

**NHS Resource Allocation Review**

**Targeting Poor Health : Professor Townsend's Report  
of the Welsh Assembly's National Steering Group  
on the Allocation of NHS Resources**

## **NHS Wales Resource Allocation Review**

### **Report to the Health and Social Services Committee of the National Assembly for Wales: 4 July 2001**

#### **Volume 1: report of the National Steering Group by Professor Peter Townsend**

Introduction: background and context

Chapter 1: inequalities in health, links between poverty and health, the Welsh legacy of ill health, inequalities within the UK and within Wales

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## Introduction

1. In 1985 the European Office of the World Health Organisation put forward a programme of “Health for All by the Year 2000” which was adopted by the governments of Europe, including the United Kingdom.<sup>1</sup> The first of its listed targets was the reduction by the turn of the century of inequalities in health by 25%. Instead, despite improvements in life expectancy, inequalities have continued to grow. The problem applies to many countries across the world and has some common features.

2. Conscious of renewed concern about the problem in Wales as well as in other parts of the United Kingdom, the Health and Social Services Committee of the National Assembly for Wales decided on 16 February 2000 to set up a Review of the arrangements for allocating resources for health and health services - with the objective of ensuring equitable access for the entire population of Wales in accordance with their health needs

3. The purpose of this report is to:

- give the findings of that Review about past and current arrangements for allocation of resources in Wales
- set the Review in the context of the Assembly’s corporate policies and strategies
- outline the complementary types of investigation and work that have been, and might be, undertaken within and outside the NHS, including that by health practitioners, managers and administrators as well as research scientists
- present recommendations for future action.

### Context – resource allocation mechanisms and the NHS performance agenda

4. The remit set by the Committee has been an ambitious one. The Review has examined the resource allocation process in the context of the performance of the NHS in tackling poor health and addressing health inequalities. We have looked not just at formula driven expenditure but also at the allocation processes used to distribute the whole of the Welsh health budget.

5. A key message is the limited scope of the resource allocation process – by formula or otherwise. Cash has to be allocated to NHS bodies (currently health authorities and through them Trusts, and primary care contractors), and this must be done through mechanisms that are – so far as humanly possible - transparent and fair. What matters is how the money is spent – we have attempted to track this from the centre to local level. The difficulties encountered in doing this have themselves illuminated key aspects of the current arrangements.

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<sup>1</sup> WHO (1985), Targets for Health for All: Targets in Support of the Regional Strategy for Health for All by the Year 2000, Copenhagen, WHO Regional Office for Europe.

6. Thus resource allocation mechanisms alone cannot be relied upon to deliver equity of access to NHS services, let alone equity of outcome in health terms. Fair access – defined as equal access to quality services for everyone in Wales - depends on the performance and practice of the staff who deliver NHS services across Wales and the professionals and managers who plan and configure those services at local and regional level, as well as the equitable distribution of resources to reflect need.

7. The reality of the services provided, as experienced by individual patients, is the result of a complex combination of financial, managerial, professional and clinical issues which need to be addressed by the performance agenda set out in Improving Health in Wales, a plan for the NHS and its partners published in February 2001. The resource allocation process must support this agenda by ensuring that the budget is shared out fairly but it cannot deliver value for money or the optimal balance of investment at local level which is needed to maximise health gain. This must be achieved through robust performance management and benchmarking.

8. The Review has attempted to take on board the implications of the new structures for the NHS in Wales announced in February 2001. This has meant a sharper and accelerated focus on allocations below health authority level and has provided an opportunity for the conclusions of the Review to be integrated with the current process of designing the financial and commissioning arrangements needed to support the new structures.

### Conduct of Review

9. The terms of reference, structure and membership of the Review are at Annex 1. It has been designed to ensure that the final report draws on

- the practical expertise and insights of NHS health practitioners, managers and administrators, local government and Assembly officials
- the best available scientific research into area based resource allocation and the socio-economic determinants of health
- an up-to- date account of trends in the allocation of resources and the factors determining change as well as categories of distribution
- geographical and professional representation
- the expertise of the NHS finance community, in the Assembly, health authorities and Trusts in relation to experience to date with the existing resource allocation process and work on how costs are related to the equitable distribution of resources.

10. The Review was headed by Professor Peter Townsend of the London School of Economics and Bristol University who is an international authority on poverty and inequality and chairs the National Steering Group.

11. The research input on area inequalities in health was provided by a team headed by Dr David Gordon of Bristol University. The team has produced an independent report, looking in detail at issues of poor health and inequalities in health, as well as making recommendations for a new resource allocation mechanism, which will be published in tandem with this report. Throughout the report references to the report of the Research Team refers to the independent report prepared by Dr Gordon and his colleagues which forms Volume 2 of this report.

12. The service input prepared on the basis of research information as well as administrative and professional experience has been provided by a series of Task Groups (remit and membership at Annex 2) responsible for addressing each of the requirements of the terms of reference. The reports of the Task Groups form Volume 3 of this report. There have been a series of workshops and seminars designed to promote a shared understanding of the underlying issues and the options for the future.

13. The central objective of the Review is to recommend a means of resource allocation to distribute, and audit the distribution of, health service resources in accordance with health need, building on the basis of previous allocation. This will address the need to allocate resources to sustain, improve and develop the hospital, community and primary care services needed to discharge statutory responsibilities to provide a universal health care service. This report sets the NHS resource allocation process in the context of the Assembly's wider policies for improving health and addressing poor health and its specific objective of addressing inequalities in health status.

#### A dual strategy for action to reduce inequalities in health

14. The consensus of the Review is that the health resource allocation process needs to be driven by a dual strategy - for action both within and beyond the health care system. Both represent challenges for imaginative investigation and development. The aims of this strategy should be to sustain and improve health, target poor health, reduce health inequalities and provide equal access to services. This approach must address both:

- inequalities in health experience – rooted in socio economic conditions which need to be addressed by action outside the NHS and by the NHS working in partnership with others
- inequity of access to services and inequitable distribution and quality of services which need to be addressed by action within the NHS, facilitated by a resource allocation process which accurately captures health need.

15. This report provides illustrations of how the reduction in inequalities is to be achieved by accountable action within and beyond the NHS by health professionals and managers. Although it is as yet impossible to give scientific estimates of how much inequity can be reduced by action within the NHS, and how much by action outside the NHS, this must be an objective of further work. This report attempts to set out the implications of the reducing inequalities dimension for both strands of the dual strategy.

16. Within the NHS the inequalities objective requires that any process for distributing resources equitably in accordance with need must apply to different parts of the service, not just at the aggregate level, and must be complemented by principled forms of practice at every level of the service.

### Structure of Report

17. Chapter 1 summarises the problem of poor health and inequalities in health within Wales and the UK. It sets the international and UK policy context and outlines the consensus on the importance of the underlying socio - economic determinants of health status and action in areas not delegated to the Assembly including action on income inequalities through the tax and benefit systems.

18. Chapter 2 outlines the scope for action by the Assembly to address poor health and inequalities in health including policies within and outside the health system – the dual strategy for action.

19. Chapter 3 examines the existing distribution of the Welsh health budget in detail, including how it has changed over time. It suggests that, in reviewing the process for sharing out resources between geographical areas, it is important to take into account

- the balance between different components of expenditure within the health budget
- the way resources within each component are spent by NHS service providers on the ground
- complementary types of expenditure by other agencies eg the social services budgets of local authorities.

20. These issues need to be given as much attention as the detail of the formula dealing with area inequalities in determining the overall effectiveness of the budget in responding to health need and tackling health inequalities. The chapter also recommends major changes that are needed to achieve consistency and reliability of information about the costs of providing health care services at every level.

21. Chapter 4 discusses the limitations of the present analysis including

- general limitations of a population formula approach as a means of promoting equitable access to services
- limitations of financial information on how resources allocated by formula are currently spent.

22. It also suggests that an area based formula approach can be used in 2 distinct ways

- as a means of allocating cash resources where budgets are delegated for local decision making

- as a means of tracking and auditing expenditure patterns at local level where budgets are managed and services commissioned at a different level eg all-Wales or regionally.

23. Chapter 5 examines the new model for allocating health resources, based on the direct measurement of health need, proposed by the Research Team, and recommends its adoption in Wales, subject to detailed refinement and phased implementation.

24. Chapter 6 sets out the present indirect method of allocating health resources based on the measurement of the utilisation of health services as a proxy for health need and explains why the Review decided it should be changed.

25. Chapter 7 presents the conclusions and recommendations of the Review – pulling together the recommendations in previous chapters.

## 1. Chapter 1: Inequalities in Health

### The problem of health inequalities

1.1. The key problem is that although the overall health of the population has improved consistently over the past 50 years, as measured by overall mortality and morbidity rates, the gap in health between 'rich' and 'poor' people and 'rich' and 'poor areas' has widened. The health of the 'rich' has improved at a much faster rate than the health of the 'poor'. This is a phenomenon that applies in many countries of the world at the present time and not only in the UK, although the rate of change varies sharply and deserves intense investigation.

1.2. There is widespread consensus that these inequalities in health and early death are rooted in poverty and inequality in material well-being. In 1980 the Black Committee on Inequalities in Health<sup>2</sup> concluded that

'while the health care service can play a significant part in reducing inequalities in health, measures to reduce differences in material standards of living at work, in the home and in everyday social and community life are of even greater importance'

Sir Donald Acheson in his final report as the Chief Medical Officer, Department of Health, 'On the State of Public Health'<sup>3</sup> for the year 1990, said

'the issue is quite clear in health terms: that there is a link, has been a link and, I suspect, will continue to be a link between deprivation and ill health' and 'analysis has shown that the clearest links with the excess burden of ill health are:

low income  
unhealthy behaviour and  
poor housing and environmental amenities'.

### Links between poverty and health

1.3. The Research Team have summarised the research which has shown consistently that poverty is related to worse health outcomes. For example the 1990 Breadline Britain survey found that poor people were 1.6 times more likely to suffer from long standing illness, 5.4 times more likely to suffer from feeling isolated and 5.5 times more likely to feel depressed<sup>4</sup>. The health gap is even larger if survey respondents' intensity and history of poverty is taken into account. At an area level there is a very close relationship between high rates of poverty and high rates of premature mortality.

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<sup>2</sup> Department of Health and Social Security, *Inequalities in Health: Report of a Research Working Group*, DHSS 1980 (The Black Report)

<sup>3</sup> Annual report of the Chief Medical Officer, Department of Health, 1990, Stationery Office

<sup>4</sup> contribution by the Research Team to the Emerging Findings report presented to the Health and Social Services Committee on 28 February 2001 (HSS-04-01)



1.4. The independent research team chaired by Sir Donald Acheson<sup>5</sup> in 1998 elaborated this reasoning as follows:

‘the weight of scientific evidence supports a socio-economic explanation of health inequalities. This traces the roots of ill health to such determinants as income, education and employment as well as to the material environment and lifestyle. It follows that our recommendations have implications across a broad front and reach far beyond the remit of the Department of Health. Some relate to the whole Government while others relate to particular Departments’.

#### Child deprivation and links with health

1.5. The links between poverty in children and worse health outcomes are well documented – babies born to poor families are at much greater risk of

- prematurity, low birth weight and infant mortality
- illness and disability
- injury and accidents.

1.6. Changes in the socio-economic profile of Britain in the past two decades have had a particular impact on households with children – the proportion of lone parent households, children in families with no earner and the proportion of households with children living in poverty have all increased. The recent Poverty and Social Exclusion Survey of Britain<sup>6</sup> showed that 18% of British children were suffering from multiple deprivation.

‘the links between poverty and child health are extensive, strong and pervasive.....virtually all aspects of health are worst among children living in poverty than among children from affluent families’.

1.7. The new 2001 report of the Academy for Learned Societies in Social Sciences – Health Inequalities: Poverty and Policy<sup>7</sup> adds to the weight of evidence to support these conclusions.

#### The potential to prevent premature death

1.8. The report of the Research Team (page 97) quotes research for the Joseph Rowntree Foundation which sought to estimate the impact of three policies

- modest redistribution of wealth
- full employment and
- the eradication of child poverty

on premature mortality in Britain.

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<sup>5</sup> Independent Inquiry into Inequalities in Health, Department of Health, 1998

<sup>6</sup> Poverty and Social Exclusion in Britain, York, Joseph Rowntree foundation, quoted in Research Team contribution to Emerging Findings report, HSS-04-01

<sup>7</sup> Forbes I. (ed), Health Inequalities: Poverty and Policy, London, ALSISS

1.9. The results for Britain as a whole and for Wales are as follows:

- annually some 7,500 deaths in Britain, including 414 in Wales, amongst people under 65 could be prevented if inequalities in wealth narrowed to their 1983 levels
- some 2500 deaths per year in Britain amongst those aged less than 65, including 134 in Wales, would be prevented were full employment to be achieved
- some 1,400 lives amongst those under 15 would be saved per year in Britain, including 85 in Wales, if child poverty were eradicated.

1.10. This gives a total of 633 potential lives saved in Wales annually were these policies to be achieved.

1.11. Saving these lives would involve government and many other institutions in a range of long-term as well as short-term radical measures, including action which is outside the scope of the Assembly as discussed in Chapter 2.

### Report of Task Group B

1.12. Task Group B has contributed a comprehensive review of the literature on the ways that socio economic conditions influence health and access to health care services and has looked in detail at the role of the health service, as discussed further in Chapter 2. Its report is included in Volume 3 of this report.

1.13. Part 1 of that report summarises the weight of evidence on the influence of socio-economic deprivation on health status, with the relationship being most marked at individual and small area level. Although the incidence of a minority of health conditions such as breast cancer, childhood leukaemia and asthma does not show a marked socio-economic gradient – the incidence of most conditions is higher in the poorer sections of society. For example the death rate from injury for children in social class V is 4.6 times that of children in social class 1<sup>8</sup>.

1.14. Relating this evidence of ill health to evidence of NHS utilisation, Task Group B quotes the work of Majeed and others on the relationship between measures of socio-economic and health status and hospital admission rates in London, which shows a strong correlation between admissions and permanent sickness rates, unemployment and family credit and disability living allowance rates. This is supported by unpublished work on hospital admission rates and socio-economic conditions measured at GP practice level.

1.15. Task Group B illustrates how deprivation impacts on health throughout the life course, through for example the effect of income on the environment in which people live, on education and on diet and nutrition – quoting Health Promotion Wales that the poor diet of many disadvantaged children and young people in Wales is of major concern. Living in deprived conditions has been associated with higher incidence of mental illness, increased out patient attendance, higher inpatient admissions and higher road accident casualties<sup>9</sup>.

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<sup>8</sup> NHS Wales Resource Allocation Review report , report of Task Group B p.2)

<sup>9</sup> Task Group B report p.11

1.16. Part 2 of Task Group B's report addresses the role of the NHS in reducing inequalities in health – this is discussed in Chapter 2.

### The Welsh legacy of ill–health

1.17. Proposals for responding to the legacy of ill – health in Wales were set out in detail in the Better Health Better Wales<sup>10</sup> consultation paper published by the Welsh Office in May 1998 which described the patterns of disease in Wales and the inequalities in health status within Wales and between Wales and other countries, including

- life expectancy in Wales among the worst in Europe
- death rates from heart disease in Wales and the UK substantially higher than in many European countries
- Wales has amongst the highest rates of cancer registrations in the EU
- consistently poor health in the South Wales Valleys
- a much higher percentage of people in Wales reporting a long term limiting illness than in Great Britain as a whole – with the highest levels in the South Wales valleys.

1.18. The health improvement indicators for the NHS Wales Performance Management framework published in July 2000<sup>11</sup> show variations in a number of measures of morbidity between unitary authority areas in Wales for example

- stroke mortality rates range from 18.1 in Monmouthshire to 33.5 in Anglesey (ages 0-74 standardised rate per 100,000)
- rates of mortality from heart disease range from 21.0 in Ceredigion to 52.5 in Caerphilly (ages 0-64 standardised rate per 100,000)
- rates of mortality from all cancers range from 121.3 in Monmouthshire to 169.6 in Blaenau Gwent (ages 0-74 standardised rate per 100,000).

### Health in Wales compared to other parts of the UK

1.19. Chapter 2 of the Research Team report (p. 17-22) provides comparisons between Wales and other countries and regions on a number of health measures including:

- age standardised mortality rates in Wales in 1999 were above England but below Scotland and Northern Ireland
- infant mortality rates in Wales in 1999 were above England and Scotland but below Northern Ireland
- mortality rates for ischaemic heart disease in 1998 for males and females in Wales were above those for England but below Scotland and Northern

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<sup>10</sup> Better Health Better Wales, Cm 3922, Stationery Office, 1998.

<sup>11</sup> NHS Wales Performance Management framework: rationale report and baseline data July 2000

Ireland, mortality rates for cancers in females in Wales were above those for England and Northern Ireland

- mortality rates for hypertensive disease in Wales in 1998 were the highest of the UK countries, and SMRs for diabetes in Wales were higher than in England or Scotland
- high levels of limiting long standing illness in Wales, in males and females, compared with England, Scotland and the North West of England.

1.20. The report of the Research Team also provides some analysis of regional variations in morbidity drawing on the GP morbidity data base (p. 22). Figures for heart disease, for both males and females, are higher in Wales than in England and are comparable with the worst regions of England. Hyper tension figures are highest for Wales and Wales has a relatively high prevalence of raised blood pressure.

#### Inequalities within Wales compared to those within other regions

1.21. The report of the Research Team (page 96) quotes a study which ranks all British parliamentary constituencies by mortality, poverty and avoidable death. On these measures Merthyr Tydfil and Rhymney ranks as the 'worst' Welsh constituency with Monmouth as the 'best'. Within Britain, on these measures, there are 62 constituencies with worse health than Merthyr Tydfil and Rhymney and 89 constituencies with better health than Monmouth.

1.22. Using the ratio of 'best' to 'worst' unitary authority areas for all age mortality rates, the report (page 97) compares inequalities within countries. On this basis inequalities between areas within Wales are less extreme than those within England or Scotland.

#### **Conclusion**

1.23. This chapter has provided a summary overview of the problem of growing inequalities in health. Tackling this requires urgent and comprehensive action – the key elements of the necessary strategy, which must form the context for this Review of the allocation of resources for health care services, are set out in Chapter 2.

## 2. Chapter 2: Policies Relevant to Action

2.1. This chapter outlines the dual strategy for action we have identified as necessary to address poor health in Wales and tackle inequalities in health, namely

- action to tackle inequities in access to health care services – which is the particular role of the NHS – in Wales as in other regions of the UK
- action to tackle the underlying socio economic determinants of poor health – which is the role of the Assembly corporately as outlined in the Assembly's Better Wales strategic plan 2000 and of the Assembly's departments working in partnership with local government and other organisations. It is too the role in key policy areas of the Westminster Government.

2.2. The scientific evidence about inequalities in health shows that the second strategy has the potentiality to make the biggest impact. That involves action by many different bodies working at different levels, some of them external to policy responsibilities in Wales. This will be examined briefly later in this chapter.

2.3. Ways of bridging the two strategies are important. Tackling inequalities was taken as a priority for the NHS in Wales by the Health and Social Services Minister, Jane Hutt, in a speech to the Assembly in July 2000. She selected tackling health inequalities as one of three fundamental principles along with promoting primary care and preventative action and breaking down barriers between professional groups. Action to achieve this, including joint work between the NHS and local government, has been set out in *Improving Health in Wales*, a plan for the NHS with its partners, January 2001, discussed below.

### Action by the NHS and its partners

2.4. Although there is a consensus that the NHS itself can have only a limited impact on the incidence of disease there is increasing recognition that access to effective treatment can have a major impact on the severity and duration of disease, its impact on quality of life and its fatality. As expressed in the *British Journal of General Practice* (June 2001), a "powerful argument for the involvement of health care professionals in efforts to reduce social inequalities of health is the urgent need to counteract the role that the health services currently play in increasing inequalities, in particular because of inequalities in access to health care. We need to become part of the solution, not to be part of the problem."<sup>12</sup> This need was eloquently expressed long ago by a well-known Welsh general practitioner in his ironic formula of the "inverse care law."<sup>13</sup>

2.5. The report of the independent research team headed by Dr Gordon provides details of how

- medical intervention increases life expectancy

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<sup>12</sup> Smeeth L. and Heath I., Why inequalities in health matter to primary care, *BJGP*; 2001, 51, 467: 436-7.

<sup>13</sup> Tudor Hart J., The Inverse care Law, *Lancet*, 1971: I: 405-12.

- by improving equity of access to services the NHS can reduce the impact of inequalities in health status.

2.6. Chapter 5 of Dr Gordon's report shows that access to treatments varies considerably across groups in society. For example men living in more affluent areas were more likely to receive coronary revascularisation surgery despite having less need as measured by mortality rates. The report goes on to discuss factors which contribute to these inequities in the receipt of health care, including

- patient variations in health care seeking behaviour
- doctor-patient interactions at a primary care level
- variations in primary care referral patterns
- variations in levels of investigation
- deciding on treatment options
- patient preferences.

2.7. This helps to show the problem of tracing inequities to their source. People vary in the demands they make on the services. Many are reasonable, some unreasonable. Community and family alike can help to set standards that deserve to be encouraged. Health care professionals can only do their best to deal with excessive individual demands. The problem of under-use, especially on the part of individuals with ascertainable disease or disability, invites a variety of positive measures. Many poor and deprived individuals turn out to be extraordinarily stoical about pain and illness. Improving available information for individuals about health – at school and thereafter, is one important, and familiar, strategy to help meet the problem. Anticipatory action on the part of health care professionals is another. Knowing the people on their lists who tend to make too few demands in relation to age, gender, ethnic status, background and home or work conditions can be an impetus for them to take precautionary action in relation to choices about visits, waiting times, investigation, referrals and follow-up.

2.8. Such anticipatory action is needed even more today at a time of rapid technological advance and the widening gap of health and income. It is a test of public service. We urge professional bodies to review, in the public interest, the changing problem of health needs, especially in relation to the principle of "equity of access."

2.9. To support this NHS Wales needs to ensure that professionals have the opportunity of taking time to review the need for changes in practice, including receipt and organisation of information about practice areas and conditions. There must be specific recognition in the funding arrangements for professional training of the need for members of professional bodies, hospitals, health centres and other organisations to be freed to meet and identify severe unmet health needs, especially of those with low income and/or living in conditions where they lack social support and access to public and private services. This needs to include a strong focus on inter-professional sessions with the specific objective of achieving equity in professional practice. Accordingly, we recommend the provision, whether in the

general NHS budget or additionally, through instruments such as the Health Inequalities Fund, of training grants for "equity in public service."

2.10. This underlines the key limitations of a formula approach to resource allocation – it can only share out cash resources. What matters is what the NHS does with the resources it receives both to promote and sustain health and to address these inequities in the receipt of services. If the distribution mechanism can be made more equitable ie based on a more accurate measurement of relative need this will enable health bodies to address inequities in access to services and ensure that for any health need the quality of treatment received is as good for all areas and social groups. The distribution mechanism alone will not ensure that this action is taken or that it is effective. The role and limitations of the resource allocation process are discussed further in chapter 4.

### Equity of service in the NHS in Wales

2.11. In developing “equity in practice” good financial information is essential, preferably at small area level and expenditure on patients according to health needs. Chapter 3 discusses the way resources are allocated from the centre to local health bodies, through a population formula approach and in other ways, and explains the limitations of the financial data in helping to establish how far principles of equity apply at each level. For this reason it is important to look at financial information alongside other detailed studies which show that there are substantial variations in standards of service across Wales, for example

- waiting times and lists as discussed in detail in Waiting Times in Wales: a Strategy for the Future
- standards of quality and access in relation to treatment for cancer (Calman/Hine report)
- serious inequities in access to treatment for Coronary Heart Disease (studies by the Specialised Health Services Commission for Wales).

2.12. These studies have shown that variations in access, and variations in the quality of services, are the result of a complex interplay of factors of which financial inputs form only one part<sup>14</sup>. These include the way disease is managed at primary, secondary and tertiary level. For example, the implementation plan for Coronary Heart Disease focuses on different ways of providing services in order to achieve more consistent standards across Wales. At present the speed of access to thrombolytic drugs –which can be critical to recovery from a heart attack – varies substantially across Wales. Reducing this differential will make a major difference to equity in access to treatment for this disease in Wales.

2.13. More widely, tackling variations in quality and access is central to the new performance management framework being developed for the NHS in Wales. The current baseline data published in July 2000 include a range of evidence relevant to access for example

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<sup>14</sup> National Assembly for Wales – Waiting Times Strategy Development Group report 20 November 2000.

- hip replacement per 1,000 persons over 65 range from 1.4 in the Vale of Glamorgan to 4.6 in Ceredigion
- all cancers survival rates range from 35.6 in Gwent to 40.4 in North Wales (5 years 1985-89)
- size of in-patient and day case waiting lists ranges from 25.2 in NW to 34.8 in Dyfed Powys (rate per 1,000 population).

2.14. The aim of the new framework which is currently being discussed with all Welsh NHS Trusts is to produce integrated measures which capture performance in relation to quality, consistency, access and value for money. This will form the basis for evaluating progress towards greater equity in the receipt of health care services across Wales.

#### Action by health authorities and Trusts

2.15. Health authorities and Trusts in Wales have identified in their Health Improvement Plans action to address inequalities in access to services in their areas, for example through

- Health Inequalities Impact Assessment
- the promotion and monitoring of equal opportunities both in access to services and in employment policies
- monitoring provision against needs assessment for example in mental health
- mapping health inequalities within LHG areas and collaboration with local authorities to audit inequalities in health
- action to reduce the impact of distance on access to specialist care
- the identification of local priorities for action for example injury control, access to over the counter medicines and cardiology
- the development of clinical networks to address inequalities in access to services across health authority areas.

2.16. The National Assembly is also investing directly to support action both to reduce waiting time differentials and to support the implementation of National Service Frameworks for the disease areas where inequities have been most marked.

2.17. Research within NHS Wales demonstrates the case for this. Some consultant physicians in Wales have shown that variations in health associated with degrees of deprivation are “identifiable at the micro level” – for example rates for common macro vascular complications of diabetes for wards in Cardiff. Pockets of unmet need may be neglected if health resources are allocated to health authorities and not then to LHGs and Trusts.<sup>15</sup> “This study provides evidence that there is a need for

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<sup>15</sup> Personal communication from J.R Peters, consultant physician, University Hospital of Wales, 22 May 2001.



greater allocation of resources to areas of increasing social deprivation in order to reduce the morbidity caused by diabetes.”<sup>16</sup>

2.18. Raised levels of risk in socially deprived areas have also been demonstrated in much recent research – including treated mental illness and heart disease.<sup>17</sup> Increasing socio-economic deprivation has also been shown to be associated with higher prevalence of psychological distress and shorter consultations.<sup>18</sup>

### Improving Health in Wales

2.19. The report of Task Group B, part 2, sets out how the NHS acting directly can improve health and reduce inequalities in health through

- achieving equality of access to health services based on need whether through geography, socio economic status, age, sex or ethnicity
- implementing evidence based interventions to improve health and reduce health inequalities
- acting as an advocate for better health
- providing information and intelligence
- promoting disease prevention and health
- acting as an exemplary employer.

2.20. Improving Health in Wales gave a new impetus to this action and builds on previous strategies including:

- the 15 health gain targets set out in Better Health Better Wales
- improving primary care
- addressing inequities in access to health care caused by the supply of services
- improving the quality of treatment and hence outcomes through clinical governance
- human resource policies – the NHS’s own staff
- development of Health Improvement Plans.

2.21. Improving Health in Wales sets out how the NHS contribution to tackling inequalities will be delivered by:

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<sup>16</sup> Morgan C.L, Craig J.C. and Peters J.R., Hospital Utilisation as a Function of Social Deprivation: Diabetes versus Non-Diabetes, *Diabetic Medicine*, 1997; 14, 594.

<sup>17</sup> Moser K., Inequalities in treated heart disease and mental illness in England and Wales, 1994-1998, *BJGP*, 51, 2001, 438-444.

<sup>18</sup> Stirling A.M., Wilson P. and McConnachie A., Deprivation, psychological distress and consultation length in general practice, *BJGP*, 2001, 51, 456.

- strengthening the role of the NHS as an advocate for community health development and as a partner in the social, economic and environmental development of Wales
- direct action by the NHS to ensure equitable access to effective and appropriate health care according to need, as discussed in para 39 above
- making the NHS, as the largest employer in Wales, an exemplar in workplace health.

#### 2.22. Detailed plans include

- by 2002 targets for the reduction of current inequalities through the Health Improvement Programme process
- action targeted at disadvantaged communities
- by December 2002 training and education programmes to ensure that all staff have greater awareness of the need for cultural and gender sensitivity in services
- equity audits of health and health care profiles between and within health care communities and the production of equity profiles
- National Service Frameworks - the first (to be launched in July) is the coronary heart disease NSF; those for diabetes, mental health and older people are due to be launched this year.

2.23. The role of this Review is to support these changes by making recommendations for a formula approach which will allow delegated budgets to be determined equitably and allow the impact of central or regional investment decisions to be monitored against an agreed measure of financial equity – as discussed in Chapter 4.

#### The Welsh policy context: Partnership: Better Health Better Wales

2.24. In Wales the broad public health agenda was addressed in Better Health Better Wales (para 1.17) which was followed by a Strategic Framework document in October 1998 which charted a strategy of joint action by the NHS and its partners to promote health and tackle the causes of poor health.

2.25. Better Health Better Wales placed Wales at the forefront of the population health approach. This was reinforced by the development of a national strategy to promote health and well being, proposals for which were published in March 2000 and an action programme to implement it published in November 2000.

2.26. This initiative has created a climate in which accountability for delivering better health is recognised as the responsibility of the Assembly corporately in partnership with the NHS, local government, the voluntary sector and with individuals themselves. At the same time improving health is one of the means of achieving greater economic prosperity in Wales for example by reducing levels of long term limiting illness and other health related barriers to employment – this has been recognised explicitly in the criteria for Objective 1 projects.

2.27. The key areas for action now are

- review of progress against the health gain targets and the preparation of the next phase of BHBW
- action to strengthen the public health function in Wales as part of the new health structures launched by Improving Health in Wales – with clear lines of accountability to the Assembly for population health.

#### Targeting Inequalities in Health

2.28. The Assembly's new Inequalities in Health Fund - £17 million over three years 2001-02 - 2003-04 - is designed to stimulate action to reduce health inequalities by targeting resources at the most deprived areas in Wales. The initial priorities have been set as measures to tackle Coronary Heart Disease and dental health.

2.29. The Fund was a new departure because it created a vehicle, open to bodies within and outside the NHS, for supporting action specifically targeted on the underlying determinants of ill – health. The proposal for such a Fund emerged from the Resource Allocation Review workshop on 19 July 2000. At that stage the Fund was seen as a possible interim alternative to early action to reform the NHS resource allocation formula.

2.30. The conclusion of Task Group B is that an Inequalities Fund will continue to be needed, even with an updated formula, if progress is to be made to reduce the underlying determinants of health inequalities. This reflects the view that while a more equitable formula will improve the capacity of the NHS to respond to existing inequalities in health and prevent them from increasing, it will not permit the additional, 'needs plus' investment needed to reduce inequalities. This is discussed further in Chapter 7.

2.31. 112 proposals were received following the launch of the Fund. This level of interest, together with the overall quality of proposals received, is regarded as encouraging and demonstrates the commitment of a wide range of organisations to tackle inequalities in health in partnership with others. An announcement on the portfolio of bids selected for support is expected to be made shortly.

2.32. Addressing inequalities in health by targeting action on hard to reach and disadvantaged groups is also a major consideration of the Assembly's health promotion programme. For example, the Assembly funded smoking cessation services, the Community Food Initiative and the Health Promotion Voluntary Sector Scheme include a focus on the most disadvantaged, while the Sustained Health Action Research Initiative is designed to show the most effective ways of breaking the cycle of poor health in Wales.

#### Corporate action by the Assembly and its partners

2.33. The Assembly as a whole can address inequalities in health and inequalities in access to care in building a more effective system of health and social care and related services. For example for older people becoming frail and needing support there is a complex inter-relationship between:

- family and social networks

- individual affluence or poverty (and its effect on the ability to buy services for themselves)
- access to adequate housing, transport, informal support networks;
- the availability of flexible primary health care programmes and support to stay at home
- responsive acute services which can treat patients quickly and give them the chance of returning home
- a varied menu of intermediate or continuing care programmes, which can put in place fast, and adjusted quickly and easily as circumstances change for better or worse.

2.34. The aim is to achieve a continuum of services for all those who need them, including children in need, children with complex disabilities and vulnerable adults. Achieving this flexible and responsive kind of provision depends not only on financial inputs but also on performance management, qualitative evaluation and inspection and review.

2.35. The report of Task Group B shows how promoting health and reducing inequalities fits with the strategies of different agencies in Wales. Part 2, Annex 2, provides examples of how a cross cutting strategy for lifelong investment in health could be achieved by action at each life stage to

- improve nutrition through better access to health foods
- the development of skills needed to combat substance misuse
- psycho social support to prevent mental health problems
- promotion of safe environments to reduce accidents and injuries.

#### The role of local government and the joint working agenda.

2.36. Local government in Wales has wide ranging responsibilities to provide services which address the health and well being, as well as the social and economic development, of the people and the communities in their areas. The new responsibilities for community strategies, under the 2000 Local Government Act, put local authorities in the lead in developing holistic approaches to the provision of services and strategic planning.

2.37. The Assembly provides a significant part of local government expenditure through the provision of the revenue support grant. This fund is unhypothecated: although small additional sums are provided through specific grants, the majority of the Assembly's support for local government comes in the form of a block grant, so that decisions are taken locally about spending priorities.

2.38. Spending by local authorities in Wales on social care is included in the financial information summarised in Table 17, para 3.66 below, with the caveat that this provision is set by local authorities in the context of financial and constitutional arrangements which are very different from those of the NHS. The policy

agreements which are being established for the first time in 2001-02, focus attention on the service output and client outcomes of local authority spending decisions, informed by best value assessments, joint review and service inspection.

2.39. Improving Health in Wales places a high priority on the effective and strategic relationship between the NHS and local government. By establishing strategic partnerships for health and well being in each local authority's area, the Assembly intends to secure a new strategic relationship which will work both to address inequalities in health, e.g. through environmental and community regeneration strategies. The use of tools such as health impact assessment will help to achieve an integrated approach to policies and programmes.

2.40. These partnerships will also provide the framework within which closer collaboration and the long-term strategic development of services can take place for children, for adults with disabilities, for older people and marginalised or disadvantaged groups such as asylum seekers, substance misusers, young offenders and travellers. By ensuring collaboration with all parts of local government (including education, housing, environmental health, transport and planning – as well as social services) this structure will provide a framework within which resources can be targeted at prevention as well as treatment/support.

2.41. The aim is to create a framework in which NHS Trusts, Local Health Groups and local authorities can work together to plan services, allocate resources and take a whole systems view of the service outcomes which they want to provide for patients. This needs to be based on an analysis of financial inputs at local level, including the resource mapping information on NHS spending discussed in Chapters 3 and 4, and on performance management outputs for both health and social services, all of which is highly relevant to equity of access in relation to need within and across local authority areas.

2.42. At the national level, budget planning within the Assembly and the proposed new National Partnership Council for Health and Well-being, all point to a closer integration in prioritisation, budget setting and strategic direction to take health and social services together jointly, rather than in separate silos. One essential ingredient, in our view, is for the NHS Finance Division to work with the representatives of local social services and professional bodies to agree the expenditure statistics that need to be collected about equity of access to and outcome for health care as a basis for action – as recommended in the proposals for a new financial strategy set out in Chapter 3. We consider this to be a crucial step in ensuring that there is improved management understanding and control of rising as well as falling (or scarce) health resources for different categories of service so that they are actually allocated to those in greatest health need.

2.43. Across local authority services the Health Alliance process has placed local authorities in the lead in promoting the wider public health agenda for all the local population – working through community planning and through individual services such as education and housing.

#### Specific Assembly strategies

2.44. Examples of how the Assembly's corporate approach to the underlying determinants of ill health is being delivered include:

- national housing strategy
- community regeneration
- strategic framework for children and young people
- strategy for older people.

### Housing

2.45. The relationship between housing and health is well established - improving the health and well being of communities and tackling inequalities in health is an objective of the Assembly's housing strategy.<sup>19</sup> The major share of the housing budget is spent on capital investment to tackle Wales's relatively high level of unfit housing – 8.5% of properties are classified as unfit on a measure which includes standards which relate to structural condition, hygiene, heating and sanitation. The Assembly's Better Wales strategy includes a target of reducing the proportion of occupied houses in serious disrepair to less than 4% of the stock.

2.46. The housing budget includes programmes specifically targeted at vulnerable people including

- to support adaptations to enable elderly and disabled people to live independently
- to help elderly and disabled owner occupiers to manage repairs to keep their homes in good condition – the Care and Repair Scheme which has been extended to the whole of Wales
- to lift 38,000 of the poorest households out of fuel poverty by March 2003 – the home energy efficiency scheme
- to eliminate the need for rough sleeping and deliver the Better Wales targets of reducing the number of homeless families occupying temporary accommodation by 2003 to less than 500.

### Education

2.47. In line with recommendations by Acheson, the Assembly has committed funding to developing healthy school schemes in all areas of Wales. Funding of approximately £2 million over 4 years has been offered to local health and education partnerships to develop healthy school schemes. As a result all 22 Unitary Authorities are in the process of starting, or further developing schemes within the national framework of the Welsh Network of Healthy school schemes. The first such scheme has been accredited by the Assembly.

### Communities First

2.48. The Assembly announced on 18 June the communities to be included in the Communities First programme which will be targeted at the most deprived communities in Wales. The communities were nominated by local authorities and

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<sup>19</sup> Better Homes for People in Wales, December 2000, para 6.8, p37.

their partners using a combination of the Welsh Index of Multiple Deprivation, at ward level, and comparative data at sub ward level. The Assembly Budget includes proposals for new investment in these communities of £20 million in 2001-2, £29 million in 2002-3 and £34 million in 2003-4 in this programme.

2.49. Under the programme, communities will be required to set up local partnerships and develop community action plans. One of the aims of Communities First partnerships will be to tie in other funding streams and complement wider initiatives. The initial indication is that there is a high coherence between the areas targeted by Communities First and the areas targeted by the Inequalities in Health Fund. It is proposed that health, including specifically the availability of accessible, responsive and relevant health services should be one of the six domains for evaluating the impact of the programme at community level.

### Children and Young People

2.50. The Assembly is currently consulting on proposals on a framework for children and young people, which will provide a coherent and comprehensive strategy for the development of policies and delivery of programmes to support the development of services for children and young people across Wales. This will include securing high standards in universal services (e.g. health and education) and effective integration in the planning and delivery for more specialist services for children in need or who are looked after by local authorities. To support the strategy, the Assembly has over recent years channelled significant additional resourcing through local authorities to enhance the delivery of children's services. Strategies include £25 million over 3 years for Children and Youth Partnership Fund, £18 million deliver the Children First Programme, and £25 million to develop the Sure Start initiative aimed at tackling inequalities for children aged 0 – 3 and their families.

### Older People

2.51. The Assembly is developing a broad ranging strategy for services for older people. This strategy, which is being taken forward with a broad consultative base, will look at a range of needs for older people including housing, transport, and leisure provision. But the main emphasis will be on the continuum of care services required by many people as they get older, ranging from domiciliary support, primary health and community care, through to acute hospital services and rehabilitation support. The strategy will include measures to ensure closer collaboration between health and local government services, and focus on the need to provide a seamless service for older people and their carers, which is responsive to changes in needs, and ensure equitable access to services, based on common needs assessment and service standards.

2.52. The Assembly's Public Health Division has recently conducted an audit of action by the Assembly in addressing those recommendations of the Acheson report (para 1.4) covered by devolved powers. This demonstrated the progress made, for example with the development of health impact assessment, health promoting schools and programmes designed to reduce inequalities in sexual health, smoking and other health related behaviours.

## Wales in the wider context

2.53. The Better Wales strategy was launched in parallel with the Acheson report. Policies throughout the UK since Acheson report have focused on action both within and beyond the health system including:

- recognising the strength of the evidence of the links between socio economic disadvantage and deprivation and poor health
- the broad scope of policies relevant to reducing inequalities
- the importance of long and short term strategies
- the role of primary health services in improving the health of the worst off
- the inadequacy of attention to the health needs of ethnic minority groups
- the importance of up-to-date and accurate data on health at the local level.

## Advocacy and the Government at Westminster.

2.54. Acheson made a number of wide-ranging recommendations but placed greatest emphasis on material and income measures, as did the Black report. Acheson made 39 recommendations, 10 dealing with the need to introduce more adequate incomes for vulnerable groups, and another 10 dealing with material factors of housing, diet and environment.

2.55. Most of these income measures relate to areas outside the Assembly's powers - which are being pursued by the DSS in relation to the UK as a whole as set out in the 'Opportunities for All' annual report, and by the Social Exclusion Unit in relation to England. The focus relates to protecting vulnerable people, tackling child poverty and ensuring a policy response to vulnerable and excluded people across all policy areas.

2.56. Because both the Acheson and Black reports laid so much emphasis upon improved levels of benefit –especially for children, old people and others, like the disabled – people not yet at, or unable, to work, it would be wrong for those in different posts of authority in Wales to concentrate only on their strict statutory responsibilities. Inevitably they advise clients and patients about benefit claims. And these sections of the population are found to attract priority in health care. Advocacy on their behalf is therefore inescapable. They are advocates, if only informally. We consider they should eagerly accept a wider responsibility, not just to help individuals who call on their expertise but to advise government of their experiences in relation to scientific information, and call for national action to improve the structural conditions which favour better health.

2.57. Professionals and volunteer workers advise patients or clients occasionally or frequently about, for example, their housing or income. Doctors are often expected to supply information to Councils or the Department of Social Security, on behalf of ill or disabled patients who consult them. Often they advise and not only supply information. We believe this function could be built into the expectations of professional practice. We therefore propose that an "advocacy grant" should be



introduced on an experimental basis for three years to enable health professionals to meet to pool their experience of unmet health needs – the responsibility for which lies outside the health care system, and to enable them to make representations for change to the appropriate external bodies. This is only one of the possible measures to call attention publicly to this wider advocacy role that in our view needs to be part of the ordinary expectations of professional practice. Provision must be made for professionals to meet to contribute their expertise to the wider agenda.

## **Conclusions**

2.58. This chapter has outlined the scope of necessary action by the NHS in Wales, and beyond the NHS, by the Assembly corporately in relation to its policy responsibilities and to advise the UK Government on measures to improve health by reducing material and social deprivation in Wales.

2.59. We recommend that a dual strategy of measures to be taken within the NHS in Wales, and measures taken outside the NHS, should be developed by the Assembly and that the parts to be played by different components of that strategy should be examined in turn and their contribution monitored and assessed, through a new assessment of future strategic potentialities for equity in health within Wales.

2.60. This strategy needs to recognise the contribution of professional practitioners both to improving equity in professional practice and to advocacy for health in relation to unmet needs outside the health care system. We make specific recommendations for training grants for 'equity in public service' and for advocacy to underline the key importance of ensuring that provision is made for professionals to contribute their expertise to the broad strategy for addressing inequalities outlined here.

2.61. We also recommend that, in parallel with the improvements needed in NHS financial information systems recommended in the next chapter, there needs to be agreement on expenditure information about equity of access across the NHS and local authority social services to support the partnership structures proposed in Improving Health in Wales.

### 3. Chapter 3 The distribution of NHS resources in Wales

3.1. NHS resource allocation by area or by sub-category of service is only an enabling device for tackling inequalities of health and of health care. How those resources are used is the key piece of information on which to approve, reinforce or change current action. An acceptable plan for the future to meet the goals set by the Assembly depends on giving a good account of the distribution of current and previous expenditure. If changes are justifiable then the reasons for making them have to be there for all to see.

3.2. The purpose of this chapter is to pull together the available evidence on the way the NHS Wales budget is currently, and has been, spent at health authority, NHS Trust and primary care contractor level. The chapter begins with the allocation of resources at the Assembly level and tracks the distribution of expenditure at health authority, NHS Trust and primary care contractor level.

3.3. We will pick out some central features of developments in expenditure and then go on to evaluate the financial information currently available and to consider what improvements are needed to support the new structures proposed in Improving Health in Wales and to enable the Assembly to monitor the effectiveness of the budget in meeting its objectives for improving health and tackling health inequalities.

3.4. In this Review we have attempted to look at the resource allocation process in the context of the whole of the Welsh health budget - £3.1 billion in 2001-2. Table 1 compares recent trends in provision for the NHS in Wales and England. As a proportion of GDP provision was broadly constant over the 3 years in both countries. Increases at constant prices were low in 1997-98 and 1998-99 - being 1.3% and 3.0% respectively, improving to 5.5% in 1999-00 and 7.7% in 2000-01, though falling back again to 5.1% in the current year (details of trends in cash and constant prices are in Annexes 3 and 4, 'Wales Health Budgets - Key Trends since 1996-97'). Trends at constant prices are summarised in Table 3 below). Since NHS costs tend to rise at a faster rate on average than other costs these figures help to illustrate the particular pressures that exist within the service. As we conclude at the end of this chapter this overall problem has to be related to the objective of reducing health and health care inequalities.

**Table 1**

**NHS provision: England and Wales**

	1996/97	1997/98	1998/99
<b>Total NHS provision</b>			
England (£m)	32,997	34,664	36,612
Wales (£m)	2,182	2,274	2,411
<b>Total NHS provision/GDP</b>			
England (%)	5.8	5.7	5.7
Wales (%)	8.0	8.0	8.1

**Notes**

GDP data have been approximated from data for calendar years.

**Sources**

NHS provision data for Wales provided by NHSF, National Assembly. Data for England from DH departmental report.

GDP calendar year data are Blue Book 2000 estimates and subject to revision.

3.5. Table 2 shows that expenditure per head for Wales was higher than for England (though lower than for Scotland). This must not be misinterpreted. Wales has relatively low GDP and its GDP per person is one of the lowest of the UK regions. Expenditure in relation to GDP is also one of the lowest in Europe. For example, according to OECD data, spending on health was 6.9% in 1998 for the whole of the UK, compared with 7.8 for Italy, 9.7 for France and 10.5 for Germany. Wales also has good cause for higher expenditure. More people in Wales than in England and Scotland (28%, compared with 23%) report long term health problems and more receive sickness and disability benefits (11% compared with 6% and 9% respectively). Death rates from heart disease and cancer registration rates are substantially higher. There are other factors too - such as different rates of private health insurance, and the larger number of small hospitals in Wales than England<sup>20</sup>.

3.6. Trends in the health budget in Wales need to be set against the background of rising health inequalities in Wales and the UK (Chapter 1), and overall levels of spending in relation to GDP which are low in international terms and have not increased in recent years. In this context it is perhaps worth noting that all the evidence from Europe and the US suggests that expanding the role of private health care is likely to increase health inequalities still further, unless there is increased investment in public health provision as well as discussed in Chapter 7.

**Table 2 Identifiable total managed expenditure, per head, 1999-2000**

	£ per head					Index (United Kingdom identifiable expenditure = 100) (2)			
	England	Scotland	Wales	Northern Ireland	United Kingdom	England	Scotland	Wales	N Ireland
Education	659	863	682	935	685	96	126	100	137
Health and personal social services	1,041	1,271	1,180	1,193	1,072	97	119	110	111
Roads and transport	133	180	154	123	138	97	131	112	89
Housing	42	90	74	166	51	82	175	144	325
Other environmental services	134	188	242	153	144	93	130	168	106
Law, order and protective services	305	302	302	649	315	97	96	96	206
Trade, industry, energy and employment	103	171	130	293	115	89	148	112	254
Agriculture, fisheries, food and forestry	55	200	116	212	75	73	267	155	284
Culture, media and sport	88	88	140	53	89	98	99	157	59
Social security	1,682	1,865	1,983	2,069	1,724	98	108	115	120
Miscellaneous expenditure <sup>(1)</sup>	42	53	50	94	45				
<b>Total</b>	<b>4,283</b>	<b>5,271</b>	<b>5,052</b>	<b>5,939</b>	<b>4,453</b>	<b>96</b>	<b>118</b>	<b>113</b>	<b>133</b>

(1) Expenditure includes the costs of the central administration of the offices of the Secretaries of State of the territorial departments.

(2) An index of miscellaneous expenditure is not included since the administration costs of departments other than the Scottish Office, Welsh Office and the Northern Ireland departments are not separated from the functional expenditure. Such an index would therefore have little meaning.

3.7. Table 2 also shows how expenditure per person on health and social services compares with other forms of public expenditure. Health and social services accounts for over a fifth of public expenditure, with social security accounting for more than a third.

<sup>20</sup> National Assembly for Wales, Stocktake of NHS Wales, July 1999, Chapter 2, paras 5-7.

## Distribution of the Welsh health budget at Assembly level

3.8. Some 64% (1.992 billion) of the total health funding in Wales is currently distributed to health authorities by means of a weighted capitation based population formula and the remainder by other means as discussed below. This was introduced in 1992 and phased in until target formula shares were reached in 1998-99 as explained in Chapter 6. Prior to the main formula based allocation to health authorities, the following processes take place:

- Step 1: decisions are made by the Assembly about the total sum to be made available for health in Wales
- Step 2: assessments of the forecast cost of non cash limited expenditure, such as payments to contractors, which is demand-led. This is around a quarter of total provision
- Step 3: decisions on the quantum for each service component – as determined nationally before these sub-totals are aggregated for allocation by formula or otherwise to health authorities.

3.9. In serving the principles of equity at every level of decision making there will be a need to balance

- the need to sustain the existing NHS infrastructure designed to provide universal access to services and to support stable, long term planning, including the training and development of the NHS workforce
- the need to fund new developments at national, regional and local level, to respond to unmet need and new pressures – eg new drugs and treatments
- to change investment patterns to deliver improvements in performance eg on hospital activity and waiting lists/times and to implement National Service Frameworks.

3.10. The pie chart at Annex 5 summarises how the Assembly's health budget for 2001-2002 was distributed<sup>21</sup>. The narrative at Annex 6 provides a background commentary on each budget item and how it is allocated. In summary, of the £3.1 billion total:

- 64% (£1.992 billion) was distributed to health authorities on the basis of a weighted population formula - of which
  - 58% was the discretionary allocation ie to support a process of local investment and prioritisation delegated to health authorities
  - 4% was the ring-fenced/protected services allocation – for specialised services commissioned on a regional or all-Wales basis
  - 2% was the GMS cash limited allocation – for GP support costs.

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<sup>21</sup> ie before the in-year additions/adjustments made following the Chancellor's March 2001 Budget.

- 26% (0.79 billion) was distributed to health authorities not by formula - of which
  - 15% is added to the health authority allocation (13% is for prescribed drugs, 2% for top sliced protected services)
  - 11% is for demand led Family Health Services – provided by GPs, dentists, ophthalmists and pharmacists
- 4% (about £125 million) was distributed direct to NHS Trusts – not by formula – for capital, capital charges, education and training and R&D.
- 7% was distributed to other bodies – not by formula.

In principle this distribution relates to considerations of equity as follows:

- 64% is allocated to health authorities in proportion to the distribution of population according to a formula weighted for age and sex and relative mortality as explained in chapter 5
- some 24% - for primary care expenditure (13% for prescribed drugs and 11% for payments to primary care contractors) is allocated not in proportion to population but on the basis of the historic pattern of expenditure – as discussed below
- the balance of 12% - for protected services (2.2%), capital (2.5%), education and training (3.7%), central budgets and brokerage (2.3%) and other health services (1.7%) - is based on an assessment of need relevant to each programme.

#### Key trends since 1996-97

3.11. The table below provides a summary of trends in constant prices (details in Annex 3) with an indication of the trends in primary and secondary care.

**Table 3 Welsh health budget 1996-7 – 2001-02: trends in constant prices**

	Cash funding revalued	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	5 Year %	Average
	To 1999-00 constant prices	£m	£m	£m	£m	£m	£m	Increase	Increase %
	<b>Hospital, Community &amp; Family Health Services Revenue</b>	<b>1895.0</b>	<b>1923.5</b>	<b>2003.5</b>	<b>2137.3</b>	<b>2307.7</b>	<b>2411.6</b>	<b>27.3</b>	<b>5.5</b>
	Of which:								
1	Hospital & Community Health Services – discretionary	1418.4	1447.1	1471.8	1535.6	1634.4	1720.0	21.3	4.3
2	Ringfenced & Protected Services FN illustration?	88.2	74.2	94.2	133.0	128.4	189.0	114.3	22.9
3	GP Drugs Prescribing	268.8	283.6	307.1	327.6	350.5	373.2	38.8	7.8
4	General Medical Services - cash limited	51.3	52.2	54.6	58.7	58.9	60.8	18.7	3.7
5	Central Budgets	68.3	66.4	75.8	82.5	135.5	68.6	0.4	0.1
6	<b>Hospital &amp; Community Services Capital</b>	<b>103.7</b>	<b>110.7</b>	<b>99.5</b>	<b>90.4</b>	<b>71.9</b>	<b>73.8</b>	<b>-28.8</b>	<b>-5.8</b>
7	<b>Education &amp; Training</b>	<b>77.6</b>	<b>78.3</b>	<b>77.7</b>	<b>80.9</b>	<b>87.0</b>	<b>108.5</b>	<b>39.8</b>	<b>8.0</b>
8	<b>FHS – non cash limited</b>	<b>276.4</b>	<b>273.9</b>	<b>279.1</b>	<b>286.6</b>	<b>310.9</b>	<b>319.3</b>	<b>15.5</b>	<b>3.1</b>
	General Medical Services	135.1	136.5	137.9	146.5	157.0	159.7	18.2	3.6

	Pharmaceutical Services	60.6	61.1	61.0	60.2	67.6	67.7	11.7	2.3
	General Dental Services	61.4	57.6	61.4	61.0	66.7	70.8	15.3	3.1
	General Ophthalmic Services	19.3	18.7	18.8	18.9	19.6	21.0	9.2	1.8
<b>9</b>	<b>Other Health Services</b>	<b>9.9</b>	<b>7.7</b>	<b>7.5</b>	<b>2.8</b>	<b>22.5</b>	<b>26.1</b>	<b>163.7</b>	<b>32.7</b>
<b>10</b>	<b>Health Promotion &amp; Health Improvement</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>8.4</b>	<b>9.4</b>	<b>7.8</b>		
<b>11</b>	<b>Health Inequalities Fund</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>3.8</b>		
<b>12</b>	<b>Food Standards</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.6</b>	<b>0.8</b>	<b>1.8</b>		
<b>13</b>	<b>Welfare Foods</b>	<b>16.1</b>	<b>15.7</b>	<b>15.3</b>	<b>12.9</b>	<b>12.6</b>	<b>11.5</b>	<b>-28.9</b>	<b>-5.8</b>
	<b>Total</b>	<b>2378.8</b>	<b>2409.9</b>	<b>2482.6</b>	<b>2620.0</b>	<b>2822.8</b>	<b>2964.2</b>	<b>24.6</b>	<b>4.9</b>
	<b>Revaluation factors</b>	92.366	94.985	97.697	100	102	104.55		

(HM Treasury GDP deflators - Dec 2000:1999-00=index 100)

	Total of Secondary Care / Primary Care /	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	5 Year %	Average
	Other Services	£m	£m	£m	£m	£m	£m	Increase	% increase
	<b>Secondary Care</b>	<b>1610.3</b>	<b>1632.1</b>	<b>1665.5</b>	<b>1759.0</b>	<b>1834.7</b>	<b>1982.8</b>	<b>23.1</b>	<b>4.6</b>
	Nos. 1,2 & 6								
	<b>Primary Care</b>	<b>596.5</b>	<b>609.7</b>	<b>640.8</b>	<b>672.9</b>	<b>720.4</b>	<b>753.2</b>	<b>26.3</b>	<b>5.3</b>
	Nos. 3,4 & 8								
	<b>Other Services *</b>	<b>172.0</b>	<b>168.1</b>	<b>176.3</b>	<b>188.1</b>	<b>267.7</b>	<b>228.2</b>	<b>32.7</b>	<b>6.5</b>
	Nos. 5,7,9,10,11,12 & 13								
	<b>Total</b>	<b>2378.8</b>	<b>2409.9</b>	<b>2482.6</b>	<b>2620.0</b>	<b>2822.8</b>	<b>2964.2</b>	<b>24.6</b>	<b>4.9</b>

\* Note: Funding within "Other Services" may be allocated to either the secondary or primary care sectors. This information is not available

3.12. Budgeted provision for health has increased from £2.197 billion in 1996-97 to £3.100 billion in 2001-2, an annual increase of 4.9% at constant prices. The major developments in this period are:

- average annual growth at constant prices of 4.9% overall over the period, which is the product of low rates of growth in the first three years 1996-7 – 1998-99 and higher growth in the last three years 1999-2000 – 2001-2002
- the £2.521 billion budget for Hospital and Community Health Services revenue has grown by an average 5.5% a year at constant prices since 1996-97, of which the discretionary element has grown by 4.3% a year at constant prices
- the budget for capital has fallen by an average 5.7% a year at constant prices – because of the pressures to maintain health authority revenue provision. This is a matter of considerable concern, to which we return in the conclusion to this chapter. Thus in Improving Health in Wales attention is drawn to "a recent condition survey of the building stock [which] reflects many years of under-investment. Latest returns indicate that 39% of the stock is in unacceptable physical condition..."<sup>22</sup> The current budget provides for investment to be increased in future years and the report "Improving Health in Wales" expresses a commitment to do so

<sup>22</sup> Improving Health in Wales: A Plan for the NHS with its Partners, Cardiff, National Assembly for Wales, 2001, p.59.

- the fastest growing budget has been for GP prescribed drugs which has increased at an average of 7.8% a year at constant prices. Although the precise figures may be open to some adjustment the substantially above average trend is clear. This is another matter for concern - to which we will return at the end of this chapter.
- overall, the average percentage real terms growth in the budgeted provision for primary care expenditure in the last five years (5.3%) has been greater than that for secondary care (4.6%) but this is attributable solely to the increases in provision for GP prescribing; the increases in FHS (3.1%) and GMS cash limited (3.7%) expenditure have both been lower than average for secondary care expenditure. (Note this does not include an analysis of those central budgets which cannot readily be apportioned between secondary and primary care.)

### The problem of analysing total hospital, community and family health services expenditure in Wales

3.13. In explaining above and below average expenditure trends in Wales (Table 3) readers will have noted that the great bulk of expenditure - four-fifths - has not been considered in its constituent parts. We have investigated possibilities, and find there is a historic problem in providing precise sub-totals - which should be resolved urgently in relation to reforms in the collection of financial and health-condition information that we recommend elsewhere in this chapter and in our conclusions.

3.14. The best available estimates from the annual accounts kept by the health authorities are given in Table 4 and in more detail for each of the five authorities in the second half of this chapter. Setting aside the smaller categories of expenditure Table 4 shows that there were above-average annual increases in pharmaceutical services and community services. The first adds to the concern already expressed about prescribing costs.

3.15. There are also below average trends that need investigation as shown in Table 4 below. The low rate of growth in cash limited GMS reflects the pattern of underspending mentioned in paras 57 and 61 below. The reduction in spending on learning disability services reflects the agreed transfer of services for this client group to local authorities.

3.16. Table 4 shows how the five Welsh health authorities spent the HCFHS allocation shown in Table 3. It may be construed as "a high level analysis" of how the total of health authority expenditure was distributed between

- the purchase of primary care ie expenditure on GP drugs prescribing and cash limited General Medical Services
- the purchase of secondary care from NHS Trusts
- programme expenditure by health authorities (which includes for example the costs of the public health function and the purchase of continuing care by health authorities)
- health authority administrative costs

- restructuring costs.

**Table 4**

<b>High level breakdown of Health Authority HCCHS expenditure 1996-97 to 1999-2000</b>						
		<b>1996-1997</b>	<b>1997-1998</b>	<b>1998-1999</b>	<b>1999-2000</b>	<b>Average annual</b>
<b>£ millions</b>		<b>£ m</b>	<b>£ m</b>	<b>£ m</b>	<b>£ m</b>	<b>increase % at constant prices</b>
<b>Primary care :</b>						
GMS cash limited		53	53	55	56	1.9
Pharmaceutical services	(2)	349	360	375	420	6.8
<b>Total</b>		<b>402</b>	<b>413</b>	<b>430</b>	<b>476</b>	<b>6.1</b>
<b>Secondary care :</b>						
Acute services		1,134	1,113	1,179	1,295	4.7
Community services		196	206	207	249	9.0
Mental illness		160	194	202	205	9.4
Learning Disabilities		51	55	57	57	3.9
Continuing inpatient care		34	28	27	24	-9.8
Continuing health care in the community		7	10	14	11	19.0
<b>Total</b>		<b>1,582</b>	<b>1,606</b>	<b>1,686</b>	<b>1,841</b>	<b>5.5</b>
<b>Other direct service expenditure</b>	(3)	<b>49</b>	<b>50</b>	<b>50</b>	<b>80</b>	<b>21.1</b>
<b>Health authority costs</b>	(4)	<b>40</b>	<b>34</b>	<b>37</b>	<b>46</b>	<b>5.0</b>
<b>Total HCCHS</b>		<b>2,073</b>	<b>2,103</b>	<b>2,203</b>	<b>2,443</b>	<b>5.9</b>

Source : Adjusted Health Authority annual accounts 1996-97 to 1999-2000

Note 2.8 Core performance Indicators

**Notes**

(1) The figures for 1996-97 to 1998-99 have been adjusted for HM Treasury GDP deflators using 1999-2000 prices.

(2) The 1999-2000 figures include £ 67m FHS expenditure.

(3) Other direct service expenditure includes health promotion, nursing homes inspection service and the net Costs of ongoing clinical negligence claims arising before the establishment of NHS trusts. The increase in 1999-2000 is due to exceptional funding of £ 20 m to non-reconfigured NHS trusts in respect of FRS 11 impairment funding.

(4) Health authority costs include central running costs. The increase in 1999-2000 is due to the amalgamation of Health Solutions Wales in Bro Taf Health Authority.



3.17. Data produced by the Department of Health in 2001 for England shows how the problem of standardising health care costs in a form that allows sub-categories of expenditure to be investigated can be met. Table 4a gives a breakdown of the £25 billion spent in England in 1998-99. Unfortunately trend data on this basis are not yet available. However the table offers a model of good practice that could be followed and further developed for Wales.

**Table 4a HCHS England Programme Budget Expenditure, 1998-99**

	Programme						£ million	
	Total	Maternity	Mental Illness	Learning Disability	Children	General Adults & Acute Elderly		
Total Hospital	19,204	1,087	2,455	530	2,070	5,589	7,473	
Ordinary admissions <sup>23</sup>	13,618	953	1,926	448	1,176	3,612	5,504	
Day cases	1,397	-	-	-	126	854	417	
Outpatients	3,001	134	230	16	611	860	1,148	
Day care	513	-	298	66	-	40	108	
Accident and Emergency	675	-	-	-	158	222	296	
Total community	4,888	215	790	873	729	927	1,353	
Community nursing	2,113	215	441	118	46	456	836	
Health visiting	381	-	-	-	247	120	15	
Professional staff groups	679	-	-	-	55	317	307	
Immunisation, surveillance & screening	429	-	-	-	381	35	13	
Residential care	1,285	-	348	755	-	-	182	
Ambulance journeys	511	29	65	14	55	149	199	
Other Patient related	815	44	110	47	95	220	299	
Non-patient related	77	4	10	4	9	21	28	
<b>Total HCHS</b>	<b>25,494</b>	<b>1,380</b>	<b>3,430</b>	<b>1,469</b>	<b>2,958</b>	<b>6,905</b>	<b>9,352</b>	

3.18. For Wales one further means of examining expenditure trends is to assess whether or not the distribution of resources by specialty is equitable. We show the results at constant prices below for the Welsh Trusts in Table 4b for the period 1996-97 to 1999-00. There are examples of increases and decreases that are substantially above- and below average. There was an apparent fall in expenditure at constant prices on geriatrics from £99m to £69m (10% fall per annum at constant prices) – which seems likely to reflect a change in the coding of the treatment of the very elderly as explained in para 3.56 below, and a corresponding fall in Royal College specialties and day care functions. The increase in psychiatric specialties (with the exception of forensic psychiatry) has been fitful over the four years and for old age psychiatry has been much below average.

3.19. Some other trends in expenditure by specialty have been well above average, including cardiology, rheumatology, haematology, rehabilitation medicine and neurosurgery. These trends are analysed in more detail in paras below. In tracking NHS expenditure the reasons for departures from average experience must be explained and widely understood.

<sup>23</sup> Includes regular day/night attenders

**Table 4b****Expenditure by Welsh NHS trusts by specialty 1996-97 to 1999-2000**

	Total	Total	Total	Total	Average annual increase at constant prices
	1996-1997	1997-1998	1998-1999	1999-2000	
	£	£	£	£	%
<b>MEDICAL SPECIALTIES</b>					
a. Paediatrics	48,481,304	50,237,136	53,206,305	57,041,710	5.9
b. Geriatrics	98,903,987	92,774,364	79,727,484	68,913,570	(10.1)
c. Cardiology	8,730,546	10,478,119	11,523,288	14,384,997	21.6
d. Dermatology	11,394,808	13,026,671	13,182,510	13,234,329	5.4
e. Infectious diseases	-	-	-	2,652	0.0
f. Medical oncology	2,632,157	3,222,720	5,417,770	5,451,465	35.7
g. Neurology	5,574,593	5,176,524	4,780,063	5,402,324	(1.0)
h. Rheumatology	5,432,959	7,219,499	7,716,897	7,480,003	12.6
i. Gastroenterology	478,559	529,237	612,549	666,201	13.1
j. Haematology	16,247,456	17,241,675	18,962,738	21,699,316	11.2
k. Clinical immunology and allergy	-	-	-	-	0.0
l. Thoracic medicine	7,682,981	7,725,708	7,839,928	7,040,662	(2.8)
m. Genito-urinary medicine	3,380,957	3,685,882	4,272,314	5,283,249	18.8
n. Nephrology	2,139,321	2,066,826	2,252,458	2,231,376	1.4
o. Rehabilitation medicine	5,530,527	5,927,740	9,192,138	11,387,234	35.3
p. Other medicine	151,146,764	172,688,147	203,956,714	228,479,001	17.1
<b>Sub-total</b>	<b>367,756,918</b>	<b>392,000,248</b>	<b>422,643,156</b>	<b>448,698,089</b>	<b>7.3</b>
<b>SURGICAL SPECIALTIES</b>					
a. General surgery	115,114,421	123,080,765	131,231,355	139,940,242	7.2
b. Urology	24,761,147	25,579,735	25,295,571	26,426,309	2.2
c. Orthopaedics	86,421,230	93,771,990	106,193,200	110,888,520	9.4
d. ENT	27,702,306	28,564,986	30,155,541	32,310,623	5.5
e. Ophthalmology	27,211,460	27,515,696	28,809,074	27,267,733	0.1
f. Gynaecology	38,176,173	39,465,444	43,014,830	42,812,428	4.0
g. Dental specialities	19,630,673	21,688,979	16,561,443	17,187,155	(4.1)
h. Neuro-surgery	7,275,298	7,308,178	9,123,301	9,362,294	9.6
i. Plastic surgery	12,778,580	10,207,189	9,987,420	10,517,719	(5.9)
j. Cardiothoracic	12,174,919	13,361,854	14,886,029	12,335,577	0.4
k. Paediatric surgery	1,614,503	1,779,650	3,251,620	2,602,121	20.4
<b>Sub-total</b>	<b>372,860,710</b>	<b>392,324,467</b>	<b>418,509,384</b>	<b>431,650,720</b>	<b>5.3</b>
<b>MATERNITY FUNCTION</b>					
a. Obstetrics	53,449,728	55,786,375	57,328,236	62,348,306	5.5
b. General practice	1,746,454	1,901,014	2,659,509	2,819,915	20.5
<b>Sub-total</b>	<b>55,196,183</b>	<b>57,687,389</b>	<b>59,987,746</b>	<b>65,168,221</b>	<b>6.0</b>
<b>PSYCHIATRIC SPECIALTIES</b>					
a. Mental handicap	43,618,535	43,119,786	38,834,393	32,942,679	(8.2)
b. Mental illness	64,234,423	60,112,521	66,733,832	72,323,976	4.2
c. Child and adolescent psychiatry	4,464,697	4,636,140	4,449,259	5,147,311	5.1
d. Forensic psychiatry	5,435,577	4,964,373	7,228,953	9,308,622	23.8
e. Psychotherapy	224,972	264,908	261,179	255,803	4.6
f. Old age psychiatry	52,399,637	51,126,024	55,051,046	55,877,128	2.2
<b>Sub-total</b>	<b>170,377,842</b>	<b>164,223,753</b>	<b>172,558,662</b>	<b>175,855,520</b>	<b>1.1</b>
<b>OTHER SPECIALTIES</b>					
a. General practice (other than maternity)	32,493,861	35,779,989	37,766,879	36,715,288	4.3
b. Radiotherapy	18,204,911	18,159,760	19,857,468	-	7.7
c. Pathological specialities	2,122,809	386,606	735,325	-	(29.6)
And radiology	-	-	-	-	-

d. Anaesthetics	2,416,614	2,619,241	2,771,986	2,605,545	2.6
e. A & E	6,688,625	7,413,255	3,715,624	5,281,415	(7.0)
<b>Sub-total</b>	<b>61,926,821</b>	<b>64,358,851</b>	<b>64,847,283</b>	<b>67,227,919</b>	2.9
<b>SUPRA DISTRICT SERVICES</b>					
a. Renal dialysis (inc CAPD)	9,441,070	9,816,126	9,567,072	10,442,457	3.5
b. Renal transplant	2,446,073	2,235,216	2,281,826	1,794,818	(8.9)
c. Open heart surgery	-	-	-	-	0.0
<b>Sub-total</b>	<b>11,887,143</b>	<b>12,051,342</b>	<b>11,848,898</b>	<b>12,237,275</b>	1.0
<b>SUPRA REGIONAL SERVICES</b>					
<b>Sub-total</b>	22,154,479	21,741,132	17,638,607	20,395,355	(2.6)
<b>Other Patient Groups</b>					
Patients using A & E services	37,391,872	37,274,560	42,667,334	44,994,451	6.8
<b>ROYAL COLLEGE SPECIALTIES AND DAY CARE FUNCTIONS</b>					
General medicine					
- Younger physically disabled	-	12,122	7,760	615,580	0.0
- General	929,076	803,743	1,452,516	1,488,106	20.1
Neurology	-	-	-	-	0.0
Rheumatology	-	106,781	-	-	0.0
Geriatric	7,896,661	7,357,127	7,583,306	5,677,009	(9.4)
Mental handicap	885,145	1,578,465	935,425	1,115,160	8.7
Mental illness					
- Alcoholism	316,602	166,286	149,515	238,455	(8.2)
- Drug abuse	-	-	-	-	-
- Psychogeriatric	336,114	826,883	-	-	(33.3)
- General	12,834,957	12,096,011	12,297,501	11,259,175	(4.1)
Child & adolescent psychiatry	1,642,541	1,334,859	1,767,274	1,949,516	6.2
Old age psychiatry	8,048,505	7,774,807	8,536,384	7,604,745	(1.8)
Paediatrics	450,799	392,017	398,728	445,448	(0.4)
Other specialities					
- Alcoholism	-	-	-	-	0.0
- Drug abuse	551,556	549,827	685,688	893,874	20.7
- Younger physically disabled	-	-	-	-	0.0
- Psychogeriatric	-	-	-	-	0.0
- General	1,993,738	2,233,910	2,014,815	1,943,310	(0.8)
<b>Sub-total</b>	<b>35,885,695</b>	<b>35,232,837</b>	<b>35,828,913</b>	<b>33,230,378</b>	(2.5)

### Health Programme Analysis

Paediatric community services					
- Assessment & development	13,208,407	14,774,553	15,004,096	19,097,790	14.9
- Vaccination and immunisation	2,223,375	2,551,883	2,619,239	4,964,260	41.1
- Dental	7,022,114	7,241,914	7,135,074	8,699,345	8.0
- Other professional advice & support	3,958,565	3,986,855	3,932,123	3,485,200	(4.0)
Mental illness	24,896,201	28,586,449	26,952,188	30,373,704	7.3
Mental handicap	11,874,774	11,622,266	12,904,123	14,380,548	7.0
General					
- Professional advice & support	1,953,210	1,719,082	2,116,483	3,200,008	21.3
- Nursing	63,318,245	61,606,143	60,752,293	65,223,316	1.0
- Chiropody	6,066,555	6,832,356	6,913,838	7,004,873	5.2
- Other paramedical	5,127,962	7,064,525	7,169,865	7,450,652	15.1
- Screening	6,455,567	5,008,579	4,702,403	13,494,756	36.3
- Home dialysis	1,456,403	1,316,593	1,218,144	1,181,034	(6.3)
- Family planning	2,862,095	2,504,588	2,733,049	3,585,680	8.4
Maternity services	9,226,472	12,199,000	10,201,148	13,527,111	15.5
Services to GPs under open access	19,496,503	22,075,780	25,008,162	25,450,609	10.2
Services for local authorities	82,303	105,546	109,527	-	(18.4)
Health education and promotion	4,158,928	4,194,943	5,353,295	-	(16.5)
Occupational therapy	1,093,947	2,735,956	1,513,744	-	11.9

Palliative care	1,905,851	2,084,702	2,536,228	2,817,305	15.9
Speech therapy	3,424,452	4,092,686	4,190,679		21.0
Other services	22,851,224	21,956,333	32,432,938		39.3
<b>Sub-total</b>	<b>212,663,152</b>	<b>224,260,733</b>	<b>235,498,637</b>		<b>11.0</b>
<b>TOTAL</b>	<b>1,348,100,815</b>	<b>1,401,155,312</b>	<b>1,482,028,620</b>	<b>1,582,386,395</b>	<b>5.8</b>

### Equity and growth

3.20. It has not been possible in this Review to produce a scientific analysis of the implications for equity of the differential growth rates of each component of the budget. We suggest this would be a fruitful development in future investigation and discussion within the service. It would require much more detailed analysis of the impact of incremental investment in each budget category on poor health and health gain, than is currently available. The rate of growth of each budget item reflects, to a large extent, demand and above inflation cost pressures that need to be met in order to sustain core services. These are not fully reflected in the constant price growth rates because the assumed inflation rate is less than the growth in pay costs, which represent some 70% of HCHS spending, and other cost factors. For example, in 2001-02 the figures have been revalued using the GDP deflator of 2.5% whereas the estimated growth in pay bill costs was around 7.4%.

3.21. The remaining sections of this chapter consider

- how different health authorities spend the budgets delegated to them by the Assembly
- how Trusts spend income they receive from health authorities
- how primary care expenditure is distributed
- how budgets held centrally by the Assembly are distributed.

### Disposition of the HCHS allocation by health authorities

3.22. Of the £2.598 billion distributed to health authorities for expenditure in 2001-2, £1.798 billion is distributed on the basis of the current weighted capitation formula as a discretionary allocation for authorities to use to commission services for their populations. Although this is largely unhypothecated Ministers have issued directions to the NHS on the priorities they wish to see implemented through the discretionary allocation eg reducing waiting times and developing primary care, and some funds are earmarked for this purpose. In addition there are standing targets for authorities to spend 0.5% of their discretionary allocations on health promotion and improvement measures and 0.4% in tackling substance misuse.

3.23. Following the announcement of increases in overall health resources in 2000-01, health authorities received a capitation share of £40 million (£35 million on a recurrent basis) for joint working with social services to tackle emergency pressures and reduce waiting times/lists and £25 million (£27 million in the current year) to tackle key Health and Social Service Committee priorities (coronary heart disease, cancer, primary and community care and community health development, mental health, children, ICT, learning disabilities re-settlement) and other priorities identified in local health improvement programmes.

3.24. Within these constraints health authorities have to set priorities for responding to local pressures including for example the cost of high cost continuing care cases and plans to reconfigure services and tackle problems of access and quality/governance in their areas. Authorities' plans for spending the discretionary allocation are not, for the most part, currently subject to Assembly approval although plans for investing the new money mentioned above have been.

3.25. The following tables provide a high level analysis of health authority accounts data, with adjustments to remove distortions arising from expenditure on items such as the Special Increment for Teaching (SIFT) and the Bro Taf Health Authority costs of operating Health Solution Wales, a service provided on behalf of NHS Wales as a whole.

3.26. Table 5 below shows health authority adjusted expenditure over the four years for which accounts are available since the re-configuration of health authority boundaries in 1996. This shows total expenditure of some £2.6 billion in 1999-2000 which represents an average annual increase of 3.8 per cent at constant prices since 1996-97. The expenditure totals here differ from those in Table 4 above which relate only to the cash limited HCHS allocation. Table 5 shows all spending shown in the health authority accounts (excluding the adjustments made for SIFT and Health Solutions Wales which are payments made to Bro Taf health authority for all - Wales services) and thus includes non cash limited FHS spending ie payments to primary care contractors. In any one year health authority spending as shown in the accounts will not be the same as the budget allocations shown in Annex 4 due to underspending or overspending against allocation for example as a result of carry forward from the previous year or deficit spending funded by brokerage – and because of differences in definitions.

**Table 5 Expenditure by Welsh health authorities 1996-97 to 1999-2000**

	<b>N Wales</b>	<b>Dyfed Powys</b>	<b>Morgannwg</b>	<b>Bro Taf</b>	<b>Gwent</b>	<b>Total</b>
	<b>£000</b>	<b>£000</b>	<b>£000</b>	<b>£000</b>	<b>£000</b>	<b>£000</b>
1996-97	513,213	385,709	406,513	574,540	415,393	<b>2,295,368</b>
1997-98	518,412	387,482	397,091	563,942	421,540	<b>2,288,468</b>
1998-99	530,847	419,845	404,696	602,799	436,648	<b>2,394,836</b>
1999-2000	572,202	434,530	433,417	641,305	474,164	<b>2,555,618</b>
Average % increase	3.8	4.2	2.2	3.9	4.7	<b>3.8</b>

Notes:

Source: Annual accounts of health authorities 1996-96 to 1999-2000

Figures adjusted for payments to SIFT and in 1999-2000 for Health Solutions Wales.

Figures revalued at 1999-2000 prices using HM Treasury GDP deflator figures

3.27. Table 6 below shows each health authority's adjusted expenditure as a share of overall health authority expenditure compared with its formula share of the allocation (Annex 7). The variance from formula shares is explained by

- the inclusion of GP drugs prescribing (in the allocation and expenditure totals) and of FHS expenditure (in the expenditure but not in the allocation totals) which are not currently allocated by formula (as discussed in chapter 5) and
- the difference between budget allocations and expenditure as explained above.

3.28. Thus in relation to formula allocated resources, formula shares may not translate into expenditure where authorities overspend or underspend significantly against allocation. For example in Dyfed Powys and Bro Taf the higher shares of expenditure compared with formula shares reflect inter alia additional money made available through loans and brokerage over the period. Conversely North Wales's percentage share of expenditure in 1999-2000 (22.4%) was lower than its formula share (22.9%) perhaps in part reflecting the fact that the Authority repaid brokerage owing to the Assembly in that year.

**Table 7 Shares of expenditure by Welsh health authorities compared with (formula share)**

	<b>N Wales</b>	<b>Dyfed Powys</b>	<b>Morgannwg</b>	<b>Bro Taf</b>	<b>Gwent</b>
	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>
1996-97	22.4 (23.1)	16.8 (16.8)	17.7 (17.1)	25.0 (24.3)	18.1 (18.7)
1997-98	22.7 (23.0)	16.9 (16.8)	17.4 (17.1)	24.6 (24.3)	18.4 (18.8)
1998-99	22.2 (22.9)	17.5 (16.9)	16.9 (17.1)	25.2 (24.3)	18.2 (18.8)
1999-2000	22.4 (22.9)	17.0 (16.8)	17.0 (17.1)	25.1 (24.5)	18.6 (18.8)

3.29. Table 8 shows health expenditure as spend per head of population over the same period. It indicates that Dyfed Powys has the highest spend per head of population (some 4.2% higher than the all Wales average in 1999-00), Gwent the lowest (some 2.2% lower than the all Wales average). These differences reflect the impact of the population formula on the allocation, modified by the factors explained above.

**Table 8 Welsh health authorities' expenditure (1) per head 1996-97 to 1999-2000**

	<b>£</b>	<b>£</b>	<b>£</b>	<b>£</b>	<b>£</b>	<b>£</b>
<b>Spend per head</b>	<b>N Wales</b>	<b>Dyfed Powys</b>	<b>Morgannwg</b>	<b>Bro Taf</b>	<b>Gwent</b>	<b>Wales</b>
1996-97	779.96	810.31	811.40	793.56	747.11	<b>787.43</b>
1997-98	790.26	814.04	792.60	757.99	731.84	<b>774.96</b>
1998-99	809.22	878.34	807.78	805.88	785.34	<b>814.85</b>
1999-2000	872.26	907.16	865.10	863.13	851.28	<b>870.44</b>
Average % increase at constant prices	3.9	4.0	2.2	2.9	4.6	<b>3.5</b>

Notes:

Source: Annual accounts of health authorities 1996-96 to 1999-2000

Figures revalued at 1999-2000 prices using HM Treasury GDP deflator figures

### Health authority expenditure by service category

3.30. It is important to note that data on health authority expenditure by service category provided in Table 4, and discussed in more detail below, is not incorporated in the NHS Wales summarised accounts and has not hitherto been the subject of analysis on this basis. The data needs therefore to be treated with considerable caution because the classification by health authorities of the different categories of expenditure identified has apparently changed over time and there are also likely to be inconsistencies in approach between different health authorities. One of the factors contributing to this is that before the major trust re-configuration which took effect on 1 April 1999, the breakdown will largely have reflected the pattern of expenditure between different types of trusts. That is no longer the case as most Welsh trusts now provide the full range of acute, community, and mental health services. If this high level analysis is to be retained and used to inform decision making these issues of standardisation and consistency must be addressed urgently as discussed below.

### Health authority expenditure on acute services

3.31. Table 9 analyses health authority expenditure on acute services. In constant prices overall expenditure on acute services increased by an average 4.7% a year over the period but the rate of increase was very different in the different HA areas, increasing by some 11.7% a year in Bro Taf but just 0.2% in North Wales.

**Table 9 Health authority expenditure on acute services 1996-97 to 1999-2000**

	1996-97	1997-98	1998-99	1999-2000	Average change in constant prices
	£000	£000	£000	£000	%
N Wales	263,227	250,664	256,520	264,840	0.2
Dyfed Powys	196,562	193,209	205,225	218,285	3.7
Morgannwg	220,561	208,930	212,151	222,286	0.3
Bro Taf	263,121	271,104	272,697	355,228	11.7
Gwent	190,073	188,940	232,791	234,123	7.7
	<b>1,133,543</b>	<b>1,112,847</b>	<b>1,179,384</b>	<b>1,294,762</b>	<b>4.7</b>
Spend on acute as % of healthcare & related services purchased					
	50.76	49.86	51.40	52.61	

3.32. Table 10 shows the percentage of overall expenditure spent on acute service by each health authority. This ranges from 46.3% of overall expenditure on patient services in North Wales to 55.4% in Bro Taf in 1999-2000. However, as the recorded expenditure on acute services in Bro Taf was nearly £82 million higher at constant prices in that year than the previous year, raising the proportion of its overall expenditure by some 10 percentage points higher than the levels of the previous year, this higher figure needs investigation.

**Table 10 Expenditure on acute services as a percentage of health authorities' total expenditure**

	<b>N Wales</b>	<b>Dyfed Powys</b>	<b>Morgannwg</b>	<b>Bro Taf</b>	<b>Gwent</b>	<b>Wales</b>
	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>
1996-97	51.3	51.0	54.3	45.8	45.8	49.4
1997-98	48.4	49.9	52.6	48.1	44.8	48.6
1998-99	48.3	48.9	52.4	45.2	53.3	49.2
1999-2000	46.3	50.2	51.3	55.4	49.4	50.7

3.33. On an all Wales basis, some 50.7% of expenditure in 1999-2000 was on acute services. In previous years it has been just below 50% with year on year fluctuations making it difficult to discern a consistent pattern on an all Wales basis. However, there is more consistency within some health authority areas and over the last four years, expenditure on acute services has increased as a proportion of overall expenditure in Gwent but has decreased in North Wales and Morgannwg. A more detailed breakdown of expenditure on acute services is included in the analysis below of expenditure by NHS Trusts in Wales.

3.34. Table 11 shows how the total of Welsh expenditure on acute services was distributed between authorities. Comparing this with the shares assumed in the formula shows significant variation eg in 1999-2000 Bro Taf's share of actual expenditure (27.4%) was above its formula share of 24.4% whereas North Wales's share of actual expenditure (20.5%) was less than its formula share of 23.0%.

**Table 11 Health authority expenditure on acute services as percentage of Welsh total expenditure on acute services**

	<b>N Wales</b>	<b>Dyfed Powys</b>	<b>Morgannwg</b>	<b>Bro Taf</b>	<b>Gwent</b>
	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>
1996-97	23.2	17.3	19.5	23.2	16.8
1997-98	22.5	17.4	18.8	24.4	17.0
1998-99	21.8	17.4	18.0	23.1	19.7
1999-2000	20.5	16.9	17.2	27.4	18.1

**Notes**

Source: Annual accounts of health authorities 1996-96 to 1999-2000

Figures adjusted for payments to SIFT and in 1999-2000 for Health Solutions Wales.

Figures revalued at 1999-2000 prices using HM Treasury GDP deflator figures

Health authority expenditure on community services

3.35. Table 12 analyses health authority expenditure on community services. The adjusted figures suggest that during the period 1996-97 to 1999-2000, expenditure on community services has increased by 9% at constant prices, with increases of around 20% in both Bro Taf and North Wales.



**Table 12 Health authority expenditure on community services 1996-97 to 1999-2000**

	1996-97	1997-98	1998-99	1999-2000	Average change at constant prices
	£000	£000	£000	£000	%
N Wales	45,322	57,005	54,662	73,749	20.9
Dyfed Powys	42,762	43,590	45,756	45,571	2.2
Morgannwg	31,187	26,256	26,549	27,191	-4.3
Bro Taf	38,692	41,423	42,309	61,491	19.6
Gwent	38,285	37,504	37,690	41,106	2.5
<b>Total</b>	<b>196,248</b>	<b>205,778</b>	<b>206,966</b>	<b>249,108</b>	<b>9.0</b>
HA spend on community services as a % of total healthcare and related services purchased					
	8.8	8.9	9.0	10.1	

3.36. Table 13 shows the percentage of each authority's expenditure spent on community services with the marked increases in North Wales and Bro Taf reflecting the expenditure trends in Table 9.

**Table 13 Expenditure on community services as a percentage of health authorities' total expenditure**

	N Wales	Dyfed Powys	Morgannwg	Bro Taf	Gwent	Average
	%	%	%	%	%	%
1996-97	8.8	11.1	7.7	6.7	9.2	8.5
1997-98	11.0	11.2	6.6	7.3	8.9	9.0
1998-99	10.3	10.9	6.6	7.0	8.6	8.6
1999-2000	12.9	10.5	6.3	9.6	8.7	9.7

3.37. As a result of these trends, North Wales is spending considerably more (as a percentage of overall Welsh expenditure on community services) than its formula share of this element of discretionary resources (22.3%) – as shown in Table 14 - but Bro Taf is still spending less than its formula share.

**Table 14 Health authority expenditure on community services as percentage of Welsh total expenditure on community services compared with (formula share)**

	N Wales	Dyfed Powys	Morgannwg	Bro Taf	Gwent
	%	%	%	%	%
1996-97	23.1 (22.4)	21.8 (16.6)	15.9 (16.2)	19.7 (25.5)	19.5 (19.3)
1997-98	27.7 (22.4)	21.2 (16.6)	12.8 (16.2)	20.1 (25.5)	18.2 (19.4)
1998-99	26.4 (22.2)	22.1 (16.6)	12.8 (16.1)	20.4 (25.6)	18.2 (19.5)
1999-2000	29.6 (22.3)	18.3 (16.4)	10.9 (16.1)	24.7 (25.9)	16.5 (19.4)

Notes

Source: Annual accounts of health authorities 1996-96 to 1999-2000

Figures adjusted for payments to SIFT and in 1999-2000 for Health Solutions Wales.

Figures revalued at 1999-2000 prices using HM Treasury GDP deflator figures

3.38. Gwent and Morgannwg are also spending significantly below their formula share and in both health authorities expenditure on community health services has declined as a percentage of overall expenditure during the period. In the case of

Morgannwg, expenditure has actually reduced in cash terms by 0.6% over the four year period and amounts to only 10.9 % of overall Wales expenditure although the formula allocates them 16.1% for this element of the HA allocation. Dyfed Powys' expenditure (18.3%) is above the formula share (16.4%) and has increased by 15.4% over the period.

3.39. It is difficult to know whether the higher spend in Dyfed Powys and North Wales reflects deliberate decisions to spend proportionately more on community services in a rural and widely dispersed community to provide an overall higher level of service in areas where access to acute and/or primary care services is more difficult, whether it means that the current formula does not sufficiently reflect the additional costs of providing services in these areas, or whether services are perhaps less efficiently delivered. Auditors' reports on value for money issues in some of the Dyfed Powys Trusts have certainly indicated that there could be scope for efficiency savings in these areas.

#### Health authority expenditure on mental illness services

3.40. Table 15 analyses expenditure on mental illness as recorded in the accounts. There are, as indicated above, concerns about the robustness of this data but it appears to suggest that overall there has been an average increase of 9.3% at constant prices over the 4 year period. However, within this figure Gwent has increased its share of total expenditure on mental illness services from 11.1 to 19.2% although its formula share is only 17.9%. Overall, there has been uneven, if modest, growth in the proportion of HA expenditure on this service to achieve a 1 percentage point increase from 7.2% to 8.3% although it accounted for 8.8% of overall health expenditure in 1997-98.

**Table 15 Health authority expenditure on mental illness services 1996-97 to 1999-2000**

	1996-97	1997-98	1998-99	1999-2000	Average change at constant prices
	£000	£000	£000	£000	%
N Wales	34,351	38,320	43,271	39,042	4.6
Dyfed Powys	31,578	33,562	35,649	39,344	8.2
Morgannwg	34,999	36,948	37,447	39,742	4.5
Bro Taf	41,244	55,811	57,005	47,301	4.9
Gwent	17,727	29,771	28,657	39,290	40.5
<b>Total</b>	<b>159,899</b>	<b>194,412</b>	<b>202,029</b>	<b>204,719</b>	<b>9.3</b>
HA spend on mental illness as a % of total healthcare & related services purchased					
	7.2	8.4	8.8	8.3	

3.41. The apparent reduction in Bro Taf's expenditure on mental illness in 1999-2000 and the corresponding marked increase in expenditure on acute services suggests that there has perhaps been a change in practice in the classification of expenditure. However, it is generally recognised that mental health services provision is unsatisfactory in Bro Taf where the health authority has stated that its first priority is to increase the overall level of expenditure on these services. In this context it is perhaps worth noting that its actual expenditure has been consistently higher than its formula share until 1999-2000.

3.42. There has been a 4.6% average increase in North Wales' expenditure on mental illness services although it spends less than its formula share on these services. Morgannwg, on the other hand, has increased its investment in these services by a very similar amount but spends more than its formula share on mental health services. At constant prices the increase has been rather higher (an average of 8.2%) in Dyfed Powys where expenditure is also above formula share – as shown in Table 16.

**Table 16 Health authority expenditure on mental illness services as percentage of Welsh total expenditure on mental illness services compared with (formula share)**

	<b>N Wales</b>	<b>Dyfed Powys</b>	<b>Morgannwg</b>	<b>Bro Taf</b>	<b>Gwent</b>
1996-97	21.5 (24.0)	19.7 (17.6)	21.9 (17.4)	25.8 (23.0)	11.1 (17.9)
1997-98	19.7 (24.2)	17.3 (17.5)	19.0 (17.3)	28.7 (23.1)	15.3 (17.9)
1998-99	21.4 (24.1)	17.6 (17.5)	18.5 (17.3)	28.2 (23.2)	14.2 (18.0)
1999-2000	19.1 (24.1)	19.2 (17.6)	19.4 (17.3)	23.1 (24.1)	19.2 (17.9)

Notes

Source: Annual accounts of health authorities 1996-96 to 1999-2000

Figures adjusted for payments to SIFT and in 1999-2000 for Health Solutions Wales.

Figures revalued at 1999-2000 prices using HM Treasury GDP deflator figures

#### Health authority expenditure on learning disability services

3.43. Table 17 covers expenditure on learning disability. This accounts for just 2.3% of adjusted health authority expenditure and has increased by an average 3.7% a year in constant prices over the period. However, the funding for this is ring-fenced within the overall allocation and provision is transferred to social services' budgets when, in accordance with overall policy, patients with learning disabilities are transferred when appropriate from the health sector. The analysis of overall expenditure is therefore not particularly significant as it principally reflects the location of current residential provision in healthcare settings for people with learning disabilities.

**Table 17 Health authority expenditure on learning disabilities services 1996-97 to 1999-2000**

	<b>1996-97</b>	<b>1997-98</b>	<b>1998-99</b>	<b>1999-2000</b>	<b>Average change at constant prices</b>
	<b>£000</b>	<b>£000</b>	<b>£000</b>	<b>£000</b>	<b>%</b>
N Wales	11,057	11,961	11,526	11,732	2.0
Dyfed Powys	8,265	9,600	10,198	7,790	-1.9
Morgannwg	13,447	14,153	14,145	15,837	5.9
Bro Taf	13,465	14,990	16,334	9,460	-9.9
Gwent	4,695	4,614	5,093	11,709	49.8
	<b>50,929</b>	<b>55,318</b>	<b>57,297</b>	<b>56,528</b>	<b>3.7</b>
HA spend on learning disabilities as a % of total healthcare and related services purchases					
	<b>2.28</b>	<b>1.25</b>	<b>2.50</b>	<b>2.30</b>	

#### Considerations of equity in resource allocation by health authorities

3.44. Budget allocations by health authorities have been driven by the need to balance a number of factors, within cash limited totals, including:

- pressures from expenditure which authorities are required to fund but over which they have very limited direct influence eg GP prescribing, continuing

care (ie the cost of meeting the care needs of highly dependent individual patients, often with complex and expensive care needs)

- the requirement to fund Long Term Agreements with Trusts at a level which will allow Trusts to maintain staff and facilities to meet forecast demand from emergency and elective referrals
- the need to cover the rising costs of meeting clinical negligence claims.

#### Non discretionary allocations to health authorities

3.45. In 2001-02 £197.9 million was allocated to health authorities for ring fenced and protected allocations. This includes two distinct types of expenditure, both of which feature in the health authority accounts

- expenditure (£130 million in 2001-02) allocated direct to Trusts including for capital charges and the Service Increment for Teaching (which goes to Bro Taf Health Authority for onward transmission to the University Hospital of Wales Trust)
- expenditure (£67.9 million) on behalf of health authority patients but which relates to specialist services commissioned by the Specialist Health Services Commission for Wales – funds are allocated to health authorities on the basis of formula shares but must be spent on the designated specialist service (this is the health authority protected formula allocation).

3.46. In each case considerations of equity are applied but in different ways – eg in relation to SIFT the key issue is to capture accurately the costs incurred by the Trust in training the future NHS workforce, for specialist services that actual access to services matches the need for service in each health authority area – for which the formula is a proxy. These issues have been reviewed in detail by Task Group D.

#### The distribution of capital resources

3.47. The formula distribution methodology for HCHS applies only to revenue resources. Resources for major capital projects are allocated centrally by the Assembly in accordance with a prioritised capital programme process. The amount attributable as capital additions since 1996-97, as reflected in audited accounts by Health Authority area, is shown in Table 18. It should be noted that the capital value of some Private Finance Initiative schemes is not reflected.

3.48. The table demonstrates that the majority of the public capital funded additions in the past 5 years have been skewed towards the Bro Taf area – this largely reflects decisions on the all Wales capital programme and the condition of the capital stock.

3.49. The distribution of discretionary capital to NHS trusts is based on a formula related to the income of the individual Trusts and the age of the existing capital stock. The fall in capital expenditure in recent years is of great concern, as described elsewhere in this chapter.

**Table 18 - Capital additions profile for NHS Wales from 1996- 2001**

£ millions	96-97	97-98	98-99	99-00	00-01	Total	% share
Iechyd Morgannwg	22,004	17,613	10,868	7,630	9,948	68,063	14.2%
Bro Taf	48,802	38,225	44,194	47,812	28,039	207,072	43.1%
Dyfed Powys	8,198	11,075	8,889	6,215	6,507	40,884	8.5%
North Wales	15,317	16,586	20,192	15,182	13,281	80,558	16.8%
<b>Gwent Health</b>	9,376	9,198	12,851	12,798	10,993	55,216	11.5%
Ambulance Trusts	4,316	4,562	4,757	6,459	4,625	24,719	5.1%
<b>Total</b>	<b>111,135</b>	<b>97,330</b>	<b>102,661</b>	<b>96,096</b>	<b>73,393</b>	<b>480,615</b>	<b>100%</b>

### Local Health Group analysis

3.50. Although work is currently being undertaken within each health authority area to map the use of health resources by each Local Health Group area, it is not possible to derive this information from health authority accounts. These identify the overall expenditure of each health authority with its main provider trusts but do not enable that expenditure to be tracked back to LHG areas.

3.51. Detailed analysis of trust activity expenditure in 1999-2000, with appropriate adjustments to remove the distorting impact of Special Increment For Teaching (SIFT) payments and other non-recurrent payments which are not used to support the provision of patient services, has been undertaken within the Bro Taf Health Authority area to map the use of health authority resources to individual LHGs and compare it with the current formula share. Other health authorities are undertaking similar resource mapping exercises. As discussed in Chapter 4 this work is extremely important both as the basis for analysing the equity of the actual current distribution of expenditure between areas and as the baseline for evaluating the redistribution required to implement a new approach.

### Disposition of Expenditure by Trusts

3.52. Trust returns Table 4b above, submitted to the National Assembly with their annual accounts, provide rather better information than is available from the health authority accounts on how resources are used within Trusts and thus support an analysis of trends in overall patterns of expenditure on health services. It is, however, important to note that these Trust returns are not currently audited and while their totals are required to reconcile to the accounts, the inadequacy and unreliability of the current information base is widely recognised in the NHS Wales finance community. In order to address this, the National Assembly, health authorities and trusts last year commissioned a major Costing Review<sup>24</sup>.

3.53. The Review, which commenced in October 2000, has involved a baseline review of current methodology and the development and validation by implementation in three pilot sites of a new methodology to support the agreed move to the use of Healthcare Resource Group (HRG) costings in Wales instead of the

<sup>24</sup> Teamwork Management Services, 'The Accountants Tale: The Experience and Lessons of HRG Costing in Wales' (April 2001).

current All Patient Diagnostic Related Groups (DRG) methodology used in Wales since 1994-95. The move to HRG based costings and the use of a consistent and robust costing methodology is essential to enable benchmarking of costs and performance on a meaningful basis across the England/Wales border and to promote a better understanding of the use of resources within Wales. It is intended that the new costing framework should be reflected and incorporated in the Assembly's guidance for the preparation of returns to be submitted with the 2000-01 accounts and that these returns should also become subject to audit.

3.54. In the meantime, there must be significant concerns about the quality of data in Trusts' specialty, programme, and service costing returns and the data needs to be used with caution. Nevertheless, the summarised data for all Wales Trusts gives at least some indication of how health resources are applied within Wales. It does not, of course, reflect the significant activity commissioned by Welsh health authorities from English providers. Conversely, the Wales' figures also include the costs of activity undertaken in relation to England residents.

3.55. Table 19 below is a summary of the Welsh Trust specialty data in Table 4b above. This shows that in 1999-2000, the latest year for which data are available, NHS Trusts in Wales were responsible for expenditure of £1,582.4 million which had increased by an average 5.8% in constant prices overall since 1996-97.

**Table 19**

<b>Expenditure by Welsh NHS trusts by specialty</b>					
	<b>Total</b>	<b>Total</b>	<b>Total</b>	<b>Total</b>	<b>Average increase</b>
	<b>1996-1997</b>	<b>1997-1998</b>	<b>1998-1999</b>	<b>1999-2000</b>	<b>(constant prices)</b>
<b>£ millions</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>	<b>%</b>
<b>Medical specialties</b>	367.8	392.0	422.6	448.7	7.3
<b>Surgical specialties</b>	372.9	392.3	418.5	431.7	5.3
<b>Maternity function</b>	55.2	57.7	60.0	65.2	6.0
<b>Psychiatric specialties</b>	170.4	164.2	172.6	175.9	1.1
<b>Other specialties</b>	61.9	64.4	64.8	67.2	2.9
<b>Supra district services</b>	11.9	12.1	11.8	12.2	1.0
<b>Supra regional services</b>	22.2	21.7	17.6	20.4	(2.6)
<b>Patients using A &amp; E services</b>	37.4	37.3	42.7	45.0	6.8
<b>Royal College/day care</b>	35.9	35.2	35.8	33.2	(2.5)
<b>Community services</b>	212.7	224.3	235.5	282.9	11.0
<b>TOTAL</b>	<b>1,348.1</b>	<b>1,401.2</b>	<b>1,482.0</b>	<b>1,582.4</b>	<b>5.8</b>

Source: Annual accounts of NHS trusts 1996-96 to 1999-2000 (TFR2 programme and specialty cost return)

Figures revalued at 1999-2000 prices using HM Treasury GDP deflator figures

3.56. The key features to note (subject to the caveats recorded above) are that the analysis of expenditure on patient treatment services derived from the Trusts' TFR 2 returns suggest that :

- medical specialties account for some 28.4% of expenditure which has increased by an average 7.3% in constant prices over the period 1996-97 to 1999-2000
- geriatrics (4.4% of the whole) has apparently declined by an average 10.1% at constant prices. (There is also a reduction in the geriatric expenditure listed in the royal college and day care functions section.)

This needs to be set against clear evidence that the very elderly are actually consuming an increasing proportion of health care resource and hospital capacity and remain in hospital longer than younger patients. The probable explanation for the apparent contradiction is that rather than being treated within the geriatric specialty such patients are being treated and coded within the relevant specialty for their particular illness.

- surgical specialties account for some 27.3% of overall expenditure and overall expenditure in this area has increased by an average 5.3% a year in constant prices over the period, a significantly lower rate of increase than on medical specialties. This probably reflects the increasing general pressure that there has been on beds for emergency medical admissions
  - expenditure on general surgery 32.4% (8.8% of the whole) has increased by some 32%
  - orthopaedics (25.7% of surgical specialties and some 7.0% of the specialty and health programme analysis) has increased by an average 9.4% a year in constant prices over the period. This has been insufficient to keep pace with demand and some of the longest waits for treatment are experienced in this specialty.
  - expenditure on plastics, another area where there are particularly long waits in Wales, has apparently declined by an average 6% a year in constant prices.
- the maternity function accounts for some 4.1% of expenditure and expenditure has increased by an average 6% in constant prices over the period, slightly higher than the 5.8% increase in overall expenditure on the TFR 2 analysis.
- overall expenditure on psychiatric services (11.1%) of the gross total has increased by just 1.1% a year at constant prices over the period but this low rate of growth masks considerable variation within these services:
  - there has been an average 8.2% annual reduction at constant prices in expenditure on mental handicap services as resources have been transferred to social services budgets in line with the policy of resettlement, where appropriate, of people with learning disability into a community, rather than healthcare, setting.
  - forensic psychiatry, up an average 23.8% a year at constant prices over the 4 year period, is widely recognised as a significant and unavoidable cost pressure on services. The expenditure figures here do not reflect health authority expenditure in English high secure or other units where, in recent years, funding has been repatriated to Wales
  - in other areas, however, the increase in expenditure on psychiatric specialties is below average.

- health programme expenditure which largely relates to the provision of community based services to people in their own homes, community based setting, or through services provided to GPs under open access amounts to some 17.9% of overall expenditure on this analysis and has increased by an average 11 % a year at constant prices over the period. This order of growth is consistent with the growth recorded in health authority analysis of expenditure and tends to confirm the evidence for a progressive shift in resource into this area of service and/or areas of service commissioned by GPs.

#### Disposition of the primary care budgets

3.57. Provision for primary care is spread across three different Assembly budgets as follows (figures for 2001-2):

- GP drugs prescribing (£390 million) – part of the HCFHS cash limited budget managed by health authorities – budgeted provision has risen by an average 7.8% a year in constant prices between 1996-97 and 2001-02 (Table 3 above) and expenditure by an average 6.8% a year at constant prices between 1996-97 and 2000-2001 (Table 4 above)
- GMS cash limited budgets (£65 million) – part of HCFHS cash limited budgets managed by health authorities – budgeted provision has risen by an average 3.7% a year between 1996-97 and 2001-02 (Table 1) and expenditure by an average 1.9% a year between 1996-97 and 2000-2001 (Table 5). This money is ring-fenced for GP support costs and because of the history of underspending, additional growth has been provided through a formula based primary care development fund while GMS increases have been restricted to forecast GDP inflation
- Family Health Services demand led expenditure (£334 million) funded directly by the Assembly with health authorities responsible for making payments to contractors.

3.58. In relation to GP prescribing there has been considerable amount of analysis of prescribing patterns in Wales, prompted by the high rate of growth, the high level of prescribing in Wales relative to England and by the significant variations across Wales. Most recently the report of the Assembly/NHS task and finish group on prescribing in Wales sets out the complex factors which influence prescribing behaviour.

3.59. This (and other studies of prescribing expenditure) concludes that it is impossible to draw conclusions from analysis of the cost of prescribing alone. It is necessary to analyse in detail at practice level what kinds of drugs are being prescribed and how effective they are- for example apparently high levels of prescribing may be an appropriate and effective response to need or may reflect an absence of other more effective therapies.

3.60. In relation to the Family Health Services budget the distribution of spending has been largely determined by the number and location of the contractor professions. Historically the distribution of GP numbers has been the responsibility



of the Medical Practices Committee whose determinations have taken account of issues such as social deprivation and rurality which translate into additional payments included in the FHS totals. More generally the major concerns about equity in primary care relate not only to financial issues but also to quality of services and recruitment.

3.61. In relation to the GMS cash limited budget the key driver is the bids from GP practices to develop services. This has meant that although the budget is allocated on a formula basis between health authorities, within authorities the distribution is skewed towards those practices which have been most active in developing services. Some health authorities have attempted to redress this by creating formula based indicative GMS budgets at LHG level but progress in redistributing actual expenditure has been constrained by the level of bids from GPs.

#### Disposition of budgets held centrally by the Assembly

3.62. Some 10% of the overall health budget is distributed centrally by the Assembly ie is not included in the HCHS budget allocated to health authorities or in the budget for primary care contractors. These budgets (details in Annex 6) include either allocations for services which are costed and provided on all Wales basis or for services targeted at particular needs locally.

3.63. For example the budgets for Health Promotion, Health Inequalities Fund and Health Improvement include a mix of locally targeted projects and national screening and prevention campaigns which are designed to have a direct impact on the determinants of poor health. (The establishment of the Health Inequalities Fund was set up in parallel with the Resource Allocation Review and its future role is discussed in Chapter 6). The welfare foods budget is specifically targeted on those on low incomes and is a demand led wide scheme which is administered by the Assembly on behalf of DH.

3.64. The budgets for Education and Training, Other Health Services and Central Budgets relate to services provided on an all – Wales basis or for services which are designed to benefit the NHS as a whole. Here the issue is not necessarily how to allocate the budget equitably across Wales but how resources within the budget are deployed most effectively to address the Welsh health agenda.

3.65. The budget for brokerage reflects the amounts needed to finance deficits in the Bro Taf and Dyfed Powys areas. By definition these amounts fall outside the equitable formula approach and have been approved by Ministers over the years to support the process of financial recovery.

#### Complementary expenditure by local authorities on social care provision

3.66. The inter-dependence of NHS and local government provision for health and social care means that any account of health spending should also include an account of complementary investment by local authorities. A summary of Welsh local authority revenue spending on social services since 1996-97 is at Table 17 below. This shows that in 2000-2001 local authorities in Wales spent £668 million on social services - expenditure that has grown by an average 4% a year at constant prices since 1996-97. This is a somewhat slower rate of growth than overall spending on health (average growth of 4.8% at constant prices 1996-97 – 2000-01)

but at a higher rate than health authority expenditure (3.8%) (Table 4). Within overall social services growth of an average 4% a year the growth in spending on the elderly –where the interface with health is greatest– was lower at an average 2% in constant prices over the period.

**Table 17**

**Local authority gross revenue spend on social services in Wales**

	1996-97	1997-98	1998-99	1999-2000	2000-01	Average annual increase at constant prices
<b>Expenditure (£ millions)</b>						
Children	92	102	114	116	136	8%
Older people	243	253	266	280	294	2%
Adults aged 18 to 64	185	197	205	213	225	3%
Other services	8	9	10	9	12	9%
<b>Total social services</b>	<b>528</b>	<b>560</b>	<b>595</b>	<b>619</b>	<b>668</b>	<b>4%</b>
All local authority services	3,168	3,238	3,375	3,509	3,666	1%

**Notes**

Figures are for revenue expenditure only. Capital spend is excluded.

Gross revenue expenditure excludes activities funded by income from fees, sales and charges.

Outturn information (up to 1998-99) includes funding from special and specific grants.

Budgets (1999-2000, 2000-01) will exclude special grants announced after the settlement.

Spend at constant prices calculated using the GDP deflators (as at 7/3/01)

Note that data for income from fees, sales and charges are not collected at the budget stage.

3.67. The Assembly's capacity to analyse the whole system impact of investment patterns at local level is very limited for two main reasons:

- information on NHS spending at unitary authority/LHG level is not yet reliably available (this is being taken forward through resource mapping as discussed in above)
- the implications of the financial data are not clear without more detailed local analysis of policies operated by health bodies and social services for example on assessment criteria, standards of service and charging which affect access and equity.

3.68. Given that the health and social care interface is major policy focus –

- the legislative basis for the joint planning and provision of integrated health and local government services was provided in the 'joint flexibilities' provisions of the Health Care Act 1999
- creating the structures to implement integrated provision is one of the key strands of the implementation of Improving Health in Wales

3.69. It will be crucial to ensure that information relevant to access and equity across health and social services provision is provided to support the new structures and reflected in the financial strategy discussed below, taking into account the different relationship between Assembly and local government and in particular the focus being developed through the Policy Agreement process on standards of provision and outcomes achieved.

## Conclusions – the need for a new financial information strategy for the NHS in Wales

3.70. The equitable distribution of available resources to different services as well as different areas centrally, regionally and locally poses an immense challenge to Ministers, managers and practitioners alike. All can play an influential role in taking the fresh direction advised in this report. The independent research team appointed in the course of this review has recommended the development of a new formula to allocate resources more justifiably to areas (explained in Chapter 5). But that is only one part of the challenge.

3.71. The research team emphasise that giving the appropriate sums of money to LHG areas will have little effect in reducing inequalities of health unless the resources go to help poorer people in ill-health. Giving more money to richer and generally therefore healthier people in those areas will not reduce health inequalities.

3.72. The key issue is therefore what the NHS does with the money allocated to it.

3.73. So far as possible we have attempted in this chapter to trace and analyse in some detail the scale of resources devolved on different services at the centre, via health authorities and then Trusts. Some recent trends provoke concern:

- In Wales, total NHS expenditure was broadly flat as a percentage of GDP in the three years 1996-97 to 1998-99 (table 1 above). Meeting the back-log of investment and service development as well as implementing a necessary scaling-up of resources (currently planned by the Welsh Assembly and by the UK Government) are factors that require detailed attention. In 2000-01 and 2001-02 expenditure at constant prices grew by 5.5% and 7.7% respectively but growth is set to fall a little in the next two years.
- NHS expenditure on major capital projects across Wales fell from £111m in 1996-97 to £96m in 1999-00 and £73m in 2000-01 (table 18). Capital investment has in the past been postponed to meet pressing current demands on resources but such cuts can be counter-productive, and longer-term plans of a scale that are defensible, and that have to be closely monitored, in relation to inequalities of health, need to be fully developed.
- Prescribing, and therefore pharmaceutical costs have been rising considerably above average. Good new drugs are clearly sought after by patients and practitioners alike, but national limits on resources mean that services suffer and the objective to reduce inequality of health care in access and outcome is frustrated. This has been investigated by the Assembly but immediate action is needed. In one of its recent reports the Audit Commission stated that progress had been slow and "scope remains to make significant savings without detriment to patient care."<sup>25</sup>
- At the other extreme there are trends much below average that deserve urgent re-appraisal. Thus examination of trends by specialty in Welsh Trust expenditure for the four years 1996-97 to 1999-2000 shows a fall of 2.5% a

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<sup>25</sup> Audit Commission, A Picture of Health? A summary of findings from local value-for-money studies undertaken during 1999 and 2000 in the NHS in Wales, London, March, 2001.

year at constant prices in Royal College specialties and day care functions. There has been no consistent advance in psychiatric specialties (with the exception of forensic psychiatry).

- Some other trends in expenditure by specialty have been well above average, including cardiology, rheumatology, haematology, rehabilitation medicine and neurosurgery.

3.74. These trends have been picked out from the analysis in this chapter. Discovering them and assessing them must be a priority in the exercise of departmental responsibilities. They are examples of the value of analysing trends to inform planning and management. The trends need to be explained in relation to medical, surgical and social service developments, not just so that those in the services and outside are more aware of the changes taking place but also for better direction of policy and more efficient control of resources. The objective must be establish beyond doubt whether the trends in different items of expenditure contribute, and contribute to a small or a large extent, to the reduction of inequalities of health care access and outcome.

3.75. Accordingly we recommend that an indispensable step in tackling inequalities in health in Wales is to establish a system whereby trends in access to, and outcome of, health care is put in place jointly by finance, health care and social service administrations, centrally, regionally and at local Trust and LHG levels. Successful change depends on taking this step - in priority over other record-keeping administrative practices. Annual trend data should also be available in relation to changes in policy the have been introduced and exert an effect from particular dates.

3.76. We believe that if implemented this recommendation will help to fulfil the purposes set out in Improving Health in Wales - namely to ensure equitable access to health care, set targets for the reduction of current inequalities, compile equity audits, and promote and undertake Health Impact Assessments (pp.20-21).

3.77. 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.

3.78. We have discussed these issues in depth with the Audit Commission and recommend that they engage with the Assembly and the NHS in a detailed analysis of the further work needed, building on the Costing Review. This will assist the Assembly in developing an effective financial information strategy – for which the key requirements are as follows:

- 1) Better central specification of requirements through:
  - the issue of a clear guidance on the methodology to be employed in compiling costings –to reflect the outcome of the work of the Costing Working Group (issue imminent)
  - agreement on a common approach to the analysis of HA/LHG expenditure information, both planned and actual, so that it meets both local management information requirements and wider national requirements for the analysis of expenditure in relation to area and, possibly, specific population groups.
  - more reliable and comprehensive inputting of coding data by trusts on individual patients, including postcode and practice details, to enable expenditure to be analysed at LHG, electoral ward, and practice level. (This data is not currently collected for outpatients and the postcode data will be important for equity to be monitored within LHG areas.)
- 2) equivalent data to be collected on activity undertaken within a primary or community care setting – this will be increasingly important as and when activity traditionally undertaken in a secondary care setting is undertaken in a primary or community care setting.
- 3) an agreed set of financial management information data, rather than just the data required to satisfy statutory financial reporting requirements, to be subject to external audit – as it will be in England.
- 4) appropriate linkage to equivalent data collected about social services expenditure as proposed in para 69 above.

#### 4. Chapter 4: limits of analysis and action

4.1. This report seeks to clarify what can be done to improve the allocation of NHS resources. We have called attention to the need for a dual strategy - of action outside as well as inside the NHS and related healthcare services - to address the scientific causes of poor health and especially inequalities of health (see, for example, Chapter 2). We have also called attention to the urgent steps that need to be taken on the latter to produce good information about the trends in costs of each component of healthcare services from year to year in relation to specific changes in policy (see Chapters 3 and 7) and thereby get into a position of being able to assess the effectiveness of particular expenditure on the NHS.

4.2. These two major conclusions explain why the role of a formula-driven allocation of resources by area (a key feature of our terms of reference) must not be exaggerated. There are a number of key constraints in using a such a process as a means of achieving greater equity in the distribution of health care resources:

- limitations of principle: the resource allocation formula is about allocating cash resources and can therefore be used only as a measure of financial equity – it does not address other dimensions of equity including access to quality services and equity of treatment between different groups in society
- limitations of information: there is very limited financial information available about how NHS resources are currently spent at local level in Wales.

These issues are discussed in greater detail below.

##### Limitations of principle – the necessary limitations of a general formula

4.3. Where the formula is used as a basis for allocating cash resources it is a means of ensuring financial equity ie the distribution of shares of money to geographical areas in line with health need as captured by the formula. But it would be possible to achieve this equitable distribution and still have significant differences between areas in terms of the quality of service offered to patients and its effectiveness in responding to health care needs. This is because the quality of care experienced is the result of a wide range of factors including:

- financial – investment decisions – the balance of investment between services influenced by local priorities
- non-financial – the availability of trained staff, the way individual patients are treated (as discussed in chapter 2).

4.4. Where the formula is not used directly for resource allocation eg for budgets held centrally or regionally for tertiary and secondary care budgets – it can be used as a means of monitoring the pattern of expenditure produced by commissioning decisions against the distribution of resources suggested by a formula based distribution. This would help to determine

- the impact of investment in national strategies to level up standards of care - the National Service Frameworks (para 2.22 above) and waiting times strategies (para 2.11 above) - on the amount of resources being spent on geographical areas
- how this compares with the needs based distribution suggested by a formula.

4.5. This would be a key part of the equity audit process set out in Improving Health in Wales (para 2.2 above). This will need to look at financial equity as well as other measures of equity in the receipt of health care services, recognising that a pattern of investment driven by the a requirement to meet service standards is unlikely to match exactly the pattern of investment suggested by the formula.

#### Limitations of information

4.6. In order to determine how NHS budgets are currently being spent we need detailed and accurate information from NHS Trusts about the cost of providing their services. This is crucial in order to analyse expenditure

- by specialty or diagnosis – in order to analyse the balance of spend between different types of service and client group and the implications of this balance for considerations of equity, health gain or efficiency
- by geographical area – in order to attribute costs of treatment to geographical areas and compare the amount of money actually being spent on patients in that area with the amount suggested by its formula share.

4.7. This information is available but it is subject to major uncertainties eg the Costing Review (para 3.52) suggested that there could be inaccuracies of several £million in the amounts charged by one Trust. These inaccuracies have implications for an equitable distribution of expenditure because they indicate a significant degree of cross subsidisation between formula determined health authority budgets. This could mean that, assuming no change in activity, an area which is being over-charged could benefit significantly by more accurate charging which would release funds for investment elsewhere and an area which is being under-charged would need to make savings elsewhere to fund the existing level of activity.

4.8. These problems of data reliability exist for 3 main reasons:

- inconsistencies within and between Trusts in conventions for recording treatment costs and allocating overheads between services and specialties
- Trust budget setting has been based on rolling forward year by year large volume contracts with health authorities
- other financial and operational issues have taken priority over investment in better quality information including IT and staff resources.

#### Resource mapping

4.9. The importance of accurate costing data has been highlighted by the resource mapping work which Health Authorities have taken forward as part of the

Health Improvement Plan process. The aim of this work is to determine what share of the total resources allocated to health authorities is being spent on each local health group population within its area. This is needed as a benchmark for comparing existing expenditure shares with the share indicated by the existing or proposed population formula. In order to produce this analysis it is necessary to break down Trust expenditure by service, and attribute it to Local Health Group populations. The accuracy of the analysis is highly dependent on

- accurate costings for each service – which is limited by the constraints described above
- accurate attribution of service costs to individual patients – which is constrained by the fact that many patient episodes are not accurately recorded by GP practice.

4.10. These data problems mean that the existing resource mapping work is highly sensitive both to data error and to assumptions where precise attribution is not possible.

4.11. The margins of uncertainty around the results so far are considerable. For example the progress report prepared for Task Group A includes the following examples of the sensitivities involved in the resource mapping calculations:

- contract costing anomalies
- treatment of Trust deficits and surpluses
- uncounted private health care including nursing
- social service and non statutory provision
- treatment of directed expenditure and regional services
- case mix
- changes over time
- methodology assumptions eg the apportionment of day-care by Trust outpatient distributions
- basis of population mapping eg unitary authority or LHG populations.

4.12. The report<sup>26</sup> confirms that work carried out so far in Wales is incomplete and inconsistent, and that at this stage no Health Authority is confident that variances between estimated expenditure at LHG level and target shares based on the current Welsh formula provide a basis for shifting resources between LHGs.

## **Conclusions**

4.13. Consideration in this Review of the options for a more equitable basis of resource allocation in future has put the spotlight on the equity or otherwise of the

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<sup>26</sup> Resource Allocation Review, Task Group A, addendum to PRG 6-3, 8 June 2001.



existing distribution of expenditure. This chapter has set out why accurate information about the geographical distribution of existing budgets is essential in order to allow evidence based proposals for change. To achieve this we recommend that priority needs to be given to:

- collecting information which will allow systematic and consistent analysis of the total quantum of NHS resources being spent on Local Health Group populations (and subsets of those populations) ie taking forward the Resource Mapping approach to monitor the impact of new commissioning structures on financial equity
- improving as a matter of urgency the quality of the information on which Resource Mapping depends through the implementation of the new financial information strategy recommended in Chapters 3 and 7.

4.14. Until this information is available there will continue to be significant uncertainty about how the existing distribution of expenditure compares with either the existing formula or a new formula distribution.

## 5. Chapter 5: A new model of allocating resources by area to health care services

5.1. A direct measure of need for health care can, we believe, be developed successfully as a means of measuring area inequalities of health and to form the basis of resource allocation. The Welsh Health Survey, which is more comprehensive than for any other region of the UK, affords a major opportunity of scientific and statistical breakthrough. The way it can be used to improve the allocation of NHS resources will be explained in this chapter. The reasons for choosing this approach in preference to alternative models currently in use in Wales and elsewhere will be described in the following chapter.

5.2. The virtues of the direct approach, which is new, can be explained most easily in relation to the limitations of the indirect approach, which has been developed and used up to the present time in Wales and other regions of the UK.

### Disadvantages of the Indirect Method

5.3. The methodology currently followed can be described as an indirect method of capturing relative need for health care 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. It can also be described as indirect because mortality rates are often used as a proxy for rates of ill-health and disability – rather than direct observations or records of present conditions. Rates of death by area and socio-economic condition in any year are not exact representations of rates of illness and disability by area and socio-economic condition – even if information to reliably construct them may be simpler to collect. 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 involve the services in very substantial long-term costs.

5.4. A further disadvantage is that data about service utilisation are collected by many different organisations, with variable reliability and accuracy. And death registrations are not always reliable about cause of death or easy to relate to previous socio-economic conditions. Furthermore, the use of health services is affected not just by need but also by the availability of the service in a local area.

### Introducing Direct Measures of Health Need

5.5. 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, the independent research team have examined other ways of revising the formula approach based on the direct measurement of health need. Their approach is explained in detail in the research report but it can be summarised as follows.

### Summary of Proposals from Research Team

5.6. The team have produced a methodology for allocating at local health group level £1,356m, that is, all but £92 million of the revenue resources distributed by formula to health authorities in 1998-99 (the last year for which expenditure figures

by specialty are available from Trust returns). They have applied the same approach to create notional allocations for GP prescribed drugs and GMS services.

5.7. The allocations have been calculated as follows:

### Step 1

to split the total revenue allocation to the five health authorities into 9 main sets of services (rounded to the nearest £0.1m) on the basis of Trust expenditure in 1998-99

Non psychiatric in patients and day patients	£691.0m
Children	£ 83.6m
Maternity	£ 68.6
Psychiatric	£230.7m
A&E	£ 45.3m
Outpatients	£170.5
Community nursing	£ 59.3m
Chiropody	£ 6.8m

### Step 2

For each item of expenditure select relevant health condition indicators, for example within non psychiatric in patients and day patients spending on heart disease is identified and linked with the incidence of heart disease indicator.

### Step 3

Calculate the shares of the sums identified in Step 1 for the 22 LHGs on the basis of their shares of the selected health condition indicators. With the exception of expenditure on children and maternity, the distribution relies mainly on the evidence of the incidence of illness derived from the 1998 Welsh Health Survey, the cancer registry database, notifiable disease statistics, hospital episode statistics, and the GP Morbidity Database.

### Step 4

5.8. Add the results for the nine services. Combine the results to produce overall shares for each LHG. Thus that part of total NHS spending for health authorities on any health condition is shared out between LHGs on the basis of the relative incidence of that condition in the LHG area. Table 1 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).<sup>27</sup> 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.<sup>28</sup> 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.

<sup>27</sup> Wales NHS Resource Allocation Review: Independent Report of the Research Team, 2001, p. 138.

<sup>28</sup> See the account of "face" and "criterion" validity, and reliability at LHG level, and especially the results from applying Cronbach's Coefficient Alpha for the 17 items used in the WHS in 1998.

**Table 1 Prevalence of health conditions: 1998 Welsh Health Survey**

Health Condition	Percent	Number
Teeth (fewer than 20)	31	9,634
Back pain	30	9,132
Arthritis	25	7,872
Respiratory Illness	23	6,842
Heart (ever)	21	6,488
Food poisoning (last 3 months)	21	5,670
Mental Illness	14	4,055
Hearing	13	3,882
Varicose Veins	11	3,427
Seeing	8	2,419
Accidents (last 3 months)	8	2,072
Cancer (ever)	5	1,614
Diabetes	4	1,166
Stroke	1	380
Epilepsy	1	251
Parkinson's Disease	*	76
Pressure Sores	*	71

### Evaluation of the Research Team Proposals

5.9. The work by the research team is an innovative approach using data of a quality and reliability unique to Wales. Since receiving the team's proposals at the end of April 2001 there has been extensive discussion, involving representatives of all the Task Groups and other Assembly staff, NHS colleagues and the WLGA to consider the recommendation and its implications – especially for the timing and phasing-in of its implementation.

5.10. There was strong support in principle for the Research Team's objective of basing resource allocation on direct measures of ill health, and other population indicators, as a rational basis for deciding need for health care services. Some doubts were expressed about the translation of this objective into a detailed methodology for resource allocation.

5.11. The main concerns relate to:

accuracy and stability of the Welsh Health Survey at LHG level - whether the Survey results are reliable enough to allow a confident ranking between areas

validity of the proposed indicators as sufficiently representative of health need – for example whether the 12-15 Welsh Health Survey health condition indicators used are sufficient to capture the overall relative need and need for treatment (the WHS is not the only data source used but it is the main source for the largest block of expenditure)

the connections made between the WHS health condition indicators and the expenditure blocks have been questioned - these were felt to be aspects of the methodology which could be modified with more detailed work on each condition and how it is treated

accuracy and reliability of the budgetary (TFR2) returns on which the expenditure weightings for the health conditions are based.

5.12. We have considered these concerns and discussed them in detail with NHS practitioners, the Research Team and the Office of National Statistics. We are satisfied that the proposed method is sound in principle and is preferable to the current method in Wales of allocating resources. It also is preferable, theoretically and in practice, to the corresponding, technically more sophisticated, methods adopted in England, Scotland and Northern Ireland. We are also confident that the practical issues about the application of the methodology can be resolved through detailed work using the expertise of the NHS and its partners.

5.13. For example, numbers of children with physical and profound multiple disabilities – a small category within children assessed as having Special Educational Needs – is one of the indicators used to distribute a small component of the £83.6 million identified as spending on children – para 7 above. Questions have been raised about the tendency of SEN statements to understate the needs of deprived children although the Research Team point out that this bias is unlikely in relation to this category within SEN. We believe that this, and other indicators which it is proposed to combine with the WHS, should be reviewed by the NHS and local government, along with consideration of ways of improving the WHS itself in relation to the health of children. Nevertheless the separate identification of expenditure on children and the attempt to find suitable specific needs indicators for them is a valuable innovation which needs to be developed, bearing in mind that the higher risk of ill health in children is reflected in the higher exposure of their parents to ill health which the new approach is designed to capture.

5.14. Further development work may also be needed in two more general areas:

- to establish whether the shares of the incidence of health conditions measured by the WHS are sufficiently reliable indicators of the shares of severe conditions. In the view of the Research Team there is a pyramid distribution of less severe to severe conditions which is unlikely to vary between areas but this needs further exploration
- to establish whether the use of average costs for each condition needs to be refined to allow for the additional costs of treating older people.

#### GP prescribed drugs and non cash limited General Medical Services

5.15. In addition detailed work is needed on the implications of the Research Team's proposals in relation to expenditure on GP prescribed drugs and non cash limited GMS which have hitherto been distributed on the basis of historic spending patterns as discussed in Chapter 3. Detailed work on a formula for non cash limited GMS is being done by ACRA in England and we recommend that the Assembly needs to consider the outcome of this work – which should be available in September -alongside that of the Research Team

#### Additional costs

5.16. The Research Team's proposals provide a methodology for capturing relative need for health care services. Because the indicators used relate to actual ill health this removes the need for further adjustment to capture the impact of socio economic factors – their effect is already reflected in the relative incidence of disease. The approach does not however deal with the relative cost of meeting

need – the additional costs associated with delivering health services in rural areas are being examined separately by Task Group C (as discussed in Chapter 6 and in Annex (summary of Task Group reports)).

#### Timescale and interim action

5.17. The need for this further work to refine and work through the practical application of the Research Team's proposals, to complete the outstanding work on rurality and urban issues, together with the need to consult about the new approach and about the new NHS management structures which the resource allocation process needs to support, mean that in our view the earliest practicable date to begin phasing in the new approach is 2003-04.

5.18. Bearing in mind that the terms of reference of the Review specified the objective of change from 2002-03 we believe that interim action will need to be continued through the Health Inequalities Fund, which enable the aims of the Review to be progressed by other means.

#### Role of expenditure in determining relative need

5.19. It is worth noting that all the approaches considered use existing expenditure to calculate the weightings to be applied to determine the importance of different aspects of health need. The possibility that different conditions attract equitable allocations of resources per person will be a necessary question to investigate. For the present our concern has been to apply average costs of treatment per person for each condition to the corresponding evidence from the WHS of the numbers suffering from that condition in each of the local health areas. For example, the Research Team approach applies the relative shares of the incidence of cancer across areas to the total cost of cancer treatment across Wales. In this way, for example the rankings for cancer have a much greater effect than, for example, the rankings for varicose veins.

5.20. We do not know whether the average amount per patient spent on each condition is too large or too small according to reasonable scientific and social criteria. That is a complex issue that merits comparative future inquiry.

#### Impact of the proposed new formula compared to the current Welsh formula and the 1998 RAWG formula

5.21. Table 2 below compares the allocation of £1.356 billion using the current formula, with the proposals of the Research Team. This total is based on the 1998-99 total of Hospital and Community expenditure as reported by Welsh Trusts (less some £92 million the Research Team was unable to allocate). Figures for 1998-99 were used because this is the latest year for which detailed allocation of Trust expenditure by health condition was available. In order to compare the new formula with the current formula, the current percentage shares for 2001-02 can be applied to the same total. A similar comparison can be made for the formula recommended by the Resource Allocation Working Group (RAWG) in 1998.

5.22. The Research Team's formula excludes at present any adjustment for rural costs, such as the Rural Costs Premium (RCP) recommended by RAWG or the various sparsity components within the current formula. In order to make a fair

comparison, the RCP has been applied to the Research Team's allocations. It should be noted here that the further work by the Research Team commissioned by Task Group C may result in a different adjustment for rural costs. There are also some differences due to the population base – 1996 estimates were used in the RAWG work while the current 2001-02 formula uses 1999 estimates. However, these are likely to be small compared to the effects of the formula changes.

5.23. In evaluating the practical effect of these changes two key points need to be borne in mind:

- if, as we recommend, the proposed new formula is phased in over a period of years, with all areas receiving a minimum level of growth to ensure stability in the transitional period, no area will see a reduction in resources as a result of this change. The effect of introducing the new formula will be to distribute additional growth, over and above the amount needed for stability, towards those areas which the new formula suggests, are furthest from target share
- although it is possible to compare the proposed changes with the actual allocation of expenditure at Health Authority level (Col A below) – it is not possible to do this below health authority level because of the incomplete information available from resource mapping (Chapter 4)
- as discussed above further work is needed on the detailed implementation of the Research Team's approach including refinement of the indicators and the costings to which they apply – this is likely to produce different final shares from those suggested in the Research Report. Thus the figures in Table 2 below should not be seen as precise indications of the effect of introducing the new approach – although the broad direction is likely to be accurate.

5.24. The comparison in column F of Table 2 shows that the new formula would redistribute future growth resources away from the current shares of North Wales and Bro Taf towards Gwent and Morgannwg, with Dyfed Powys receiving a more or less unchanged share. The magnitude of the differences ranges from a reduction of £15 million (compared with growth that would have been received under the current formula) to an increase of £11 million at the health authority level, about 5% of the total allocation. Applied to current 2001-02 budgets, the shifts would be the same in percentage terms, but greater in cash terms. It is important to note the effect of the rural costs premium – if sparsity is excluded altogether, the effects on Bro Taf and Dyfed Powys are approximately reversed, as shown in column G.

5.25. The changes can be expressed in another way (see columns D and E in Table 1) by noting that the RAWG formula would have redistributed money away from Dyfed Powys and North Wales towards the other 3 authorities, Morgannwg benefiting to the greatest extent, while the change from RAWG to the new formula reverses these effects for Bro Taf, Dyfed Powys and, to a lesser extent, Morgannwg. For North Wales and Gwent the new formula intensifies the RAWG changes.

**Table 2 : Allocations of £1.355 billion and the differences for each health authority**

	Allocations (£ million)			Differences between:			Difference between Current and new formula, excluding RCP
	Current formula	RAWG 1998	New formula plus RCP	Current formula and RAWG	RAWG and the new formula	Current formula and the new formula	
	A	B	C	D	E	F	G
Gwent	254.2	257.0	265.5	2.829	8.473	11.302	12.782
Bro Taf	331.0	336.8	327.9	5.868	-8.890	-3.022	0.868
Dyfed Powys	229.6	223.4	229.9	-6.236	6.497	0.262	-2.217
North Wales	310.8	300.0	296.0	-10.838	-3.959	-14.797	-16.366
Morgannwg	230.4	238.8	236.6	8.377	-2.122	6.255	4.933
All HAs	1,356.0	1,356.0	1,356.0	17.074	14.970	17.819	

**Note:**

The totals at the bottom of the difference columns D to F are the sum of the positive changes only and thus show the magnitude of the redistribution when the basis of allocation is changed (the sum of all the positive and negative differences comes to zero).

Phasing in through differential growth

5.26. Analysis is being done to see how these changes could be absorbed through differential growth within the current resource planning assumptions. These are currently 7.0 per cent annual uplifts on the discretionary allocation. Equalisation – progress towards new target shares – would be achieved by distributing an annual cash increase on health authorities’ discretionary allocations differentially between areas. Thus no area loses in absolute terms and all areas receive a minimum uplift.

**Conclusion**

5.27. We recommend the adoption by the National Assembly for Wales of the direct model of measuring need for health care services. This model represents a departure from the approach used in recent years and because it is novel its implementation has to be subject to intensive further scrutiny and refinement in the immediate future. If successful and popular its adoption by the National Assembly for Wales will have implications for other regions of the UK and other member states of Europe.

5.28. There are questions about the scope and number of indicators from the WHS that can be, and might be, used to improve the reliability of an area formula, by which Ministers can allocate resources more equitably and effectively to local areas in Wales. We recommend that steps are taken to confirm but also improve the value of the WHS.

5.29. We are aware of the importance of monitoring this development and phasing its introduction – preferably in as short a time-span as possible. The crucial step is for the Finance Division of the NHS to monitor trends in allocation and expenditure



on specific services by LHGs and Trusts, so that distribution to different services, and to groups in health care need in the population can be evaluated year on year in relation to specific policy decisions. In principle the outcomes of changes in policy, and especially of decisions about the division of resources – centrally, regionally and locally - must be open to clear assessment and evaluation – in relation to the objectives of ensuring equal access to services according to need, irrespective of income, and of more equitable health among local and national populations.

5.30. That can happen only if health and social survey statisticians in Wales are given full backing by Ministers and senior civil servants in producing trend data in conjunction with the NHS Finance Division of the National Assembly for Wales, which are then published for consultation among health care practitioners. As we propose elsewhere, this necessary joint work can be assisted by the Audit Commission, if, following its reports on value for money studies in the NHS in 1999 and 2000,<sup>29</sup> it is invited to work with the Assembly and local government to review of financial information to support management action and define and implement a new financial strategy as discussed in Chapters 3 and 4. We therefore recommend that links between resource management, measurement of local health care needs, and expenditure on those needs at LHG and Trust level be established organisationally by 2002-2003 and monitored annually.

5.31. We also recommend that the direct method of measuring area needs for health care should be introduced in 2003-2004. This would allow sufficient time for further work to be completed, preparations made and consultations with practitioners, managers and others throughout the NHS and allied services to take place. It is not possible at this stage to recommend a target date for completion of the phasing in process. The current Welsh formula was phased in over 7 years (1992-93 - 1998-99) and its implementation when the financial envelope was challenging for all health authority areas contributed to financial pressure in areas trying to manage down a level of expenditure higher than their formula share<sup>30</sup>. We recommend that the transition to new target shares should be achieved through redistributing the annual growth in NHS resources. Thus no area will receive less than their current level of resources and those areas which are furthest from their target share will receive the highest rate of growth.

5.32. We recommend that the change should be achieved as rapidly as is possible consistent with a minimum level of growth for all which the Assembly considers necessary to ensure a planned transition to the new shares. We consider the change could be effected in three years - but at most five years. The speed with which the change can be achieved will depend on the amount of overall growth available to the NHS in Wales. This transitional period will also allow a further WHS to be conducted and assessed and any necessary formula modifications made.

5.33. Given the necessary delay in beginning the process of implementation, compared with the target date of 2002-03 set in our terms of reference, we recommend that the scope for continued interim action through the Health Inequalities Fund should be considered by the Committee as an alternative route for achieving the aim of targeting resources on those in greatest need.

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<sup>29</sup> Audit Commission in Wales, A Picture of Health: a summary of findings from local value-for-money studies undertaken during 1999 and 2000 in the NHS in Wales, Cardiff, 2001.

<sup>30</sup> Stockake of NHS Wales, July 1999 paras 17 and 18

## 6. Chapter 6 A review of existing methods of allocating resources using indirect models

6.1. On what grounds did the Review decide to recommend change from an indirect model of need for health care in allocating NHS resources? The change to the direct model is discussed in the previous chapter. This chapter sets out

- how the current population formula methodology operates
- how the process in Wales compares with alternative approaches in the other countries of the UK and
- what is its impact on the current distribution of resources to health authorities in Wales.

6.2. As explained in Chapter 3, the budget for health services is allocated in different ways:

- amounts allocated by formula to health authorities
- other amounts allocated, including some amounts passed on to health authorities.

6.3. A prior decision is reached about the total sums to be made available to different categories of service – acute illness hospitals, general practice, community health services etc. The amounts are then distributed to health authorities according to the percentage shares worked out from the area formula or, in the case of the smaller part of the total, according to other, including historical, reasons. The formula approach currently applies only to

- the budget for Hospital and Community Health Services (£1,800 million in 2001-02) which represents 62.2% of the £3.101 billion total health budget for Wales and
- cash limited General Medical Services (support to GP practices) (£63.6 million), 2% of the total.

### Role and rationale for formula approach

6.4. The purpose of the current formula is to share out resources to each health authority area on the basis of the relative needs of its population. The question is how to measure those needs. Resources are distributed on the basis of population weighted for characteristics such as age - which influences the need for health care services. All other things being equal, an area with a higher than average percentage of elderly people would receive a higher than average share of resources – because the elderly generally have more needs than the non-elderly. The methodology is explained in more detail below.

6.5. The formula was devised as the basis for a system of delegated budgets for hospital and community services. In practice, once the health authorities receive the total amount allocated by formula they have the discretion to use the funds as they see fit to commission local services and to meet local priorities.

6.6. The present formula was introduced from 1992 to underpin the internal market devised to create budgets with which health authorities could purchase services on behalf of their populations. Before 1991 health boards' budgets had been funded directly, with a capitation formula introduced in the 1970s to share out growth funding in line with progress towards target formula shares.

6.7. When the new formula was introduced its major intended effect was to shift resources mainly from Bro Taf and DP into North Wales, largely because of the increased weighting, compared with the previous formula, given to elderly people. It must be emphasised that decisions were taken administratively to phase in the new formula over a longish period of years – on grounds that health authorities had to be given time to adjust to slightly higher, or lower, expected revenue. Final target shares were reached in 1998-99.

#### How the existing formula is supposed to operate

6.8. The formula is the combination of different steps taken on each sector of the HCHS budget.

Step 1 determines the overall total allocated to Hospital and Community Health Services resources for distribution to all five health authorities (i.e. 62% of the total sum for the NHS)

Step 2 divides the total into notional expenditure sectors (which represent the average estimated proportion of expenditure - at an all- Wales level - which is spent on each service (based on a survey in 1992 or earlier):

1.	Non psychiatric inpatients	62.2%
2.	Mental illness in patients	06.9%
3.	Outpatients	12.6%
4.	Ambulance services	03.6%
5.	Community services	14.7%

Step 3 calculates each authority's weighted population shares for each sector by weighting the population for age, sex and (for items 1,3,4,5) death rates. Items 4 and 5 are also adjusted by a sparsity factor to reflect the costs of providing services in rural areas.

Step 4 combines the shares to create each health authority's overall share – which is the authority's budget to be spent at its discretion.

The calculations by sector and the resulting shares for each year since 1996-7 are shown in Annex 7.

6.9. This illustrates one of the key features of the formula approach – it seeks to distribute expenditure between areas and populations on the basis of the existing balance of spending (at an all Wales level) between the different components of the health budget set out in para 6.8 above. The formula does not therefore prescribe how resources should be divided eg between secondary and primary care or between acute and community services in the interests of improving health, or addressing poor health and inequalities in health status.

6.10. The amounts spent on different service sectors are all Wales averages. They form the basis of calculating the formula shares: they are not intended to indicate what proportion should be spent on these services at local level. There are in practice wide variations in the proportion of the discretionary budget which each health authority spends on these services, as discussed in Chapter 3. Without more detailed analysis of the factors driving local spending, or standardised information on how it is allocated to services and by trusts, it is not possible to evaluate these variations. The following factors no doubt play an important part:

- variations reflecting local circumstances
- inherited patterns of service, facilities and staff
- differences in efficiency
- different local priorities.

### **Impact of the formula**

6.11. The effect of redistributing the HCHS budget by formula to the health authorities can be calculated by comparing each health authority's share of the allocation with the share it would have received on the basis of population alone. This is set out in the following tables. To summarise, in 2001-02 the capitation formula made a difference of £22 million, or 1.1% of the total formula allocated budget of £1,992 ie the sum of the variations (plus or minus) between health authority allocations based only on capitation shares and those which would have resulted from a distribution based only on population. Expressed as a percentage variation from the sums that would have been allocated on a population only basis the difference is:

Per cent of 2001-02 formula distributed budget gained/lost by each Health Authority compared with an unweighted population based distribution

NW	DP	IM	BT	G
+ 0.5	+ 0.6	0.0	-0.9	- 0.2

6.12. This suggests that the redistributive effect of the current formula at health authority level is modest - the reasons for this are discussed below. The figures are set out in Table 1 which shows how the distribution in 2001-02 of the £1,992 billion allocated by formula compares, in cash and percentage shares, with a distribution based on population alone ie where each authority received the same amount for each of its residents.

**Table 1: how the formula shares compare with population shares (2001-02 revenue allocation)**

Allocation	NW	DP	IM	BT	G	Wales
Population £m	446	326	338	504	378	1992
Population shares	22.4	16.4	17.0	25.3	19.0	100
Formula (actual) £m	457	337	339	486	373	1992
Formula (actual) shares	22.9	16.9	17.0	24.4	18.7	100

6.13. Table 2 shows these distributions expressed as £ per head of population ie how the distribution per head under the capitation formula allocation ie what health authorities actually received compares with what it would have been with an allocation by population alone – which would mean that the average for each health authority is the same as the all Wales average.

**Table 2 – distribution per head**

Per capita	NW	DP	IM	BT	G	Wales
Population	678	678	678	678	678	678
Formula	693	699	679	654	668	678

6.14. The share each health authority receives is a function of

- its population
- its age and sex distribution
- its under 75 death rates
- its sparsity

all relative to other Welsh health authorities. Since the allocations are currently calculated only at health authority level – differences within health authorities are averaged out, masking more significant differences at LHG level.

Primary care: budgets for GP prescribed drugs and Family Health Services expenditure

6.15. At present, with the exception of cash limited GMS, primary care spending in Wales is distributed not by a formula but on the basis of historic expenditure patterns as explained in Chapter 3. At health authority level, the distribution of expenditure this has produced is, for GP services, close (within 0.6 percentage point) of the distribution that would be produced by applying the capitation formula shares.

6.16. Table 3 below shows how the actual distribution for GP prescribed drugs by health authority in 1999-2000 compares with the shares that would have resulted from a distribution on the basis of population alone or using the HCHS formula shares.

**Table 3 net drugs out-turn 1999-2000**

<b>GP prescribing</b>	<b>NW</b>	<b>DP</b>	<b>IM</b>	<b>BT</b>	<b>G</b>	<b>Wales</b>
Distribution £m	75.9	52.9	56.8	78.6	60.5	324.7
Distribution shares	23.4	16.3	17.5	24.2	18.6	100
Population shares	22.4	16.4	17.0	25.3	19.0	100
formula shares	23.0	16.8	16.9	24.6	18.6	100

Family Health Services expenditure

6.17. Table 4 shows the same comparison for FHS spending which is also distributed on a forecast spend basis – budgets are non cash limited, held centrally by the Assembly and therefore not included in HA allocations (figures are for cumulative spending 1996-97 to 1999-2000 – the latest available).

**Table 4 family health services expenditure 1996-97 to 1999-2000**

<b>FHS distribution</b>	<b>NW</b>	<b>DP</b>	<b>IM</b>	<b>BT</b>	<b>G</b>	<b>Wales</b>
a. GMS £m	119	91	90	133	99	533
b. GMS shares	22.4	17.1	16.9	24.9	18.7	100
c. pharm £m	55	40	42.6	61.7	45.4	243.9
d. pharm shares	22.3	16.3	17.5	25.3	18.6	100
e. oph £m	12	10	13	21	17	73
f. oph shares	17.1	13.5	17.2	28.9	23.2	100
c. pop shares	22.4	16.4	17.0	25.3	19.0	100
d. formula shares	22.9	16.8	17.0	24.4	18.8	100

6.18. For payments to GPs the shares of actual spend are close to the population and capitation shares. There is much greater variation in the payments to pharmacists and ophthalmic practitioners and receipts for prescription income which may reflect a tendency to get prescriptions dispensed and eye sight tests/spectacles in the major urban areas where people work and shop rather than where they live.

Current approaches to the formula across the UK

6.19. Chapter 3 of the report of the research team reviews the resource allocation formulae currently used in Wales, Scotland, Northern Ireland and England. Each is based on the weighted population approach discussed above and each includes the following stages. Note that at stage 1 each of the formulae depend on an indirect measure of health need – i.e. the cost of the use of services.

- Stage 1 – calculating the age and sex of the population and applying weights to reflect the costs of the use of services by each group compared with the average
- Stage 2 – adding weightings for additional needs eg for social deprivation
- Stage 3 – adding weightings for additional costs eg in respect of sparsity.

6.20. The major non technical differences between the present Welsh formula and the others are in respect of

- the treatment of additional needs and costs – which are given less weight than in the other countries
- the coverage of the formula – there is less top – slicing and hypothecation of hospital and community services in Wales
- GP prescribing is excluded in Wales, pending the outcome of the RAR, but included in England, Scotland and Northern Ireland
- FHS spending is excluded in all countries at present but in England proposals are being developed to bring it into a formula approach.

#### Additional needs

6.21. In the current Welsh formula process the under 75 Standardised Mortality Ratio is used to adjust the population weightings – this is designed as a proxy measure for relative ill health between areas. The SMR is generally acknowledged to be an incomplete indicator of health need because the death rate does not capture for example long-term chronic sickness in a population.

6.22. In England, Scotland and Northern Ireland the formula includes weightings designed to capture the additional health needs caused by social deprivation. The under 65 SMR (thought to be a better measure of health need than the under 75 SMR) is included in the Scottish formula but supplemented by other deprivation measures. The weightings are derived from a statistical analysis which determines which deprivation indicators best explain the additional utilisation of services in that country, over and above the utilisation determined by the age profile of the population. This includes the SMR supplemented by other factors.

#### Additional costs

6.23. The current Welsh formula includes a weighting for the additional costs of providing services in sparsely populated areas in relation to community and ambulance services and cash limited General Medical Services. The English formula includes a market forces factor designed to capture the above average costs of providing health services in high cost areas like the South East of England, but applies a weighting for sparsity only to expenditure on the emergency ambulance service, which represents just under 2% of the hospital and community budget. The Scottish formula includes a weighting for remoteness and rurality in relation to all services covered by the formula approach. In the course of the review we commissioned a report on the possibility of applying the Scottish recommendations to Wales.<sup>31</sup> This has been considered by Task Group C who have commissioned further research to determine the effect of using the Scottish methodology with Welsh data on the costs of health care services.

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<sup>31</sup> We are grateful to Martyn Senior and Jan Rigby for their report on “Unavoidable costs of rurality and remoteness in NHS resource allocation: applying the Scottish evidence to Wales.”

## The indirect approach to measuring health need

6.24. The methodology currently used by all the UK countries can be described as an indirect method of capturing relative need because it uses evidence of the utilisation of services between different age and social groups in the population as a proxy for their relative health need. The Research Team regard the Scottish approach as the most detailed variant of the indirect approach which uses the most sophisticated statistical techniques.

6.25. However the Research Team note that the current Welsh, English, Scottish and Northern Irish formulae all rely on health service utilisation data and thus may all be criticised for not accurately reflecting true need and for assuming that past utilisation is the best guide to future requirements – although statistical techniques have been used in Scotland, Northern Ireland and England to try to disentangle demand, supply and needs effects on utilisation<sup>32</sup>.

6.26. Commenting specifically on lessons for Wales from Scotland the Research Team point out that its use of complex statistical analyses hinders transparency and comprehensibility. Although a wide range of socio-economic and demographic measures of health need were examined statistically to establish their influence on the utilisation of health services, the use of a large number of proxy need indicators led to instability between care programmes and adjacent years – which led to the decision to use a restricted number to create the composite Arbutnott index.

6.27. On lessons from England, the Team point out that the English formula is itself subject to a major review. Although the current formula uses a wide range of indicators of additional needs most are from the Census and not readily updated between Censuses. Adopting the English formula, as recommended by the Resource Allocation Working Group in 1998, would be unwise in the view of the Team, for these reasons and because of concerns about their use of population projections and work specific to England on fixed and variable specialty costs –as explained on page 32 of the Research Report.

6.28. The Research Team estimate that updating the Welsh formula along Scottish lines would, in any event, take at least 2 years because the Welsh health service data is not all collected in the form required ie recording for all treatments the post code of each patient so that analysis of utilisation on the small area basis needed to determine the impact of social factors can be made. Although health services data in Wales is in some respects better than elsewhere, it has not been designed for the purpose of formula calculations.

## **Conclusion**

6.29. The current method of allocating nearly two-thirds of NHS resources to health authorities in Wales is unsatisfactory, on a number of grounds discussed in this chapter. We decided there were serious problems with utilisation data and SMRs as proxy measures of need for health care. We also found there were considerable practical problems in constructing reliable utilisation data – which will take two years in Wales, and perhaps longer, to overcome. Compared with practices in Wales the

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<sup>32</sup> Research Team report Chapter 3 page 24



corresponding, technically more sophisticated, methods adopted in England, Scotland and Northern Ireland, using the indirect model, were also found to pose major difficulties in theory as well as in practice. In our judgement the alternative model proposed by the independent research team appointed for this review is undoubtedly preferable. We therefore recommend that work to develop the indirect approach be put on hold for two years, until the early promise of the direct model can be fully confirmed.

## 7. Chapter 7: Conclusions and recommendations

7.1. This Review of current arrangements for allocating resources to the NHS in Wales was set up in February 2000 to advise “how equitable access to appropriate quality health services in accordance with health need” should be developed. The Review is necessary for two reasons, which are inextricably linked. Despite advances in health care, inequalities in health have continued to grow in Wales, as well as in the UK as a whole. And some vulnerable, especially poor, groups do not have equitable access to health care services.

7.2. If matters are to be remedied, and the trend of growing inequalities halted and reversed, action within the NHS requires extensive appraisal by managers and practitioners of their activities, functions and responsibilities at every level of service - including funding, which plays only one part, though a crucial part, as this report makes clear.

7.3. But new action within the NHS cannot be isolated from action outside the service. Health, and the management of ill-health, also depends on income, housing, working conditions, environmental facilities and other factors. Some of these are affected by action within Wales itself, including, for example, improvement or deterioration in the conditions of its schools, streets and workplaces. But some, like the level of social security benefits, depend not on action by the National Assembly for Wales or local authorities within Wales. They depend on the Government at Westminster. And some, like the unemployment and stress and upheaval caused by the closure of plants belonging to transnational companies, depend on international law and the conventions of a global market.

7.4. The specific tasks of this Review therefore have to be set within a realistic context of planning for improvements in health. It would be wrong to expect action within the NHS in Wales to solve health problems and even more wrong to expect the way a sum of money is spent to resolve existing inequalities and shortcomings. But they are essential components of the dual strategy discussed here.

### **The dual strategy for action within and beyond the NHS: Chapters 1 and 2**

7.5. We therefore recommend that a dual strategy - of measures to be taken within the NHS in Wales, and measures taken outside the NHS - should be developed by the Assembly and that the parts to be played by different components of that strategy should be examined in turn and their contribution monitored and explained through a new assessment of future strategic potentialities for equity in health in Wales. The full scope of possible action to address poor health and inequalities in health status (within which the resources distributed by formula and variations to that formula can be applied) can be expressed as

1. action within the NHS, in the context of a universal service responding to the needs of all patients, to encourage sensitivity to the needs of the poorest patients and ensure equality of service access;
- 2a. action outside the NHS but within the policy responsibilities of the Welsh Assembly to improve community services, reduce deprivation and unemployment, and improve housing, environmental and other services;

- 2b. action outside the NHS (and the scope of the Welsh Assembly) to advise the UK Government on appropriate and necessary measures to reduce material and social deprivation, poverty and social exclusion, and increase low incomes – and thereby contribute to improved health.

7.6. The parts to be played by different components of that strategy can be examined in turn and their contribution to a solution specifically monitored from year to year and assessed.

### **Action by professional practitioners**

7.7. We have suggested how action to improve equity of outcome and of access might be improved by practitioners in the NHS and other health organisations. This is not the place for a thorough review, but we hope that different professional bodies will welcome an opportunity to re-examine their everyday practices and programmes of work in relation to the urgent task of halting, and then reversing, the situation of growing inequalities of health. Tentative proposals can be made on the basis of some current developments. Thus, the General Medical Council has asked the UK Government for powers to put doctors through a five-yearly “MOT” to demonstrate their continuing fitness to practise (22 May 2001). Such a re-validation procedure would lend itself to inclusion of a training strand related to the service of equity.

7.8. The problem of equity applies to all the health care professions. How might they connect with the dual strategy recommended in these pages? Consultants, hospital doctors, general practitioners, nurses, midwives, health visitors, psychotherapists, psychiatrists, and many more health professionals make choices every day about the distribution of their workloads and their priorities. Many follow long-established customs, sometimes rough rules-of-thumb, about length of time and number of consultations, waiting times and selection of patients and clients. In a multicultural society where there are more elderly and disabled people and more demands for targeted as well as specialised care, equity may be a question which is increasingly difficult to satisfy. Certainly unequal health, and unequal treatment, take different forms.

7.9. “Equity training grant.” We recommend a short-term measure that could have a wide influence: equity training grants to enable members of professional bodies, hospitals, health centres and other organisations to be freed to meet and identify severe unmet health needs, especially of those with low income and/or living in conditions where they lack social support and access to public and private services. Half the programme of grants might be available for inter-professional sessions. Such training courses might be designed to result in recommendations for changes required in internal professional practices and in the practices or policies of external health departments and other organisations.

7.10. As stated in Chapter 2 above, the cost of such a proposal could be met either in the general NHS budget or additionally, for example through the provisions of the new Health Inequalities Fund. We consider that the HIF is a considerable innovation in Wales. For the three years 2001-2004 annual expenditure has been set at a modest level – rising to £7million, or some two-thousandths of the total NHS budget. Its scale deserves re-appraisal. The different functions that such a Fund serves could become extremely important. It may need to be greatly enlarged. Much depends on the reactions of professional practitioners and administrators to the

need for urgent action on need for health care and inequalities in health. A special government fund can be “pump priming” in the innovative way illustrated by the best voluntary agencies throughout history. New initiatives, once shown to be worthwhile, can be absorbed subsequently on a far bigger scale into statutory services. Relatively small sums of money can be used in a pioneering way to justify the wide adoption of good proposals. But if change is resisted despite confirmed evidence of the need for it a difficult question arises of setting up alternative institutions and services as the only means of addressing the problem.

7.11. The work of the Task Groups has been invaluable in calling attention to the severity of the problem – and the case for introducing additional, exceptional measures not just to prevent inequalities from continuing to widen and stabilise them at their present level but to reverse them (see in particular the report of Task Group B in Volume III). We believe the steps that are necessary for professional NHS practitioners to respond fully to the conditions of deprivation faced by numbers of their patients, and to promote better outcomes for them, are many and varied. Large-scale collaborative effort is required to meet it.

7.12. In England the Department of Health introduced a new deprivation payments system for general practitioners on 1 April 1999. This was designed to target payments more accurately for small areas than had been the case since 1990,<sup>33</sup> when additional capitation payments were made for patients living in deprived areas. One intention is to compensate adequately for additional workload. There are problems of assessment and of relating outcomes to quality of care, but the principle deserves close examination – in terms of extension to all professional groups and concentrating attention on better ways of meeting the gaps in health care.

7.13. Our evidence has demonstrated not only the encouraging ways in which nurses, doctors, health visitors and many other professionals apply good social priorities in their everyday work - to ensure equitable service, but also the difficulties some have in meeting their own as well as national standards. Some of the possible actions are set out in the Task Group reports<sup>34</sup> and we hope they will be a basis for re-appraisal on the part of professional and administrative groups, including LHGs and Trusts, throughout Wales. At every level those in the NHS can make a huge difference to the prospects of patients in greatest need of health care.

### **Action outside the NHS**

7.14. Many practitioners advise patients or clients occasionally or frequently about, for example, their housing or income. Doctors are often expected to supply information to local authorities or the Department of Social Security, on behalf of ill or disabled patients who consult them. Often they will be advocates and not simply suppliers of information. In relation to the pursuit of equal health, we believe this is not simply a valuable, if unsought, function, but one that could be built into the expectations of professional practice. Examples could be given of doctors who secure improvements in the health of some of their patients more by advocacy to get new housing or a disability benefit than by prescribing medicine as a “placebo” remedy for the same patients.

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<sup>33</sup> Bajekal M., Alves B., Jarman B. and Hurwitz B., Rationale for the new GP deprivation payment scheme in England: effects of moving from electoral ward to enumeration district underprivileged area scores, BJGP; 2001, 51, 467, 451-5.

<sup>34</sup> See, for example, Task Group B, Social Deprivation and Disadvantage, Part II, p. 9.

7.15. “Advocacy grant.” We are conscious of the importance of not adding to the demands that are placed on good health care professionals but, knowing that so many undertake such “outside” work in their everyday practice, we believe it should be better recognised and accepted as part of the job. To encourage formal recognition of this wider health role we recommend that provision should be made for an advocacy grant to be made available to health professionals, to enable them to meet to pool their experience of unmet health needs – the responsibility for which lies outside the health care system, and to enable them to make representations for change to the appropriate external bodies.

7.16. The raft of measures concerned with community services and social deprivation prepared and implemented by local authorities and by departments of the Welsh Assembly not concerned directly with health care impinge on equity and health, especially public health. In the course of our review strong representations have been made about the importance of dealing with different forms of material and social deprivation in order to prevent as well as remedy some forms of ill-health. These issues need to be addressed in the new strategic assessment recommended in para 7.5 above.

7.17. In advising how “equitable access to appropriate quality health services in accordance with health need “ should be developed we are conscious that funding within the NHS can only begin to be effective also in conjunction with bigger measures that remain to be taken by the Government at Westminster and that lie within their powers, rather than those of the National Assembly for Wales. There exists strong scientific evidence of the links between multiple deprivation, and poverty, and ill-health or premature death. Much of this evidence was collected for the 1980 Black Report and the 1998 Acheson Report and can be found both in the reports and collected evidence, as set out in Chapters 1 and 2. The weight of evidence led to the recognition in both reports that structural action outside the health care system was a priority. Ten of the 39 Acheson recommendations involved raising levels of different social security benefits.

7.18. Such a major component of a strategy for equity in health remains of key importance. This was recognised by the Welsh Affairs Committee in its report on Social Exclusion in Wales in November 2000. “At present, the benefits system allows people to survive, but does not lift them out of poverty... We call on the Government to raise the level of benefits overall...”<sup>35</sup> The measures that are developed, for example, by the UK Treasury in relation to earnings, taxation and benefits provide a structural basis of funding for outcomes in the health of the population. Those working within the health care system and the National Assembly for Wales might therefore consider how more formal methods of representing the interests of people in Wales routinely can be developed when those measures come to be reviewed and changed. There are of course other ways of strengthening such an “advocacy” role.

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<sup>35</sup> Welsh Affairs Committee, Third Report: Social Exclusion in Wales, HOC 365-1, 2000, London, TSO, p. xvii.

## **Better information on how the NHS budget is spent and priorities between services – Chapters 3 and 4**

7.19. No formula for the allocation of resources to health care can be effective unless

1. the actual distributional allocation of previous years can be traced in detail, fully explained and therefore used as a basis for changes to be recommended;
2. the distributional changes implied by the formula can be accurately estimated for the next, say, three years, and
3. the outcomes from using it can be tracked from year to year so that any proposals for amendment can be fully informed.

7.20. These principles are not easy to fulfil. Chapter 3 provides a form of detailed financial analysis not developed in previous reports, illuminating the deficiencies in existing financial information about the distribution of resources and setting out what needs to be achieved. This highlights the importance of accurate and meaningful financial information to inform analysis of the implications for equity of past decisions and illuminate possible future options.

7.21. 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 - at central, regional and local levels. There also needs to be a clear strategy for using financial information effectively to inform the Assembly's future budget decisions, as recommended in para 3.77.

7.22. Accordingly, we recommend that an indispensable step in tackling inequalities in health in Wales is to establish a system whereby trends in access to, and outcome of, health care is put in place jointly by finance, health care and social service agencies, centrally, regionally and at local Trust and LHG levels. Expenditure, and proposed expenditure, should be classifiable in a standard form by each unit and area of service. The NHS Finance Division of the National Assembly should prepare a report for each of the three years 2002-2004 setting out the steps that can be taken towards the fulfilment of this goal, in conformity with long-standing practices in preparing and auditing the public accounts.

7.23. To aid this development the Audit Commission should be invited to advise

- how expenditure in relation to the objective to reduce inequitable access to health care can be tracked consistently at central, middle-tier and local levels, and
- how statistical information for the purposes of improved public information, and of monitoring progress year on year towards greater equity, might be standardised. In putting forward this recommendation we are aware that in one of its recent reports the Audit Commission has already called attention to

the problems in Wales of "obtaining access to appropriate information to plan and manage service delivery" and "developing clear accountability and performance monitoring frameworks."<sup>36</sup>

7.24. We also recommend that, for greatest effect, the formula should be applied consistently at the different levels of administrative authority – all-Wales, region or health authority; and local health group and Trust. This will necessarily raise urgent questions about the need to standardise information given and collected about health resources and expenditure at the different levels of authority. Achieving this will be a major step forward in the process of auditing equity in resource allocation as discussed in Chapter 4.

### **A more equitable resource allocation formula – Chapters 5 and 6**

7.25. In attempting to place resource allocation mechanisms in the wider context of action by the NHS and associated organisations to address poor health, and tackle inequalities in access to effective health care, four key themes have to be highlighted:

- a needs based area resource allocation formula is only one tool in the resource allocation process
- no area resource allocation process will deliver equity of access or treatment - unless it is carried down to a local level (i.e. local health groups) and attention is given to the way money is spent at every level in relation to quality, access and effectiveness
- a formula approach is most relevant to the reduction of health inequities where budgets are delegated by the Assembly or by "middle-tier" authorities to local level
- where budgets are not delegated to local health groups but to a middle tier (at present health authorities) and a formula approach is therefore not used to determine cash allocations, other mechanisms are even more needed to ensure that resource allocation is equitable between areas. This could include an audit of all NHS resources by population group through resource mapping – to ensure that the distribution criteria for all budgets are scrutinised routinely from the standpoint of equity.

7.26. We have examined in detail the area formula adopted in 1991 for application to the five health authorities in Wales as explained in Chapters 5 and 6. Our conclusion is that it is not satisfactory because its statistical basis is not yet robust and it also provides an indirect and incomplete measure of health need. In any event, in Wales statistical data on the utilisation of health services of the kind used elsewhere in the United Kingdom are not available and would take two years to introduce.

7.27. We believe that an alternative, direct measure of need for health care can be developed successfully as a means of measuring area inequalities of health and to form the basis of resource allocation. The Welsh Health Survey, which is more

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<sup>36</sup> Audit Commission, A Picture of Health? A summary of findings from local value-for-money studies undertaken during 1999 and 2000 in the NHS in Wales.

comprehensive than for any other region of the UK, affords a major opportunity of scientific and statistical breakthrough. Chapters 5 and 6 explain the way it can be used to improve the allocation of NHS resources and the reasons for choosing this approach in preference to alternative models.

7.28. The concerns about the existing Welsh resource allocation formula have been reinforced by the work of Task Group B as well as of the Research Team in the course of this Review. That work also confirms the correlation between social deprivation and ill – health in Wales and that the distribution of resources produced by the existing formula does not match the distribution of disease in Wales.

7.29. The Scottish method is perhaps technically the most advanced for the countries of the UK but, like the methods currently applied also in England and Northern Ireland, it is also an indirect measure. The indirect method uses evidence of the utilisation of services between different age and social groups in the population as a proxy for their relative health need. Utilisation data are subject to significant accuracy problems such as definitions and recording conventions. As elsewhere Standardised Mortality Ratios are also used in Wales as a proxy for ill-health. As a proxy for ill-health the measures of mortality do not reflect the extent of long-term chronic sickness and disability in a population. In principle the SMR is far from being ideal, although many analysts have felt obliged to use such a ratio in the past for purpose of allocating health care resources.

7.30. Accordingly we recommend the adoption by the National Assembly for Wales of the direct model of measuring need for health care services. This model represents a departure from the approach used in recent years and because it is novel its implementation therefore has to be subject to intensive further scrutiny and refinement in the immediate future. If successful and popular its adoption by the National Assembly for Wales will have implications for other regions of the UK and other member states of Europe.

7.31. Because of the further work that is needed, outlined in Chapter 5, not least to complete the important work on rural and urban factors we recommend that the direct method of measuring area needs for health care should be introduced in 2003-2004. This would allow sufficient time for preparations to be made, consultations with practitioners, managers and others throughout the NHS and allied services to take place.

7.32. We recommend therefore that the transition to new target shares should be achieved through redistributing the annual growth in NHS resources. Thus no area will receive less than their current level of resources and those areas which are furthest from their target share will receive the highest rate of growth. We recommend that the change should be achieved as rapidly as is possible consistent with a minimum level of growth for all which the Assembly considers necessary to ensure a planned transition to the new shares. We consider the change could be effected in three years - but at most five years. The speed with which the change can be achieved will depend on the amount of overall growth available to the NHS in Wales. This transitional period will also allow a further WHS to be conducted and assessed and any necessary formula modifications made. In the interim, we recommend that work to develop the indirect approach be put on hold for two years, until the early promise of the direct model can be fully confirmed.



7.33. Given the necessary delay in beginning the process of implementation of the recommended new approach, compared with the target date of 2002-03 set in our terms of reference, we recommend that the scope for continued interim action through the Health Inequalities Fund should be considered by the Committee as a means of targeting resources on inequalities in health. The evidence we have received from the NHS Finance Division is that some LHGs, especially Torfaen, Caerphilly and Neath Port Talbot, have serious unmet needs and deserve to attract above-average increases in resources in the immediate future.

7.34. Longer term we support the recommendation of Task Group B that a recurrent Inequalities Fund is needed to allow improvements in health in deprived areas at a faster rate than the average. However we believe that careful consideration needs to be given to the role and scale of the Fund, to ensure that its existence does not detract attention from the action to change the way mainstream NHS services respond to the needs of disadvantaged people and communities, through professional practice, as discussed in paragraphs 7.8-7.15 above, and in all the other ways discussed in Chapter 2. The Fund needs to be used as a catalyst for sustainable change in the delivery of services and to support the much wider changes that are needed as set out in Improving Health in Wales, in the Research Report and in the report of Task Group B.

### **Private and public service**

7.35. The magnitude of efforts required to close the health gap – found to have continued to widen during 1997-2000 – is undoubtedly very large. Substantial measures within the scope of the NHS as well as outside the service have to be taken. Globalisation is generating structural inequality within many countries that polarises social conditions and opportunities but also access to medical, nursing and community care.

7.36. Measures must be designed not just to raise standards at the bottom but also to restrain above-average or excessive increases in resources used at the top – in certain services and by some units or individuals. Exceptional increases in some forms of health expenditure can reduce the resources otherwise available for the poorest groups in poorest health. We have indicated the growing need to restrain the accelerating costs of pharmaceutical products. There is also the disproportionate use of the costliest forms of new medical technology by prosperous people. There are implications for equity of access. Scarce NHS resources can also be diverted away from any possibility of treating the unmet needs of those in poorest health.

7.37. If some elements of the budget are permitted to grow unchecked, resources for standard services – especially for the elderly, the disabled and mentally ill and for poor families will be reduced. “Trickle-down” of the fruits of economic growth, within the NHS as well as outside it – is no longer a fact of social and health care development.

7.38. A new concern is privatisation. This could acquire a momentum that reinforces rather than reduces inequality of access to health care – so perpetuating the “inverse care law” identified in 1971 by the Welsh GP Julian Tudor Hart.<sup>37</sup> The concern applies less to Wales than to other areas of the UK. Generally Private

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<sup>37</sup> Tudor Hart J., The inverse care law, Lancet, 1971; I, 405-12.

Finance Initiative schemes, for example, are “subject to value for money checks by independent audit bodies,”<sup>38</sup> but there is good evidence (for example, in a series of papers in the British Medical Journal in July 1999, about the first 14 PFI hospitals) that they have resulted so far in severe reductions in bed capacity and clinical staff budgets because a fifth of hospital budgets is spent servicing debts. The problem is similar in the local authority sector. According to one report, the PFI is “a driving force in the reconfiguration of public services and the transfer of public sector staff to the private sector.” And although the exact costs of alternative options are difficult, because of accountancy conventions, to produce: “In simple cash terms – without discounting – PFI options tend to be considerably more expensive than their public sector equivalents.”<sup>39</sup> These issues need to be examined in constructing the next stage of the Assembly's policies on public/private partnerships – which are currently under review.

7.39. In Wales the concern began to be addressed at the end of 2000. Early in 2001 the Health Minister announced her decision that, in future, no clinical staff would be transferred out of the NHS in Wales in any public/private arrangement. The Assembly is currently engaged in a wide consultation exercise on its review of PFI and public/private partnerships. In the National Assembly the inequality agenda is perceived as forming an intrinsic part of these debates and, for the development of health care policy in particular, the connections between privatisation and inequality must be an indispensable consideration.

7.40. More private involvement in provider services needs careful monitoring from the perspective of equity - it may increase aggregate expenditure but on European evidence is unlikely to improve access of poorer groups to health care.<sup>40</sup> Equity of access is much worse in the US than in many other industrialised countries. Equity is a structural problem *within* the system there, and there are lessons from European and other regional experience. Public health care reforms turn out to be more efficient than market-oriented reforms. As one health analyst concludes: “An evidence-based health care policy should take into account that privatisation is likely to increase total costs for health services as well as inequities in terms of access to good health care. These negative effects will be further reinforced when private providers are subsidised by public funds, as this usually implies that a greater share of available public funds will be allocated to economically better-off urban areas.”<sup>41</sup>

7.41. Another example is private health insurance. Expenditure on health insurance, as a proportion of all health expenditure, increased in the UK in the 1980s and 1990s from about 1% to 5%, making up roughly a third of all private expenditure on health. In 1998-99 the NHS in England and Wales spent £383 per person on providing hospital and community services (not including GP services). During the same year the average private health insurance premium for an individual

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<sup>38</sup> For example, John Hutton, Minister of State, The Independent, 30 May 2001.

<sup>39</sup> Public Services, Private Finance: Accountability, affordability and the two-tier workforce, report by Health and Health Policy Research Unit of the School of Public Policy, University College London, March 2001, London, Unison, pp. 5 and 21.

<sup>40</sup> Mossialos E., Voluntary Health Insurance in the European Union, LSE Health and Social Care (publication forthcoming), London, LSE.

<sup>41</sup> Dahlgren G. in Manh Hung P., Minas I.H., Liu Y., Dahlgren G., and Hsio W.C., Efficient, Equity-Oriented Strategies for Health: International Perspectives – Focus on Vietnam, 2000, University of Melbourne, Centre for International Mental Health, p. 263.

subscriber (mainly covering hospital services) was £746 or almost twice as high. The scope of private health insurance is also narrower than the NHS.<sup>42</sup>

7.42. Private and public expenditure are not yet in the frame of public discussion about how equitable access to health care and reduction of inequalities in health can be achieved. OECD countries with universal health care coverage appear to do better on some indicators of health and also need to spend less of their GDP than countries relying heavily on the private sector.

### **Concluding perspective**

7.43. As has been noted elsewhere a very broad approach has been taken in this review to the problem of poor health and the role of a health resource allocation formula in addressing it. The scale and severity of the problem requires this fundamental approach. As a result the role of the formula itself has been seen in its correct perspective –as an important but limited tool. It needs to be as equitable and transparent as it can be, with regular updating to improve the quality of information which underpins it. But the role of a resource allocation formula in reducing inequalities of health and health care is certainly smaller than the contribution that can be made to equity of access and outcome by

- carefully investigating and revising, where necessary, the sums going to particular service uses
- tracking expenditure to the poorest and least healthy in rich and poor areas alike; and
- adopting the "dual strategy" to develop appropriate action outside the health services.

7.44. Properly developed these three measures would have a substantial impact on the growing inequalities of health, and, as the paper in the BJGP (para 2.4 above) makes clear, also the likely growing inequalities of health care. We recommend to the Committee that having set in train a more equitable and transparent process of resource allocation, these three measures should now be priorities for the NHS and the Assembly corporately.

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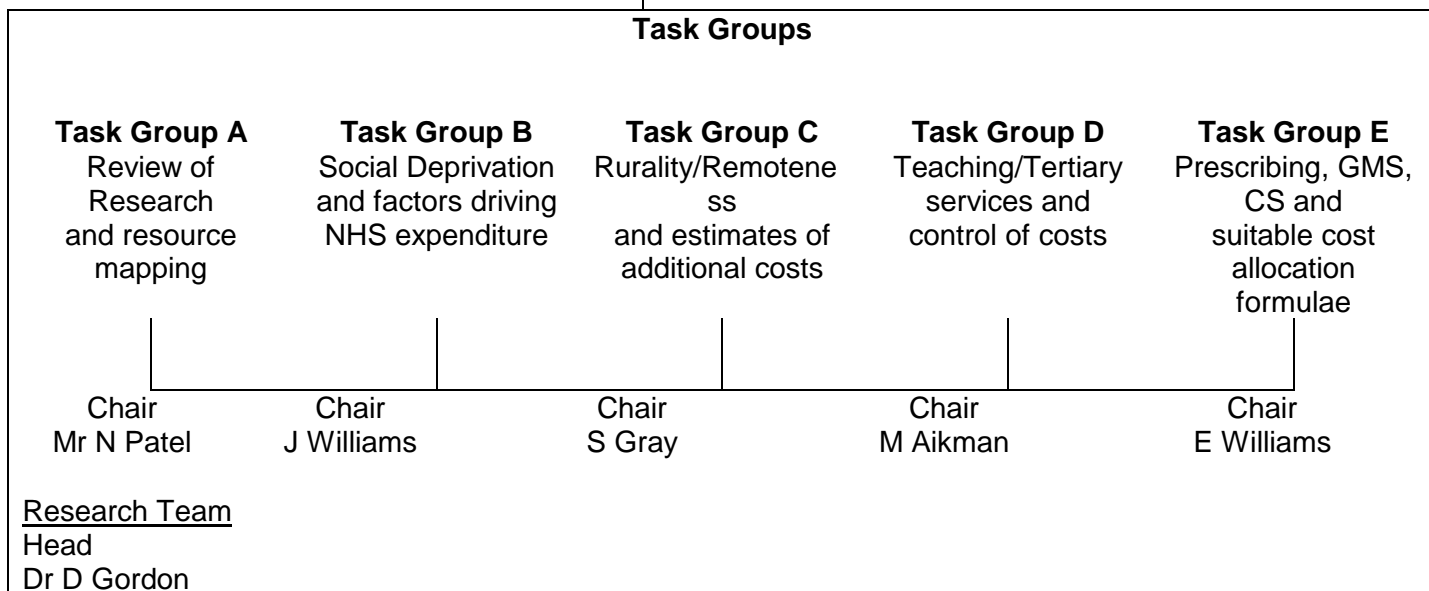
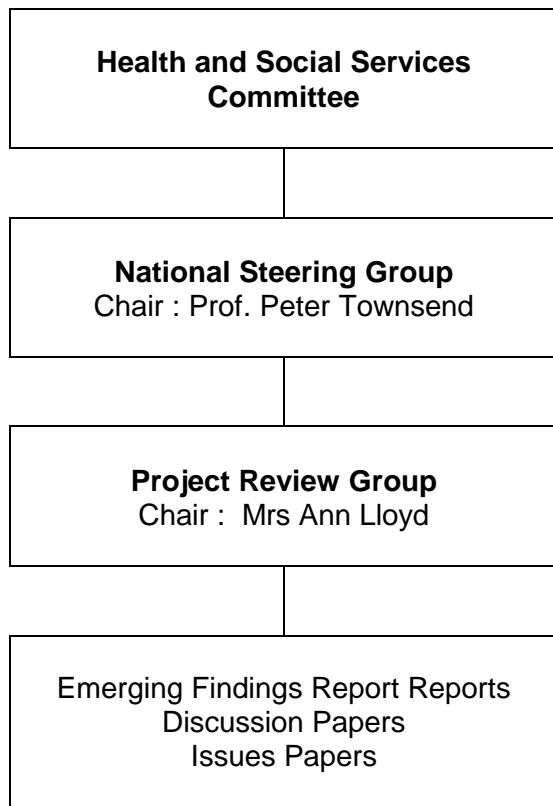
<sup>42</sup> Mossialos E., Voluntary Health Insurance in the European Union, LSE Health and Social Care (publication forthcoming), London, LSE, p. 35.

## Annexes to Volume 1

- Annex 1 Resource Allocation Review: terms of reference, structure and membership
- Annex 2 Task Groups: remit and membership
- Annex 3 Wales Health Budgets: Key Trends (Constant Prices)
- Annex 4 Wales Health Budgets: Key Trends (Cash)
- Annex 5 Wales Health Budgets: Pie Chart
- Annex 6 Assembly Health Budgets: background narrative
- Annex 7 HCHS Formula Shares

Resource Allocation Review

**Project Group Structure**



## Terms of Reference for NHS Resource Allocation Review

The Health & Social Services Committee agreed to set up a review of the current arrangements for allocating financial resources to the NHS in Wales. Professor Peter Townsend has been appointed as the independent Chair of the National Steering Group which is to oversee the review. The Terms of Reference of the review are as follows:

- (1) To advise the Health and Social Services Committee on the most appropriate means of allocating available resources to fund the provision of the full range of primary, community, secondary, and tertiary health services to the population of Wales in order to promote equitable access to appropriate quality health services in accordance with health need.
- (2) The review is particularly expected to ensure that the recommended resource allocation mechanisms take into account the health needs of areas of socio-economic disadvantage but it is also to take due account of:
  - the needs of other disease, population, and minority groups with particular healthcare needs;
  - the unavoidable extra costs and measures of providing services in rural or remote areas or areas where market forces factors impact significantly on costs;
  - the legitimate additional costs associated with the provision of all Wales services, including pre and post graduate medical education, tertiary services, and contributing to UK and England and Wales services;
  - the capability of the recommended mechanisms to inform and promote the equitable distribution of resources:
  - for the provision of all elements of NHS provision (for hospital, community, and ambulance services, GP support costs, GP prescribing expenditure, and contractor professions' fees and allowances) while encouraging a whole systems approach;
  - to Local Health Groups;
  - the availability and resource implications of obtaining and maintaining quality data, experience to date with the existing formulae, other relevant work undertaken and formulae applied elsewhere; and
  - the need for appropriate transition arrangements for the implementation of the new funding arrangements.
- (3) The review team is to present its emerging findings report to the Health and Social Services Committee by 31 December 2000 and a final report for consultation by 31 March 2001 with a view to recommended changes to the main formula being introduced progressively from 2002-3.

**NHS Resource Allocation Review (structure and membership)****National Steering Group**

Professor Peter Townsend - Chairman  
 Jane Hutt - Assembly Minister  
 Kirsty Williams - Assembly Member  
 Dai Lloyd - Assembly Member  
 David Melding - Assembly Member  
 Hefin Davies – Chairman North West Wales NHS Trust  
 Simon Jones – Chairman Bro Taf Health Authority  
 John Leece -Jones – Chairman, Association of Community Health Councils  
 Doug Paton – Powys Local Health Group  
 Dr Ruth Hall - Chief Medical Officer. NAW  
 Helen Thomas – Director Social Policy, NAW  
 Ann Lloyd – NHS Director, NAW  
 Nick Patel – Project Director, NAW

**Project Review Group**

Ann Lloyd – Chair, NHS Director, NAW  
 Jan Williams - Chief Executive, Bro Taf Health Authority  
 Stuart Gray – Chief Executive, Dyfed Powys Health Authority  
 Geoff Lang – Director of Finance, North Wales Health Authority  
 Mike Jones - Chief Executive, Carmarthenshire NHS Trust  
 Dr Mike Robinson – Vale of Glamorgan Local Health Group  
 Dr David Gordon – Head of Research Team  
 Sandy Blair – Director, Welsh Local Government Association  
 Maggie Aikman – Gwent HA Director of Finance  
 Eifion Williams – Director of Finance, Bro Morgannwg NHS Trust  
 Dr Quentin Sandifer - Director of Public Health Iechyd Morgannwg Health Authority  
 Dr Roger Williams - Medical Director, NE Wales NHS Trust  
 Georgina Gordon – Director of Nursing Swansea NHS Trust  
 John Howard – Chair, Montgomeryshire Community Health Council  
 Sarah Beaver - Director of Finance, NAW  
 Robin Jones – Statistical Directorate, NAW  
 Nick Patel - Project Director

## **Task Group – Remit/Tasks**

### **Task Group A – Review of Research**

#### **Chair – Nick Patel**

- Co ordinate the work of the research team to ensure that task group research support to task groups is being fully met.
- Monitor and liaise with the research team to ensure the achievement of the action plan including the development of the formula.
- Summarise and prepare papers for the PRG / NSG on the different resource allocation formula options which have been reviewed by the research team.
- Arrange a resource mapping exercise covering all health authorities.
- Prepare discussion papers on issues not covered by task groups.
- Capital charges.
- Resource allocation formula methodology.
- To consider urban issues and the influence of demographic factors and utilisation of service/environmental factors.
- Draft Emerging Findings Report for consideration by Task Groups, PRG and NSG.

### **Task Group B – Social Deprivation**

#### **Chair - Jan Williams**

- To describe the impact of social deprivation and disadvantage on health status in whatever settings people live, rural, urban, or valleys.
- To set out the ways in which social deprivation, occupational class and health inequalities drive NHS expenditure.
- To explore the potential future role of the NHS in reducing avoidable health inequalities through the redistribution of existing resources/ targeted deployment of new resources.
- To consider urban issues (except those relating to demographic factors and utilisation of service/environmental factors which are being dealt with by Task Group A).
- Review the emerging findings of the National Steering Group in line with the points above.



**Task Group C – Rurality/Remoteness****Chair – Stuart Gray**

- Review current literature and information on excess costs of the health service provision in rural/remote areas.
- Define rurality and remoteness in the Welsh context.
- Identify the inequities in access in health as a result of rurality.
- Estimate the additional costs of delivering health care services to rural/remote locations.
- Estimate the additional costs to patients in accessing health services in rural / remote areas.
- Recommend to the Project Review board an appropriate range of determinants/adjustment to the allocation formula to account for excess costs for rurality/remoteness.
- Comment on the draft emerging findings report.

**Task Group D - Teaching & Tertiary Services****Chair – Maggie Aikman**

- To ensure that the recommended resource allocation mechanism take into account the legitimate additional costs associated with the provision of all Wales services including:
  - Under- graduate and post graduate Medical & Dental Services
  - Tertiary Services
  - Research and Development

This would also involve consideration of the trade off between the need to maximise equality of access (ie fair resource distribution) and the need to maintain a viable Teaching and Research base with access to sustainable locally provided “leading edge“ tertiary services.

- To review the appropriateness of the factors and mechanisms used in the current resource allocation methodology to provide and safeguard all Wales services.
- To undertake a literature search to ensure that the most up to date thinking on the subject area is available to the group. This should include a critical review of approaches adopted in England, Scotland, and elsewhere.
- To identify the issues involved and specify any further work that is required.
- To develop an action plan that supports the timetable set out by the National Steering Group to meet the overall programme.

- Comment on draft Emerging Findings Report.

**Task Group E - Prescribing, GMS, Community Services, Family Health Services**

**Chair – Eifion Williams**

- To advise the Project Review Group of the NHS Resource Allocation Review on the issues to be included/recognised by an appropriate formulae for the distribution of financial resources to Health Authorities and Local Health Groups in Wales for :
  - Community Services
  - Family Health Services
  - GP Prescribing
  - GMS (Cash Limited)\*
  - Ambulance Services

Where appropriate, the group would make recommendations on the appropriate formulae. The work of the group needs to consider the evidence of the relative need for resources across health communities and consider the appropriation of available relevant factors to reflect this. The outcome of the work should be the production of a formula by the All Wales Review process that can be supported by relevant and accurate data to produce an equitable distribution of resources to meet the relative needs of the population of each Health Authority and Local Health Group for each service.

The terms of reference vary to take account of the emerging findings of the review

- Comment on draft Emerging Findings Report
- GMS (Non Cash Limited) to be reviewed in light of developments highlighted by English National Plan.

**Task Group A Membership**

Mr Nick Patel	RAR- Project Director, NAFW
Mr Jack Straw	Director of Finance, Bro Taf Health Authority
Mr Eifion Williams	Director of Finance , Bro Morgannwg NHS Trust
Mr Geoff Lang	Director of Finance, North Wales Health Authority
Mrs Maggie Aikman	Director of Finance, Gwent Health Authority
Mr Alun Lloyd	Deputy Director of Finance, Bro Taf Health Authority
Dr David Gordon	Head of ResearchTeam ,Bristol University
Dr Rhiannon Edwards	Health Economist, North Wales Health Authority and Bangor University
Mr Nigel Moss	Specialised Commissioner , Specialised Health Service Commission For Wales
Dr David Fone	Consultant Gwent HA and Senior Lecturer University of Wales College of Medicine
John Howard	Chief Officer, Montgomeryshire Community Health Council
Mrs Carys Evans	Policy Unit, NAFW
Mr Robin Jones	Health Statistics and Analysis Unit ,NAFW
Mr Ken Alexander	RAR Secretariat, NAFW
Mrs Leah Price	RAR Secretariat, NAFW

**Task Group B – Social Deprivation**

Mrs Jan Williams (Chair)	- Chief Executive, Bro Taf Health Authority
Dr Jennie Deville	- Research Manager, Institute for Rural Health
Dr Chris Godwin	- Chair, Blaenau Gwent Local Health Group
Dr Ronan Lyons	- Consultant in Public Health, Iechyd Morgannwg Health Authority
Dr Stephen Monaghan	- Deputy Director of Public Health, Bro Taf Health Authority
Dr Nina Parry-Langdon	- Health Promotion Division , NAW
Ms Hilary Pepler	- Chief Executive, North Wales NHS Trust
Mr John Puzey	- Director, Shelter Cymru
Mr Chris Riley	- Performance Management Division, NAW
Dr Martyn Senior	- Senior Lecturer, Cardiff University
Mr John Bader	- Housing Community Renewal Division, NAW
Mr Andrew Jones	- Senior Policy Officer, Caerphilly County Borough Council (WLGA)
Ms Claire Jones	Research and Policy Advisor, Bro Taf Health Authority

**Task Group C – Rural/Remoteness**

Mr Stuart Gray (Chair)	- Chief Executive, Dyfed Powys Health Authority
Mr Alan Coffey	- Director of Finance, Powys Health Care NHS Trust
Dr John Wynne-Jones	- Director, Institute for Rural Health
Mr M Woodford	- Chief Executive, Powys Health Care NHS Trust
Ms Sally Simmonds	Nurse Board Member, Powys LHG

- Mr Keith Thompson - Chief Executive, North West Wales NHS Trust
- Dr W Ritchie - Director of Health Policy and Public Health, Dyfed Powys Health Authority
- Ms Sharon Warnes - Chief Executive's department, Gwynedd County Council
- Mr John Howard - Chief Officer, Montgomery Community Health Authority
- Mr David Ellis - Regional Manager, Mid and South Wales Division, Welsh Ambulance Services
- Dr Will Roberts - Chairman, Anglesey Local Health Group
- Dr Rhiannon Edwards - University of Wales, Bangor
- Ms Non Williams - Social Services, Gwynedd County Council

**Task Group D – Teaching & Tertiary Services**

- Mrs Maggie Aikman - Director of Finance, Gwent Health Authority
- Mr Alun Lloyd - Deputy Director of Finance, Bro Taf Health Authority
- Mr Stuart Davies - Director of Finance, Specialised Health Service Commission for Wales
- Mr Charlie Mackenzie - Swansea Trust
- Mr Gary Thomas - Health Information Analyst, Gwent Health Authority
- Mr Nick Patel - RAR project director, NAFW
- Mr Chris Lewis - Cardiff & Vale Trust
- Mr Wayne Harris - Director of Finance, Wrexham Trust
- Kim Tester - Human Resources, NAFW
- Dr Alun Roberts - NHS College Liaison, College of Medicine, University Hospital of Wales
- Malcolm Green - Gwent Health Authority
- Chris Turley - Gwent Health Care Trust

**Task Group E – Prescribing, GMS, Community Services, Family Health Services**

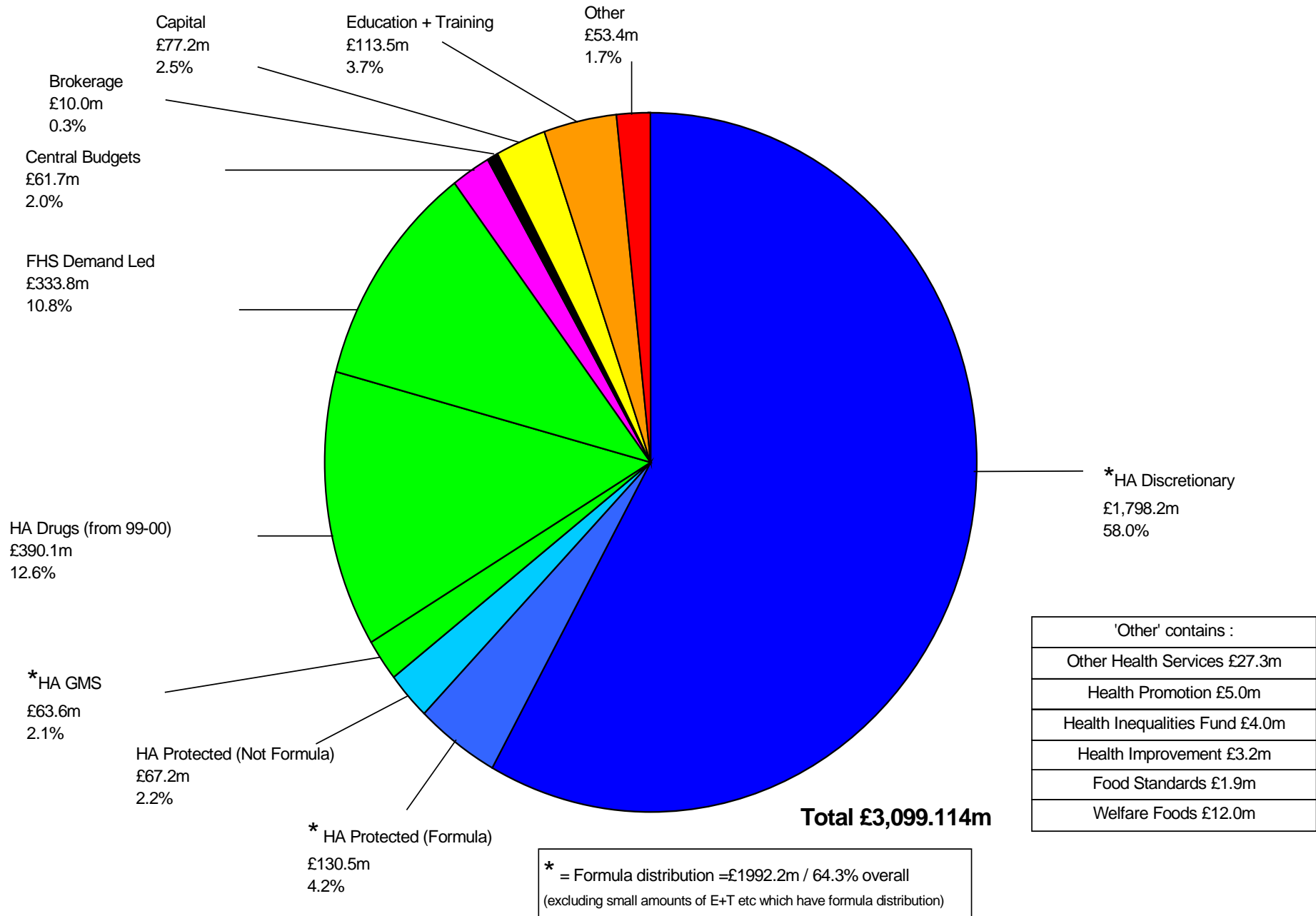
- Mr Eifion Williams (Chair) - Director of Resources/performance – Iechyd Morgannwg Health Authority
- Mr Gwyn Phillips - Director of Contractor Services, Bro Taf health Authority
- Dr Doug Russell - IMA/Head of GP Development, Dyfed Powys
- Mr Alan Wilson - Director of Community Partnership, Iechyd Morgannwg Health Authority
- Mr Geoff Lang - Director of Finance, North Wales Health Authority
- Mr Julian Baker - Manager, Caerphilly Local Health Group
- Mr Mik Webb - Finance Director, Welsh Ambulance Trust
- Mr Barrie Wilcox - Head Primary and Community Health, NAFW
- Dr Quentin Sandifer - Director of Public Health, Iechyd Morgannwg Health Authority

## Wales Health Budgets - Key Trends since 1996-97 (constant prices)

Cash funding revalued to 1999-00 constant prices	1996-97 £m	1997-98 £m	Annual increase	1998-99 £m	Annual increase	1999-00 £m	Annual increase	2000-01 £m	Annual increase	2001-02 £m	Annual increase	5 Year % increase	Average increase %
<b>Hospital, Community &amp; Family Health Services Revenue</b>	<b>1895.0</b>	<b>1923.5</b>	<b>1.5</b>	<b>2003.5</b>	<b>4.2</b>	<b>2137.3</b>	<b>6.7</b>	<b>2307.7</b>	<b>8.0</b>	<b>2417.4</b>	<b>4.8</b>	<b>27.6</b>	<b>5.5</b>
<i>of which:</i>													
<i>Hospital &amp; Community Health Services - discretionary</i>	1418.4	1447.1	2.0	1471.8	1.7	1535.6	4.3	1634.4	6.4	1722.6	5.4	21.4	4.3
<i>Ringfenced &amp; Protected Services</i>	88.2	74.2	-15.8	94.2	26.9	133.0	41.1	128.4	-3.5	189.0	47.2	114.3	22.9
<i>GP Drugs Prescribing</i>	268.8	283.6	5.5	307.1	8.3	327.6	6.7	350.5	7.0	373.2	6.5	38.8	7.8
<i>General Medical Services - cash limited</i>	51.3	52.2	1.8	54.6	4.5	58.7	7.6	58.9	0.4	60.8	3.3	18.7	3.7
<i>Central Budgets</i>	68.3	66.4	-2.8	75.8	14.1	82.5	8.9	135.5	64.3	71.7	-47.0	5.0	1.0
<b>Hospital &amp; Community Services Capital</b>	<b>103.7</b>	<b>110.7</b>	<b>6.7</b>	<b>99.5</b>	<b>-10.2</b>	<b>90.4</b>	<b>-9.1</b>	<b>71.9</b>	<b>-20.5</b>	<b>73.8</b>	<b>2.6</b>	<b>-28.8</b>	<b>-5.8</b>
<b>Education &amp; Training</b>	<b>77.6</b>	<b>78.3</b>	<b>0.8</b>	<b>77.7</b>	<b>-0.7</b>	<b>80.9</b>	<b>4.1</b>	<b>87.0</b>	<b>7.5</b>	<b>106.3</b>	<b>22.2</b>	<b>36.9</b>	<b>7.4</b>
<b>FHS - non cash limited</b>	<b>276.4</b>	<b>273.9</b>	<b>-0.9</b>	<b>279.1</b>	<b>1.9</b>	<b>286.6</b>	<b>2.7</b>	<b>310.9</b>	<b>8.5</b>	<b>319.3</b>	<b>2.7</b>	<b>15.5</b>	<b>3.1</b>
<i>of which:</i>													
<i>General Medical Services</i>	135.1	136.5	1.1	137.9	1.0	146.5	6.2	157.0	7.2	159.7	1.7	18.2	3.6
<i>Pharmaceutical Services</i>	60.6	61.1	0.7	61.0	-0.1	60.2	-1.3	67.6	12.4	67.7	0.1	11.7	2.3
<i>General Dental Services</i>	61.4	57.6	-6.2	61.4	6.6	61.0	-0.7	66.7	9.3	70.8	6.2	15.3	3.1
<i>General Ophthalmic Services</i>	19.3	18.7	-2.8	18.8	0.5	18.9	0.4	19.6	3.7	21.0	7.3	9.2	1.8
<b>Other Health Services</b>	<b>9.9</b>	<b>7.7</b>	<b>-21.9</b>	<b>7.5</b>	<b>-3.1</b>	<b>2.8</b>	<b>-62.5</b>	<b>22.5</b>	<b>698.9</b>	<b>25.7</b>	<b>14.5</b>	<b>159.9</b>	<b>32.0</b>
<b>Health Promotion &amp; Health Improvement</b>	<b>0.0</b>	<b>0.0</b>		<b>0.0</b>		<b>8.4</b>		<b>9.4</b>	<b>11.4</b>	<b>6.8</b>	<b>-27.0</b>		
<b>Health Inequalities Fund</b>	<b>0.0</b>	<b>0.0</b>		<b>0.0</b>		<b>0.0</b>		<b>0.0</b>		<b>2.9</b>			
<b>Food Standards</b>	<b>0.0</b>	<b>0.0</b>		<b>0.0</b>		<b>0.6</b>		<b>0.8</b>	<b>24.7</b>	<b>2.1</b>	<b>168.6</b>		
<b>Welfare Foods</b>	<b>16.1</b>	<b>15.7</b>	<b>-2.8</b>	<b>15.3</b>	<b>-2.6</b>	<b>12.9</b>	<b>-15.6</b>	<b>12.6</b>	<b>-2.0</b>	<b>11.5</b>	<b>-9.2</b>	<b>-28.8</b>	<b>-5.8</b>
<b>Total</b>	<b>2378.8</b>	<b>2409.9</b>	<b>1.3</b>	<b>2482.6</b>	<b>3.0</b>	<b>2620.0</b>	<b>5.5</b>	<b>2822.8</b>	<b>7.7</b>	<b>2965.8</b>	<b>5.1</b>	<b>24.7</b>	<b>4.9</b>
<b>Revaluation factors</b>	92.366	94.985		97.697		100		102		104.55			
(HM Treasury GDP deflators - Dec 2000:1999-00=index 100)													

## Wales Health Budgets - Key Trends since 1996-97 (cash)

Actual Cash Funding	1996-97 £m	1997-98 £m	Annual increase	1998-99 £m	Annual increase	1999-00 £m	Annual increase	2000-01 £m	Annual increase	2001-02 £m	Annual increase	5 Year % increase	Average increase %
<b>Hospital, Community &amp; Family Health Services Revenue</b>	<b>1750.3</b>	<b>1827.1</b>	<b>4.4</b>	<b>1957.3</b>	<b>7.1</b>	<b>2137.3</b>	<b>9.2</b>	<b>2353.8</b>	<b>10.1</b>	<b>2527.4</b>	<b>7.4</b>	<b>44.4</b>	<b>8.9</b>
<i>of which:</i>			%		%		%		%		%		
<i>Hospital &amp; Community Health Services - discretionary</i>	1310.1	1374.6	4.9	1437.9	4.6	1535.6	6.8	1667.1	8.6	1801.0	8.0	37.5	7.5
<i>Ringfenced &amp; Protected Services</i>	81.5	70.5	-13.4	92.1	30.5	133.0	44.5	131.0	-1.5	197.6	50.9	142.6	28.5
<i>GP Drugs Prescribing</i>	248.3	269.3	8.5	300.1	11.4	327.6	9.2	357.5	9.1	390.1	9.1	57.1	11.4
<i>General Medical Services - cash limited</i>	47.4	49.6	4.7	53.3	7.5	58.7	10.1	60.1	2.4	63.6	5.8	34.3	6.9
<i>Central Budgets</i>	63.1	63.1	-0.1	74.0	17.4	82.5	11.4	138.2	67.6	75.0	-45.7	18.8	3.8
<b>Hospital &amp; Community Services Capital</b>	<b>95.8</b>	<b>105.2</b>	<b>9.8</b>	<b>97.2</b>	<b>-7.6</b>	<b>90.4</b>	<b>-7.0</b>	<b>73.4</b>	<b>-18.9</b>	<b>77.2</b>	<b>5.2</b>	<b>-19.5</b>	<b>-3.9</b>
<b>Education &amp; Training</b>	<b>71.7</b>	<b>74.4</b>	<b>3.7</b>	<b>75.9</b>	<b>2.1</b>	<b>80.9</b>	<b>6.6</b>	<b>88.7</b>	<b>9.6</b>	<b>111.1</b>	<b>25.3</b>	<b>55.0</b>	<b>11.0</b>
<b>FHS - non cash limited:</b>	<b>255.3</b>	<b>260.2</b>	<b>1.9</b>	<b>272.7</b>	<b>4.8</b>	<b>286.6</b>	<b>5.1</b>	<b>317.2</b>	<b>10.7</b>	<b>333.8</b>	<b>5.2</b>	<b>30.7</b>	<b>6.1</b>
<i>of which:</i>													
<i>General Medical Services</i>	124.8	129.7	3.9	134.7	3.9	146.5	8.8	160.2	9.3	167.0	4.3	33.8	6.8
<i>Pharmaceutical Services</i>	56.0	58.0	3.6	59.6	2.8	60.2	1.0	69.0	14.6	70.8	2.6	-71.5	-14.3
<i>General Dental Services</i>	56.7	54.7	-3.5	60.0	9.7	61.0	1.7	68.0	11.5	74.0	8.8	30.5	6.1
<i>General Ophthalmic Services</i>	17.8	17.8	0.0	18.4	3.4	18.9	2.7	20.0	5.8	22.0	10.0	23.6	4.7
<b>Other Health Services</b>	<b>9.1</b>	<b>7.3</b>	<b>-19.6</b>	<b>7.3</b>	<b>-0.3</b>	<b>2.8</b>	<b>-61.6</b>	<b>22.9</b>	<b>714.8</b>	<b>26.9</b>	<b>17.4</b>	<b>194.2</b>	<b>38.8</b>
<b>Health Promotion &amp; Health Improvement</b>	<b>0.0</b>	<b>0.0</b>		<b>0.0</b>		<b>8.4</b>		<b>9.5</b>	<b>13.6</b>	<b>7.1</b>	<b>-25.2</b>		
<b>Health Inequalities Fund</b>	<b>0.0</b>	<b>0.0</b>		<b>0.0</b>		<b>0.0</b>		<b>0.0</b>		<b>3.0</b>			
<b>Food Standards</b>	<b>0.0</b>	<b>0.0</b>		<b>0.0</b>		<b>0.6</b>		<b>0.8</b>	<b>27.2</b>	<b>2.2</b>	<b>175.3</b>		
<b>Welfare Foods</b>	<b>14.9</b>	<b>14.9</b>	<b>0.0</b>	<b>14.9</b>	<b>0.2</b>	<b>12.9</b>	<b>-13.6</b>	<b>12.9</b>	<b>0.0</b>	<b>12.0</b>	<b>-7.0</b>	<b>-19.5</b>	<b>-3.9</b>
<b>Total</b>	<b>2197.2</b>	<b>2289.1</b>	<b>4.2</b>	<b>2425.4</b>	<b>6.0</b>	<b>2620.0</b>	<b>8.0</b>	<b>2879.2</b>	<b>9.9</b>	<b>3100.7</b>	<b>7.7</b>	<b>41.1</b>	<b>8.2</b>



## Breakdown of Assembly Health Budget 2001-02

1.1. The Welsh health budget is broken down for budget purposes into the blocks discussed below. This paper explains the background to each budget item.

### Hospital and Community Health Services Revenue £2.527 million

1.2. This block comprises:

- £1.999 billion is distributed to health authorities via the main allocation formula (within this £198 million is protected for all - Wales or regional services. Of this 66% is allocated by formula and 34% to host authorities according to the location of services). This is an increase since 1996-97 of 28% at constant prices.
- £390 million is distributed on the basis of forecast actual expenditure, for GP drugs prescribing. This has increased since 1996-97 (when the budget was administered centrally) by 39% at constant prices.
- £64 million is distributed by formula for cash limited General Medical Services (practice staff, cost rent schemes and equipment). This has increased since 1996-97 by 19% at constant prices.
- £65 million is for central budgets - held centrally for allocation outside the formula to: NHS Direct, consultant distinction awards, Calman Hine cancer staff development etc. This has increased since 1996-97 by 5% at constant prices.
- £10 million is for brokerage (repayable loans to support recovery plans for HAs or Trusts in deficit). This is the lowest level for brokerage [in the last 3 years]. Prior to that it was funded on an ad hoc basis through slippage on central budgets.

### Hospital and Community Services Capital £77 million

1.3. This budget comprises £52 million for Trust discretionary capital and £25 million for the capital modernisation fund and all Wales capital programme. The £52 million is allocated to individual Trusts in accordance with a formula based on income and cumulative depreciation of assets. The £25 million is for new capital schemes and is awarded in accordance with national priorities. The key criteria for capital modernisation fund allocations has been health and safety and contribution to financial recovery programmes.

1.4. Past levels of capital expenditure have fluctuated considerably as capital has been squeezed by more immediate priorities. In 2001-2 provision is projected to be some 29% lower in real terms than in 1996-97. Improving Health in Wales says that investment in buildings and equipment in the NHS in Wales has been neglected for two decades and that these trends will be reversed with investment being sustained at or improved over the 2002-3 level.



Education and training £111 million

1.5. This budget covers the cost of training for all NHS Wales medical and non-medical staff groups, including doctors, dentists, nurses, pharmacists and ophthalmists. This has increased since 1996-97 by 37% at constant prices, but this increase includes the recurrent transfer of some £5 million from FHS demand-led funding for GP training from 2001-02. The budget also provides funding for 50% of the basic salary costs of junior doctors in approved training posts – reflecting the portion of time spent on study and not in providing services to patients. The funding is distributed via the Post Graduate Dean to the employing Trusts, not by formula but on the basis of agreed training numbers and places.

Family Health Services £334 million

1.6. This is allocated not by formula but managed as a demand led budget with provision determined by the forecast cost of contractual payments to General Practitioners, dentists, pharmacists and ophthalmic practitioners. The main expenditure drivers therefore are:

- the number of practitioners and where they are located
- the level of activity attracting payments from prescribed fees and allowances
- where prescriptions are dispensed and eye tests carried out.

1.7. This has increased since 1996-97 by 16% at constant prices. The inclusion of some £3 million new money in this budget from 2000-01 for costs associated with the new flu vaccination campaign distorts the increase in the table for that year. The trend in recent years has been increases of some 5-6% annually.

1.8. The overall budget is currently held and managed by the Assembly although health authorities hold the contracts and process payments. The budget also assumes some £27 million of receipts for fees (mainly income from dental charges) in 2001-2.

Other Health Services £26.892

1.9. This budget covers the forecast running costs of the Public Health Laboratory Services, Tribunals and Advisory Committees and the Welsh contribution to the running costs of the National Institute for Clinical Excellence and the Commission for Health Improvement (which is shared between the countries of the UK on a pro rata basis). The figures for increases in this budget are distorted by the effect of budget transfers and recategorisation.

1.10. The largest single component is the £15 million budget for Research and Development which is administered by grant-aided schemes for health and social research addressing medical/policy problems. This is the responsibility of the Welsh Office of Research and Development, now part of the Assembly.

1.11. In addition the Sustainable Health Action Research programme (SHARP) was established in 2000 – the budget for 2001-02 is £0.5 million – to support 7 action research projects across Wales.

Health Promotion and Tobacco Control £4million

1.12. These Assembly managed budgets were introduced in 1999-00 and support the implementation of the national strategy to promote health and well being which includes smoking prevention and cessation measures set out in the Tobacco Control White Paper. Some £0.9 million goes to support Local Health Alliances and Healthy Schools Schemes and some £0.8 million supports local smoking cessation initiatives. The remainder is spent on centrally driven action, local pilots and voluntary schemes to benefit vulnerable and hard to reach groups.

Health Improvement £3 million

1.13. These Assembly managed budgets were introduced in 1999-00 and are for all-Wales public health initiatives and campaigns including publicity for the influenza vaccination campaign, immunisation against hepatitis B and C, and the ongoing costs of the meningitis vaccination programme.

Inequalities in Health Fund £4 million

1.14. This budget was introduced for 2001-2, is to be managed centrally and is being distributed mainly through a bidding process targeted at the most deprived areas and communities of Wales.

Food Standards £2 million

1.15. These Assembly managed budgets were introduced in 1999-00 and support the Food Standards Agency Wales to protect public health from risks in connection with the consumption of food; and to protect the interests of consumers.

J. Welfare Foods £12 million

1.16. This budget funds an entitlement for pregnant women and mothers of young children in receipt of Income Support/Family Credit under the Social Security Act 1988 which is administered by the Assembly. It is a demand led budget driven mainly by the numbers of people with young children on income support.

**HCFHS formula shares****The distributions for each sector are combined using expenditure weights shown below**

		Non-psychiatric inpatient	Mental illness inpatient	Outpatient	Ambulance	Community	Overall share
<u>2001-02</u>		0.622	0.069	0.126	0.036	0.147	
QW1	Gwent	18.671	18.081	19.495	16.059	19.398	<b>18.7478</b>
QW2	Bro Taf	24.311	23.441	25.633	18.240	25.710	<b>24.4066</b>
QW3	Dyfed Powys	16.605	17.532	15.618	27.719	16.548	<b>16.9331</b>
QW4	North Wales	23.041	23.687	21.942	25.248	22.339	<b>22.9226</b>
QW5	Morgannwg	17.372	17.258	17.311	12.733	16.005	<b>16.9898</b>
<u>2000-01</u>							
QW1	Gwent	18.708	17.954	19.554	16.129	19.446	<b>18.7794</b>
QW2	Bro Taf	24.284	23.277	25.629	18.244	25.706	<b>24.3778</b>
QW3	Dyfed Powys	16.498	17.550	15.499	27.540	16.450	<b>16.8320</b>
QW4	North Wales	23.113	23.926	21.957	25.314	22.355	<b>22.9908</b>
QW5	Morgannwg	17.396	17.293	17.360	12.773	16.043	<b>17.0201</b>
<u>1999-00</u>							
QW1	Gwent	18.711	17.919	19.523	15.912	19.407	<b>18.7610</b>
QW2	Bro Taf	24.419	23.138	25.781	18.162	25.871	<b>24.4927</b>
QW3	Dyfed Powys	16.393	17.559	15.413	27.921	16.368	<b>16.7577</b>
QW4	North Wales	23.054	24.086	21.877	24.975	22.265	<b>22.9297</b>
QW5	Morgannwg	17.423	17.297	17.405	13.030	16.089	<b>17.0589</b>
<u>1998-99</u>							
QW1	Gwent	18.775	17.960	19.597	15.929	19.475	<b>18.8236</b>
QW2	Bro Taf	24.297	23.162	25.497	17.963	25.631	<b>24.3404</b>
QW3	Dyfed Powys	16.481	17.531	15.604	28.224	16.551	<b>16.8726</b>
QW4	North Wales	23.035	24.060	21.886	24.889	22.240	<b>22.9101</b>
QW5	Morgannwg	17.412	17.287	17.417	12.995	16.102	<b>17.0533</b>
<u>1997-98</u>							
QW1	Gwent	18.700	17.913	19.509	15.864	19.380	<b>18.7465</b>
QW2	Bro Taf	24.258	23.104	25.366	17.916	25.504	<b>24.2747</b>
QW3	Dyfed Powys	16.430	17.494	15.613	28.175	16.566	<b>16.8400</b>
QW4	North Wales	23.143	24.177	22.009	25.037	22.356	<b>23.0234</b>
QW5	Morgannwg	17.469	17.313	17.502	13.009	16.194	<b>17.1154</b>
<u>1996-97</u>							
QW1	Gwent	18.607	17.939	19.443	15.799	19.271	<b>18.6639</b>
QW2	Bro Taf	24.341	23.045	25.476	17.839	25.535	<b>24.3380</b>
QW3	Dyfed Powys	16.429	17.566	15.598	27.885	16.608	<b>16.8382</b>
QW4	North Wales	23.194	24.049	22.016	25.382	22.416	<b>23.0679</b>
QW5	Morgannwg	17.429	17.401	17.468	13.096	16.170	<b>17.0921</b>