Australian Government
Department of Health

Indigenous Australians' Health Programme Primary Health Care Funding Model Technical Factsheet

Health Care Need

Purpose

This Factsheet provides technical details on how the health care needs of the client population is estimated in the Indigenous Australians' Health Programme (IAHP) Primary Health Care Funding Model.

Overview

Stakeholders engaged in the IAHP Primary Health Care Funding Model (the Funding Model) Working Group, which included representatives from NACCHO, Sector Support Organisations, ACCHS, the Australian Institute of Health and Welfare and the Department, noted the differences in health care need between different communities, and the effect of this on the cost of service delivery. In response to this, the Funding Model includes an estimator of the health care needs of Aboriginal and Torres Strait Islander people in the locality of an ACCHS clinic, and uses this information to modify funding to that ACCHS.

The health care need multiplier is made up of two parts: an estimate of the impact of the social determinants of health (the Indigenous Relative Socioeconomic Outcomes index, IRSEO), and an estimate of the burden of disease in the population (using years of potential life lost, YPLL). These elements are combined to create the health care need multiplier which is applied to individual ACCHS clinics based on geography.

The other multiplier used in the Funding Model accounts for cost differences based on location. For more information on this multiplier, please see the **Funding Model Technical Factsheet – Location** and for an overview of the model, see the **Funding Model Technical Factsheet – Overview and calculation steps**.

Social determinants of health

The 'social determinants of health' are the range of living conditions that directly affect an individual's health and wellbeing. This includes education, employment, housing, income and access to resources. The social determinants of health are estimated to account for approximately one-third of the gap in health outcomes between Aboriginal and Torres Strait Islander people and non-Indigenous Australians.

The Centre for Aboriginal Economic Policy Research (CAEPR) at the Australian National University has developed an index which captures many of the social determinants of health among Indigenous Australians.

This index, the IRSEO index[1], is composed of socioeconomic outcomes in each of these categories:

- Employment (overall rate, skill level, private sector employment rate)
- Education (Year 12 completion among adults, post-secondary qualification among adults, engagement in education among youth aged 15-24)
- Income (individual income in relation to the Australian median)
- Housing (ownership, residence in a house with at least one bedroom per usual resident)

The IRSEO index reflects relative advantage or disadvantage at the Indigenous Area level where a score of 1 represents the most advantaged area and a score of 100 represents the most disadvantaged area. Indigenous Areas are one of the levels in the Australian Bureau of Statistics' Indigenous Structure, which is a geographic classification that represents where Aboriginal and Torres Strait Islander people live in Australia[2].

There is a strong association between burden of disease (discussed below) and IRSEO. Furthermore, IRSEO is simple to apply to a population, as the only information required is a geographical location. For these reasons, IRSEO groupings are used in the Funding Model to assign the health care need multiplier. When categorised into five groups, the proportion of service locations are distributed as shown in Table 1.

Table 1. Service locations by IRSEO group

IRSEO groups	%
5 (least disadvantaged)	8%
4	14%
3	27%
2	26%
1 (most disadvantaged)	26%

Burden of disease

There are a number of ways to represent the burden of disease in a population. One of the more common methods is to consider the years of potential life lost (YPLL) of all members of the population who died before their estimated life expectancy.

The Department commissioned the Australian Bureau of Statistics to calculate YPLL for Indigenous populations across Indigenous Regions[3]. This data shows the total YPLL and a rate per 1000 people. To arrive at the health care need multiplier, YPLL information was categorised into the five IRSEO groups and the relative need calculated using the least disadvantaged group as the base (Table 2).

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[1] Biddle, N. Population projections – CAEPR Indigenous Population Project 2011 Census Papers, no. 14/2013. Canberra: Centre for Aboriginal Economic Policy Research (CAEPR), ANU: 2013.
[2] ABS catalogue number 1270.0.55.002
[3] Indigenous Regions are a level of geography defined in the ABS Indigenous Structure.

Table 2. Need multiplier by IRSEO group and YPLL rate

IRSEO groups	YPLL (per 1000 people)	Need multiplier
5 (least disadvantaged)	39.37	1.00
4	46.21	1.17
3	69.56	1.77
2	98.77	2.51
1 (most disadvantaged)	126.38	3.21

Resulting need multipliers

The resulting need multipliers are calculated as the ratio of the YPLL for the target IRSEO group to the base case (YPLL for the least disadvantaged IRSEO group). This can be displayed in an equation as follows:

$$\frac{Target\ IRSEO\ group's\ YPLL}{Base\ IRSEO\ group\ YPLL\ (39.37)} = Need\ multiplier$$

Who do I contact for more information?

For further information about the IAHP Funding Model, please email IAHPFundingModel@health.gov.au.