a consequence, imaginative arrangements need also to be put in place for devolved authorities in the UK to represent adequately the social and health impacts of proposals and decisions of the UK Government.**

### Conclusion

The work of the Standing Committee has highlighted the many important contributions of work across the devolved policy responsibilities to tackle poor health in Wales. Much is being done but there needs to be continued, directed effort to identify opportunities for more effective action across policy areas.

Tackling inequalities in health needs to continue to be an explicit objective, supported by directed work to establish how this will be achieved through the mainstream business of health and social care and the other agencies with a significant contribution to make.

The policy direction is clear - the Assembly now needs to consolidate the steps taken, and proposed, to equalise the local resources available for health and social care, and, in the near future, to help local health boards and their partners to translate national objectives for the reduction of inequalities in health, and freedom from multiple deprivation, into more effective local action. Whether progress is being made, and how effectively, needs to be reviewed on a regular basis by the Minister and by the Assembly as a whole.

The breadth of the action required makes it imperative to keep a firm grasp on priorities in terms of their scale of impact. This report highlights six principal recommendations:

**Six Principal Recommendations**
(detailed recommendations will be found in the text - in bold type)

1. **Local action by health boards**: local health boards must recognise they play the key role in reducing inequalities in health care at every level of service. From the resources they receive each year they should regularly review how those resources should be allocated more equitably in their budgeted expenditure. They should be allowed and strongly encouraged, especially by means of the introduction of new forms of professional training about deprivation, and by consultation with NHS leaders about the needs of people in relation to different types of service, to play this role.

2. **Collaboration**: the development of a joint approach to health and social care, with local authorities, to achieve an equitable and seamless pattern of services must be a top priority.

3. **Annual allocation of resources**: the principle that target shares in the allocation of health care resources can be achieved by differential growth - agreed in 2002 by the Assembly – should be re-examined in relation to speed of implementation. The meaning of “real growth” in determining what additional resources will be available to reduce inequality by area is unclear and may lead to misunderstanding about the speed of implementation of equal care at the point of equal need, and may lead to years of delay.

4. **The Dual Strategy**: Inequalities in health are becoming very serious and extensive counter-action outside as well as inside the NHS is required. A number of recent reports by the Assembly have prepared the ground. The possibility of drawing up, with other relevant organisations, a concerted programme to reduce material and social deprivation, prevent ill-health in the first place and enhance life chances, by monitored stages, should be considered by the Assembly.

5. **UK Government fiscal and other policies**: In the UK non-devolved policies have a crucial impact on the socio-economic conditions which underlie unequal health. The levels of child benefit and incapacity benefit are two striking examples. The Assembly cannot control this aspect of policy but it can, and should, make serious representations on issues which make a huge difference to the health and well-being of people in Wales - and can seriously delay reductions in deprivation and improvements in health.

6. **Research, in two areas**: 

   a) the development of the direct needs model, and of the Welsh Health Survey on which it relies, should form part of a much wider, all-embracing programme of research and development on inequalities in health and social care;

   b) an individual patient tracking health care costs model should be introduced by stages, within, say, three years, to improve capacity to address health care needs efficiently.