Wales NHS Resource Allocation Review

Independent Report of the Research Team

by

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Final Report of the Research Team

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Acknowledgements

Introduction

The major purpose of this report is to outline the most scientifically accurate and reliable methods for NHS resource allocation in Wales. In August 2000, the National Assembly commissioned the University of Bristol to assemble a research team to produce an independent report. This report has been written by a very experienced, multidisciplinary team comprising some of the UK's leading experts in the fields of clinical epidemiology, medical geography, medical sociology and policy studies from the Universities of Bristol, Cardiff and Lancaster. Additional external statistical work has been undertaken by the Office for National Statistics.

This report proposes that Welsh NHS resources be allocated using a novel and innovative method based on a range of direct indicators of health need. Previous health resource allocations in Wales and other countries in the UK have been based mainly upon the population size weighted by the age and sex distribution of people who have recently died under the age of 75 (*eg* standardised mortality rate under 75). However, there are a number of problems with the current methodology:

1. The NHS mainly provides services for people who are alive, not dead. In particular, it provides the bulk of its services for the 'sick' rather than the 'healthy'.

2. The NHS provides a considerable number of services for people with health conditions that only very rarely result in death *eg* tooth decay, back pain, food poisoning, arthritis, etc.

3. The geographical distribution of health need and death are not the same.

4. A large number of people in Wales require NHS services in any given year but only a relatively small number will die under the age of 75 (approximately 15,000 people per year).

It is much more valid to distribute NHS resources using statistics that directly measure the need for NHS services rather than using indirect indicators of health need such as death rates. For example, it makes sense to allocate money for maternity services on the basis of the number of babies born or the number of pregnant women in an area rather than on the basis of the number of people who have died. More detailed discussion of these points can be found in Chapters 3 and 4.

Principles
The principles employed by the research team are:

1. The RAR is about producing a formula for allocating money, NOT resources. The research team is not going to consider either the current distribution nor reallocation of personnel, buildings and equipment.

2. The RAR formula is designed to allocate money between geographical areas, NOT health programme areas, *eg* it is about how much money Wrexham and Anglesey get and not about how much money mental health services and ambulances services get.

3. The amount of money an area should receive can be given by the following general formula: Area resource allocation = Health needs X Costs of meeting the health needs.

4. The primary aim of this formula is to provide money to help ensure equal access for equal need by geographic areas.

The context

The idea of the Welfare State is one of the greatest British Social Policy inventions of the 20th Century. It has been exported around the world and has arguably done more to alleviate human suffering and improve health than any other single invention, including that of antibiotics[1]. The National Health Service is a keystone of the Welfare State in the UK. It not only provides efficient and effective health care for the whole population but also provides a major contribution of income 'in kind' to the poorest groups in society.

Most 'economic' studies of income and wealth tend to ignore the importance of services in raising the standard of living of households. This failure often makes international comparisons, based on cash incomes alone, of only limited value. The services (in-kind benefits) provided by the Welfare State *eg* NHS, education, local government services, have a greater effect on increasing the standard of living of the lowest income households than do the combined values of wages and salaries, Income Support and retirement pensions available to these households. Table I.1 shows the contribution that earnings, cash benefits and in-kind services had on the poorest and richest 10% of all UK households in 1996-97.

Table I.1: Income, taxes and benefit contribution to the average incomes of the poorest and richest 10% of households in the UK in 1996-97 (£)

Income	Poorest 10% of Households (*N=2,245,000*)	Richest 10% of Households (*N=2,245,000*)
Wages and Salaries	1,026	36,599
Other Income	822	18,762
Total Income	**1,848**	**55,361**
Retirement Pension	1,227	506
Income Support	1,205	6
Child Benefit	434	141
Housing Benefit	536	8
Other Cash Benefits	766	245
Total Cash Benefits	**4,168**	**906**
Direct Taxes (Income, Council, etc)	719	13,166
Total Disposable Income	**5,297**	**43,101**
Indirect Taxes (VAT, etc)	1,926	5,916
Post Tax Income	**3,371**	**37,184**
Benefits in Kind		
National Health Service	1,894	1,240

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[1] This claim has been made on a numerous occasions by Dom Mintoff (the ex-Prime Minister of Malta) and others.

Education	1,959	385
Other Benefits in Kind	210	165
Total Benefits in Kind	**4,063**	**1,790**
Final Income	**7,433**	**38,974**

Table I.1 shows that the richest 10% of households in the UK have an average final income of £38,974 (after accounting for the contribution of benefits and the effects of taxation). This is more than five times larger than the average final income of the poorest 10% of households (*ie* £7,433). It also illustrates the huge importance of services to the poorest households. Over half of the income (£4,063) that the poorest 10% of households receive is in the form of 'benefits-in-kind'. The poorest households received £1,894 worth of services from the NHS, representing over a quarter of their final income. If the NHS was not a free service, the poorest households would be 25% poorer. The contribution of NHS services to the final income of the poorest 10% of retired households (629,000 households) is even greater. They received £2,639 worth of NHS services in 1996-97, representing almost half of their final incomes of £5,475 per year.

Table I.1 (above) illustrates the effectiveness of the Welfare State system in alleviating poverty. Cash and in-kind benefits raise the incomes of the poorest households from £1,848 to a final income of £7,433; a four-fold increase. This was not, however, sufficient to raise the poorest 10% of households out of poverty, which would have required (approximately) a five to six-fold increase in original income in 1996-97. However, the Welfare State prevented the poorest households from sinking into a state of absolute destitution. There is no doubt that, properly funded, the Welfare State system in Britain could be used to rapidly reduce inequalities in health and bring an end to poverty.

The NHS is also an extremely cost-effective method of providing high quality health care to the population. The World Health Organisation (WHO) recently calculated that, in 1997, the UK spent, on average, $1,193 per person on health compared with $3,724 per person in the USA (using comparable international dollars). The UK spent less than a third of the amount on health care per person than the USA. However, the WHO ranked the UK 18th in the World and the USA only 37th, when comparing the overall performance of the health systems. This means that the USA spent three times as much per person as the UK but only achieved a health system ranking 19 places below the UK (WHO, 2000).

The problem of inequalities in health
When the NHS was founded, over 50 years ago, it was believed that providing health services 'free at the point of use' would remove all barriers to access and result in the narrowing of inequalities in health. Although this did not happen, the NHS helped dramatically to improve the health of the population as a whole (see Chapter 1). Both overall mortality and morbidity rates have consistently declined for the past 50 years, however, 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 'poor' (see Chapters 1 and 2).

The evidence that poverty and inequality in material well-being underlie inequalities in health and early death is now overwhelming. In 1980, the Black Committee on Inequalities in Health 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 Britain's Chief Medical Officer, *On the State of the Public Health*, 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.*"

Similarly, the latest World Health Organisation's annual report (WHO 1998) states that:

> "*On the unfinished agenda for health, poverty remains the main item. The priority must be to reduce it in the poorest countries of the world, and to eliminate the pockets of poverty that exist within countries. Policies directed at improving health and ensuring equity are the keys to economic growth and poverty reduction.*"

The 1995 World Health Report (WHO, 1995) argued that poverty is the world's most ruthless killer and the greatest cause of suffering on earth. Poverty is the main reason why babies are not vaccinated, clean water and sanitation are not provided, curative drugs and other treatments are unavailable and why mothers die in childbirth. Poverty is the main cause of reduced life expectancy, of handicap and disability and of starvation. Poverty is a major contributor to mental illness, stress, suicide, family disintegration and substance abuse.

It should be noted that the following report does not contain an extensive discussion on the causal link between poverty and ill health or on the distribution of inequalities in health in Wales by socio-demographic sub-groups. The details of these very important issues have been included in the final report to the National Assembly and this information has therefore not been included here in order to avoid duplication.

The NHS can do relatively little to change the levels of poverty in Britain although it can have some effect on the health of the poorest groups and areas (see Chapters 6 and 7). An impediment to greater health equity are the barriers to access of health services that exist for the poorest people. Although poor people tend to have worse health, they also are liable to receive less health care. In many countries, this trend is related to the deterrent effects of pricing but the situation also applies in the UK NHS, which is nominally free at the point of delivery. The Black Report (DHSS, 1980) identified two main classes of explanation. The first explanations are cultural: the demand for health care is different from different groups. People in lower social classes are said to be less able to explain medical complaints to middle-class doctors, less able to demand resources and more willing to tolerate illness. The second explanations are practical ones. Working-class people are less likely to have access to a telephone, less likely to have cars and less free to take time off work without losing pay. Doctors' surgeries are more likely to be in salubrious areas and so are difficult to reach (Townsend, Davidson and Whitehead, 1988).

The term 'inverse care law' was coined by Tudor Hart (1971) to describe the general observation that *the availability of good medical care tends to vary inversely with the need of the population served.* A primary aim of this review is to identify the best method or methods of allocation in order to distribute resources on the basis of health needs and thereby alleviate the problems caused by the 'inverse care law'.