Table G-1 APPROACHES TO MEASURING NEED FOR HEALTH RESOURCES

Approach	Definition	Measure/Indicators	Strengths	Weakness
Equal expenditure per capita	Resources are distributed on the basis of population.	Population	Easy to implement. Transparent.	Unlikely to result in equal resources or equal services per capita as it does not recognise: (i) differences between regions in the costs of providing services; or (ii) differences in population characteristics such as the extent and pattern of illness.
Equal real resources per capita	Resources are distributed on a basis that allows the same level of service to be provided across different regions. It allows for differences in the cost of providing services. Disabilities considered could include economies of scale, remoteness, and population dispersion.	Population weighted by differences in the cost of providing services. Ideally would use comprehensive cost information for each region. But, in practice only more general indicators are available to develop cost weights.	Accounts for differences in the cost of providing services	Only supply side factors are considered. Does not explicitly take account of differences in the demand/need for services.

Table G-1 APPROACHES TO MEASURING NEED FOR HEALTH RESOURCES (cont)

Approach	Definition	Indicators	Strengths	Weakness
Equal resources for equal need (need defined according to extent of illness)	Need is defined in terms of the extent of illness or health status. Resources are allocated on the basis of some measure of the extent of illness in the population.	Some of the more commonly use measures include: (i) Morbidity data such as hospital separations; (ii) Standardised Mortality Ratio (SMR) (iii) Disability Adjusted Life Year (DALY) (iv) Self-assessed measures of health status.	This approach takes into account population characteristics that influence the demand for services.	The extent of illness in a population is not necessarily a good indicator of where resources might best be spent ie resources are spent according to the size of the problem and not what can effectively be done with those resources. For example, resources can be effectively spent in a healthy population on preventative measures designed to keep it healthy. Broad measures such as the SMR may not be sensitive enough to reflect differences in health status between groups at a small geographic level. **Data issues** There is a lack of reliable data to enable the calculation of the SMR for Indigenous people at low geographic levels. Self-assessed measures of health status are subject to reporting bias.
Equal resources for equal need (need defined according to capacity to benefit)	Resources are allocated according to what can be achieved (or capacity to benefit). A population is in greater need if for $X a greater benefit can be achieved than if the same amount were spent on another population. Benefit can be defined in a number of ways.	Ideally would use marginal cost-benefit analysis at the regional level. However, there is an absence of data. Data on the extent of illness can be used. Judgment is required to weight various illnesses according to perceived capacity to benefit from resources.	Takes into account demand for services and the capacity of the allocation of resources to improve health status. Recognise that there is not a simple relationship between the extent of illness and the resources required to address the associated need.	Requires a value judgement as to what a benefit is. There is also a lack of data with which to implement this approach. This means that judgement is required.

Table G-1 APPROACHES TO MEASURING NEED FOR HEALTH RESOURCES (cont)

Approach	Definition	Indicators	Strengths	Weakness
Equal access for equal need	Resources are allocated according to need with additional recognition that more resources may be required in areas where there is poorer access to services and/or services are more costly to provide. Access and need can be defined in a number of different ways.	Needs can be measured using the above extent of illness and capacity to benefit measures. Possible access indicators include various measures of physical access such as distance to and cost (to the client) of services. Measures that capture cultural barriers can also be incorporated.	It accounts for differences in population characteristics that influence the demand for services. It also accounts for differences in access to services.	The same criticisms that can be applied to capacity to benefit and extent of illness measures can be applied here. Cultural barriers are difficult to measure. The weighting of the different aspects of the approach would be based on judgement.