5th International Conference on Priorities in Health Care

A Framework for Priority-setting in Health Care

Mason Durie Massey University

Wellington 3 November 2004

A FRAMEWORK FOR PRIORITY-SETTING IN HEALTH CARE

Wise Spending

The *Fifth International Conference on Priorities in Health Care* provides an opportunity to consider priorities in health care from five major perspectives: practical tools to assist prioritisation at clinical levels; the allocation of resources to services, programmes and populations; key players in priority decision-making; systems and incentives for supporting priorities; priority setting in developing countries; and disparities and inequities, especially as they might relate to indigenous populations.

One way or another priority-setting has always been practised within health services but has not always in an explicit manner. From the late 1930s, for example, New Zealanders lived under the illusion that services were equally available to all, regardless of cost. To some extent they were: prescription charges were nominal, primary health care was highly subsidised, and public hospitals provided an increasing range of medical and social services without any hint of co-payments. At the same time, though not widely known, mechanisms were in place to effectively screen access and control volumes. Managing the waiting list for example was essentially a covert operation that often depended on a hospital clerk who weighed personal and professional advocacy against medical need. The availability of many services was also often a function of professional interests rather than actual community need, and health spending was disproportionately weighted towards secondary health care.

It was not until the early ninety-nineties that priority setting emerged as a major public issue. When New Zealand embarked on the first of a series of health sector reforms in 1993, a core services committee was established to identify those medical conditions that should be publicly funded. It was anticipated that priorities would be determined according to a list of disorders arranged in order of priority. The method had been used in Oregon and presumed that a line could be drawn to separate disorders eligible for funding and those that were to be excluded. As resources and needs changed so the line could be moved up or down. It was a remarkably simple method but naively mechanistic and unable to address the wide range of factors that were important to setting priorities, at least in New Zealand. In the event, the Core

Services Committee did not follow the Oregon approach. Instead as the re-named National Health Committee it chose to pursue pathways that would contribute to quality care and a more robust understanding of priority setting in health care.

There are an infinite number of ways in which priorities in health care can be analysed and this Conference offers a unique opportunity for sharing innovation, conceptual advances, and the development of frameworks for guiding difficult decision making at consumer, clinical and policy levels. Inevitably the range of papers and presentations, and advocacy for multiple approaches may make it difficult to locate the common goals or even to identify the unifying themes. However, at the risk of being over-simplistic, a single question might be posited as the Conference's core aim: 'how can health funding best contribute to health gains in ways that are affordable, fair, and consistent with national values and aspirations?'

The question has different connotations now than it did in 1993 and obviously has several dimensions. First, implicitly it acknowledges a need to spend funds wisely. Innovative technologies, pharmaceutical advances, demographic trends towards older populations, and global population increases will strain already stressed health resources, including plant and budgets. Unless there is value for money, demand will outstrip supply imposing prohibitive burdens on future generations. Second, the broad aim of contributing to gains in health implies a deliberate focus on positive outcomes. While health care is often measured by patient volumes, completed procedures, costs per intervention, and fulltime equivalent staff members, there is increasing interest in measuring results – outcomes – and to justify effort on that basis. Third the emphasis on fairness directs attention to principles of social justice. Equity is inconsistent with disparities either between individuals or between subpopulations living together within the same nation. Fourth, affordability introduces an economic parameter with implications for public and private funders, providers and consumers. It also has implications for the ways states prioritise health spending as a proportion of the gross national spending. Fifth national values and aspirations act as ethical constraints insofar as interventions that fall outside public acceptability, no matter how well founded on scientific evidence, are likely to be rejected. In this respect any rationale for prioritisation of health care must take account of public attitudes, community expectations, and human ethics.

There is of course no single interpretation of the meaning of any of these dimensions. Does wise spending for example refer only to the allocation of public funds or is it equally about the spending of private resources? And is wise spending to be driven by the alleviation of pain and distress, or by the likelihood of deriving the greatest health benefit, or by an obligation to assist those who face the greatest health risks? Moreover, are concepts of social justice to be applied only to individuals alongside other individuals or are they also applicable to populations alongside each other, whether those populations are defined by gender, age, ethnicity or geography? Similarly while national values and aspirations form an important backdrop for discussing priorities in health care, not all ideals or ethical standards are shared equally by all peoples within a nation. Universal concepts such as human dignity and universal rights including the right to refuse treatment might find a measure of agreement but differing regard for spiritual values, or alternate views on the relative weighting of individuals and groups, or different understandings of the role of older people in society, could significantly change the way a good outcome is measured and conclusions about any benefits resulting from an intervention.

Evidence and Best Outcomes

Although priority setting based on sound evidence is a widely accepted approach, in fact it is not the only approach and in any case evidence based practices are not immune from the influence of other priority-setting methods. Nor is there agreement that criteria should always be focused on outcomes. Clinicians for example frequently need to decide between who will benefit the most from an intervention and who warrants preference on the grounds of suffering the most. On the one hand they will be guided by outcome focussed research evidence, but on the other they will swayed, consciously or unconsciously, by notions of compassion and caring rather than concern for health outcomes. Process measures will compete with best outcomes as a rationale for measuring priority.

A much-publicised case in New Zealand highlighted those issues. Rau Williams was a man with multiple organ failure compounded by diminished intelligence. He had been assessed unsuitable for further renal dialysis on clinical grounds. Public sympathies for the family and the patient swelled and there was widespread concern

that a medical procedure was being denied someone who would die without it. Media interest was also high and drew attention to a human side of priority setting that appeared to be at odds with policy and clinical perspectives.

In that particular case three competing motivations for decision-making were welded into the debate. First there was a clinical argument; priority for scarce resources should go to patients who might benefit the most from a particular intervention. That view was largely ignored by the media. Second there was a rights-based argument; authorities were accused of discriminating against Williams because he was mentally retarded and Mäori. Third cynics saw the whole affair as evidence of management's preoccupation with fiscal savings, at the expense of human dignity and standards of common decency. Leaving aside the ethical complexities and the economic realities, the case showed that there was a significant gap between clinical decision-making protocols, and community expectations and values.

Evidence-based decision-making may also be at variance with political ambitions. Two examples, without details, illustrate the point. First the argument for the retention of small hospitals in rural communities may be more persuasive when political patronage is secured. Although there is evidence that clinical outcomes can be at risk when low patient volumes are combined with inadequate facilities and limited staff, many communities value their hospital as a pivotal community resource. Its importance does not depend entirely on the results of health interventions but also on a contribution to a sense of community pride, connectedness and integrity, issues that are often central to political interests. As a result political support may be biased towards maintaining a hospital service even if the evidence points in another direction.

A second example of politically inspired priority-setting arose from a 'conscience' vote taken in Parliament. Based on the personal views of members, Parliament agreed in 2001 to lower the drinking age to 18 years and to increase the number of alcohol outlets in New Zealand. The decision was taken in the face of known evidence about the health risks and the likely consequences for health services. Health impacts appeared to be only one set of concerns studied by the politicians; constituency opinion, concern for individual liberties, sensitivity to public opinion,

and personal inclination counted for as much if not more than considerations of the best evidence.

Prioritising by Risk

Rather than focussing solely on outcomes, priority decision-making is sometimes based on the significance of health risks which may in turn be seen as substitutes for outcome. An assessment of risk factors can become a basis for deciding priorities for access to an intervention or facility. Individual risk factors are taken into account in two main ways; the presence of a risk factor can reduce priority or alternately a risk factor can increase priority. Patients who are tobacco smokers, obese, or mentally unwell are less likely to be afforded priority for organ transplants. Even though they may be clinically worse off than other patients and more at risk for a range of health problems, their chances of gaining access to treatment are less because those risk factors are associated with poorer outcomes and reduced post-operative benefits. In these situations, health risks are used to screen out would-be patients.

In contrast patients who have a known family history, a history of previous suicide attempts, recent major lifestyle changes such as unemployment or bereavement, are more likely to receive priority for psychiatric assessment and treatment. Those risk factors are associated with a higher likelihood of suicide and carry higher priority for health care.

Population risk factors are also used as a basis for prioritising. By greatly reducing the need for co-payments, all children under five years of age for example, regardless of socio-economic circumstances, have been given priority access to primary health care. This suggests that age is seen as a deserving risk factor, presumably associated with improved outcomes through early intervention, though possibly reflecting principles of social justice and equity as well. Old age, however, may be regarded differently, a reason not to resuscitate or employ heroic measures.

Rural populations have also been concerned about reduced access to treatment and care especially in the wake of the closure of cottage hospitals and difficulties in attracting professional personnel to rural areas. Equally, however, in some metropolitan areas the closure of peripheral emergency departments has caused

concern for families who must travel across a city, often by taxi, to obtain urgent attention.

Populations and Individuals

Population priority-setting also introduces another set of factors. While risks incurred by individuals are used at clinical levels to determine suitability for treatment and care, population risk factors can be used to identify groups who might warrant a degree of priority. Sometimes group priorities are seen to be in conflict with a needsbased policy where priority is determined according to the circumstances of individuals. A needs-based approach focuses on the health needs of individuals, and though taking into account socio-economic circumstances, is primarily driven by an assessment of health status. It tends to assume that priority for access to social services such as health can be best justified through measures that are divorced from collective characteristics such as culture, ethnicity, religion or race. Within the exclusive needs-based approach universality is emphasised and contextual variables are minimised or dismissed. Each person is to be treated equally regardless of wider societal associations.

In practice, however, the distinctions between individual health needs, wider environmental impacts, and the health needs of groups are not so clear. For example, because it was not possible to immunise all people at risk for meningococcal meningitis, a decision was made to give initial priority to children and young people in South Auckland. Although cases of meningitis also occurred in other parts of the country, epidemiological evidence showed that risks were greater in that particular area. However, families living elsewhere who had previous experience of meningitis were critical of the geographic priorities and urged government to make the vaccine more widely available, especially where risk had already been demonstrated. At issue was whether a population base was a more appropriate guide to risk assessment than individual risk factors.

The meningococcal example highlights a number of factors that are interwoven into priority setting. First, it recognises the reality of limited resources. While clearly it would have been desirable to immunise all people who were potentially at risk, the

costs, availability of vaccine and logistics prevented a universal approach, at least in the short term. Priorities had to be made. Second, the decision to focus on South Auckland was not only based on a higher incidence of meningococcal meningitis but also on socio-economic and ethnic realities. Measured by the NZ Dep 2001 scale, South Auckland was a metropolitan area with a high index of deprivation, relatively high numbers of young people, and proportionately greater numbers of Mäori and Pacific peoples. All three factors were known to be associated with increased rates of meningitis and the focus on South Auckland enabled all to be addressed without unbundling the relative contributions from each.

The association between material disadvantage and ethnicity, especially among some ethnic minorities has been well established in a number of studies. Compared to other New Zealanders Mäori and Pacific Peoples have higher rates of unemployment, lower household incomes, lower participation rates in early childhood education and university education, and higher rates of most diseases especially diabetes, cancer, mental disorders, and stroke. In addition life expectancy is significantly lower and mortality rates are higher. However, the strong associations between ethnicity on the one hand and adverse socio-economic circumstances on the other, have sometimes led to an assumption that one is a proxy measure for the other. Being Mäori for example is often seen as a synonym for being poor and being poor is sometimes seen as the distinguishing characteristic of Mäori and Pacific peoples.

Ethnicity

While there is a significant correlation between the two measures – ethnicity and socio-economic status – they do not measure the same unit. Needs based policies and

policies of equality as between individuals have tended to regard ethnicity and race as significant only insofar as they might be subsumed under universal indicators such as social class, life expectancy, and rates of mortality and morbidity. Recent research, however, has demonstrated that that not only is socio-economic status distinguishable from ethnicity, but universal indictors by themselves are insufficient measures of need and outcome.

Disparities in social well-being between Mäori and non-Mäori reflect a number of variables. Socio-economic circumstances are often considered to be most important and members of ethnic minorities tend to experience greater levels of social disadvantage than others in the community. Mäori children for example are more likely to live in a lone parent family, not to be immunised, to have no parent in paid work and to live in a household in the lowest income quintile. But even after those factors are taken into account, health disparities remain; class does not fully explain the differences. Explanations of the disparities are sometimes sought in genetic predisposition, customary beliefs, or cultural practices. But possible causes might also include discriminatory behaviour in the provision of services and access to economic opportunities, culturally inappropriate design of goods and services, and cultural differences in values and aspirations.

Based on an analysis of socio-economic and ethnic data three types of ethnic inequalities in health have been described by Reid: the distribution gap (Mäori are not distributed evenly across all deprivation deciles and are overly represented in the very deprived neighbourhoods [deciles 8-10]); the outcome gap (Mäori health outcomes are worse even after controlling for deprivation); and the gradient gap (socio-

economic hardship impacts more heavily on Mäori).ⁱⁱ Analysis confirms that quite apart from social class, ethnicity is a determinant of health. An intervention framework to improve health and reduce inequalities therefore recommended structural interventions that affirmed power relationships as well as Mäori health provider development, and health and disability services that recognised cultural needs and improved ethnic data collection.ⁱⁱⁱ

In a report on mental health outcomes, it was also shown that deprivation (socio-economic disadvantage) did not entirely explain the greater severity of mental disorders among Mäori. Despite having similar levels of deprivation, Mäori consumers were more likely than other groups to have higher levels of severity and lower levels of functioning. Further, in contrast to the general population, Mäori who were living in areas of least relative deprivation were more likely to have higher levels of severity and lower levels of functioning than those living in areas of greater deprivation. Although bias on the part of researchers could have contributed to that unexpected finding, it might also have reflected a greater sense of cultural dislocation by Mäori living in more affluent areas where there was less close contact with family networks and community support agencies.^{iv}

Because ethnicity is closely aligned to standards of health, educational achievement, and social wellbeing, it is inconsistent with the evidence to exclude it from social and economic policies as if it were irrelevant. Ethnicity has implications for service delivery, workforce development, and health outcome measurement and unless it is reflected in policies for priority setting, diversity will be masked, best outcomes compromised, and an assimilatory approach fostered.

Indigeneity

A particular type of ethnicity is indigeneity. There are some 5000 indigenous groups around the world with a total population of about 200 million, or around four percent of the global population. While there are significant differences in the circumstances of indigenous peoples in different parts of the world there are commonalities including severe socio-economic disadvantage and parallel patterns of disease – devastation by infectious diseases and malnutrition in the nineteenth century, then obesity; cancer and heart disease, diabetes and alcoholism, suicide and depression in modern times. Indigenous life expectancy compares unfavourably with other non-indigenous population groups and disparities are even more obvious when independent life expectancy is measured. In fact on almost all indicators of social wellbeing whether they measure educational achievement, standards of housing, income levels, unemployment, standards of health or health risks, indigenous peoples fare worse than their non-indigenous neighbours.

A significant step in addressing those disparities has been for indigenous peoples to provide greater leadership for their own people and to take active, rather than passive roles in identifying and implementing policies for change. Many of those policies have been based on a demonstration of the relevance of culture to health and roles played by indigenous organisations, not only in increasing access to health services but in ensuring that the delivery of services is consistent with cultural perspectives and integrated into developments in other social and economic fields. Within the context of greater autonomy and self reliance, ethnic-neutral policies are seen as steppingstones backwards to colonial policies of assimilation especially if they assume that all people have similar priorities, world views and aspirations. By presupposing that the health status of individuals is independent of customary world-views, they ignore modern society and overlook opportunities for gains in health that come from community and ethnic leadership and indigenous frameworks for determining priorities in health care.

There are two main reasons why, alongside other population factors (such as age, geographic location, levels of deprivation), ethnicity should be identified as a factor

in its own right, First there have been recent suggestions in New Zealand that a needs-based formula centred on individuals will suffice to meet policy requirements in health, education and social policy generally. Clearly that approach is inconsistent with the evidence and tends to assume that ethnicity is a function of need rather than a determinant of lifestyle, culture, social organisation. Second, an increasing diversity of ethnic affiliation is a characteristic of modern New Zealand. It is illusionary to develop policies, programmes and practices that purport to be 'blind' to race and ethnicity when for an increasingly large number of people an ethnic orientation underlies both personal and collective identity, provides pathways to participation in society, and largely influences the ways in which societal institutions and systems respond to their needs.

Larger Populations

Apart from focusing on sub-populations within a nation, the total national population is a further unit that may aid priority setting. Comparisons of New Zealand's standard of health alongside other countries for example may provider a guide to the adequacy of health investment.

The eight United Nations Millennium Development Goals (2000 – 2015) focus on health problems that have high priority in countries with medium and low human development indices. Human development indices are derived from a life expectancy index, an education index (the sum of primary, secondary and tertiary enrolments together with adult literacy rate) and a GDP index. The Millennium goals include the eradication of extreme poverty and hunger, achieving universal primary education, promoting gender equality and the empowerment of women, reducing child mortality, improving maternal health, combating HIV/AIDS, and malaria, ensuring environmental sustainability, establishing partnerships for development. Although those issues would not necessarily have continuing relevance in many OECD countries, in developing countries they have a significance and an immediacy which

justifies serious consideration by the collective international community. Global prioritising requires different lenses and different processes from those adopted by individual nation states.

Towards a Priority Framework

On the basis of these observations, and the New Zealand experience since 1993, it is possible to describe a priority-setting framework made up of goals, rationalising principles, units of focus, and protocols for decision-making.

While there are many objectives associated with priority-setting in health care, two overall goals are to generate the best possible health outcomes while being fiscally responsible. Best outcomes for health do not necessarily equate with restoration of health or even functional improvement. In some circumstances a good outcome may mean a reduction in pain, or an easing of distress without necessarily leading to any improvement in health status. It is possible therefore to identify sub-goals associated with best outcomes: gains in health, and the alleviation of pain, suffering and distress. Two sub-goals are also associated with the goal of fiscal responsibility. The first recognises constraints operating within the health sector and the way in which resources are allocated between regions and within and between services. The second reflects the total investments in health either through government spending or private sector spending and is related to the priority afforded health alongside other sectors.

Achieving those goals requires that priority-setting be based on the balanced application of rationalising principles. Decision-making may be justified on a number of grounds including human rights, health needs, ability to pay, likely health benefits, and the presence (or absence) of risk. Although all rationale impact on decision-making they are not always given equal weighting nor balanced in a transparent manner. High health need based on the level of acuity for example may justify greater priority but if high health need is also associated with reduced likelihood to benefit, because of concomitant risk factors, then priority might be reduced. None of the rationalising factors alone is a sufficient basis for priority setting and the obvious challenge is to consider the relationship between them in a fair and consistent manner.

In addition to the rationalising factors, the unit of focus is a further dimension of priority-setting. Priorities made on the health needs of individuals are highly relevant in specific clinical interventions but do not always provide a practical basis for planning and do not take advantage of correlations at aggregated levels. By selecting a range of population sub-types, risk can be matched with need without assuming that socio-economic circumstances are the sole determinants of poor health. Population sub-types may be based on age, place of residence, gender or ethnicity. National populations and the global population add a broader perspective to priority-setting and add significant dimensions to international collaboration in health care and health policy.

Protocols for decision-making rest heavily on the demonstration of scientifically derived evidence. But empirical evidence must also compete with other values and ideals. Public opinion, cultural perspectives, and political ideologies provide different viewpoints that must also be recognised as legitimate voices for decision making in a democratic society.

A Four-Part Priority-setting Framework

In summary, a priority-setting framework can be conceptualised as a four dimensional matrix based on goals, rationalising principles, units of focus, and decision-making protocols. The two broad goals, best health outcomes and fiscal responsibility depend on the balanced application of rationalising principles and the unit of focus (individuals, populations). The whole process is influenced by the protocols adopted to aid decision making - evidence based processes, public opinion, and political ideologies.

The large number of participants and the range of presentations at the *Fifth International Conference on Priorities in Health Care* recognises both the complexities and the importance of priority setting. This paper has simply recounted some of the issues that influence the priority-setting exercise and some of the New Zealand experience. It has concluded with a four-part framework within which the key elements of priority-setting can be considered.

Veronica Jacobsen, Nicholas Mays, Ron Crawford, Barbara Annesley, Paul Christoffel, Grant Johnston, Sid Burbin, (2002), *Investing in Well-being: an Analytical Framework*, Working paper 02/23, The Treasury, Wellington, pp. 11-12.

- P. Reid, B. Robson, C. Jones, (2000), 'Disparities in health: common myths and uncommon truths', *Pacific Health Dialogue*, 7: 38-48.
- iii Ministry of Health, (2002), *Reducing Inequalities in Health*, Wellington, pp. 18-22.
- Tom Trauer, Kathy Eagar, Phillipa Gaines, Alison Bower, (2004), *New Zealand Mental Health Consumers and their Outcomes*, Mental Health Research & Development Strategy, Health Research Council, Auckland, pp. 83-6.
- for further discussion see Kunitz, Stephen J. (1994), *Disease and Social Diversity The European Impact on the Health of Non-Europeans*, Oxford University Press, New York