



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

Location and Need: How to find the correct multiplier

Purpose

This Factsheet provides step-by-step instructions on how to find the location and need multipliers for a clinic. It should be read in conjunction with other Funding Model Technical Factsheets.

Overview

The cost of delivering Primary Health Care varies widely across Australia. The location of clinics and the health care needs of clients strongly affect the cost of service delivery.

The Funding Model uses the location of service delivery (based on the Remoteness Structure component of the Australian Bureau of Statistics' Australian Statistical Geography Standard, ASGS) and an estimate of the health care needs of clients (based on the Indigenous Relative Socioeconomic Outcomes index, IRSEO, and a measure of Years of Potential Life Lost, YPLL) to adjust the amount of funding each service is calculated to receive.

Adjustment is calculated using 'multipliers' which express the relative differences between locations and health care need groups, as shown in Table 1.

Table 1. Multipliers (location and need)

	5 (least need)	4	3	2	1 (most need)
Major Cities of Australia	1.00	1.18	1.77	2.52	3.22
Inner Regional Australia	1.11	1.30	1.96	2.78	3.56
Outer Regional Australia	1.26	1.48	2.23	3.17	4.06
Remote Australia	1.73	2.03	3.05	4.34	5.55
Very Remote Australia	1.75	2.05	3.09	4.38	5.61

Step one – Finding the location multiplier

The Australian Bureau of Statistics' (ABS) website includes an interactive map displaying all elements of the Australian Statistical Geography Standard (ASGS). The map is available at the following link:

[ABS Maps](#)

Begin by locating the target address on this map. For this example, the address is:

Tennant Creek Hospital
45 Schmidt St,
Tennant Creek, NT, 0860

Click on the 'Geocoder Search' button, as shown in Figure 1, and enter the address. As you type, the autofill function will find and return similar addresses. Choose the correct address from the list, as shown in Figure 2. The location will be displayed (Figure 3).

Figure 1. Entering an address into ABS maps

ABS Maps



Figure 2. Address autofill function

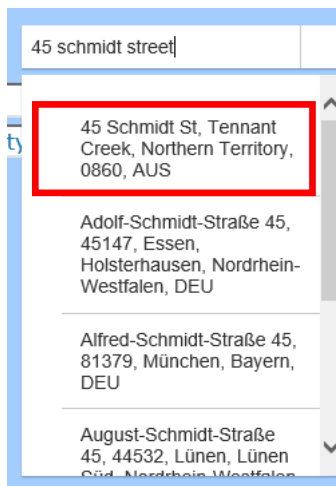
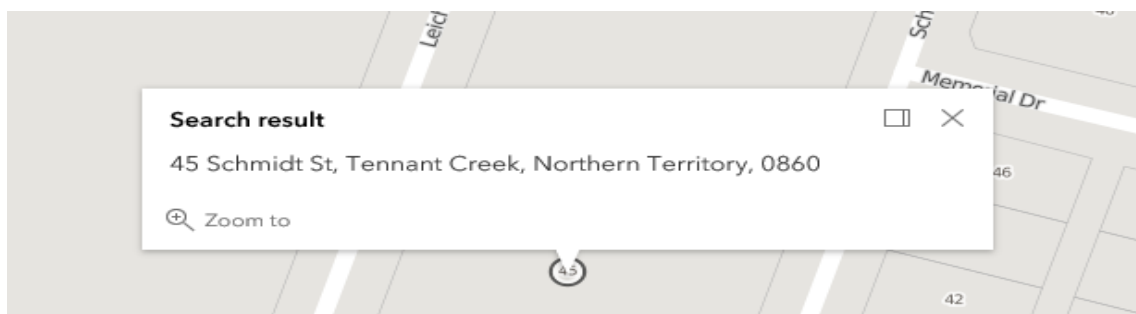
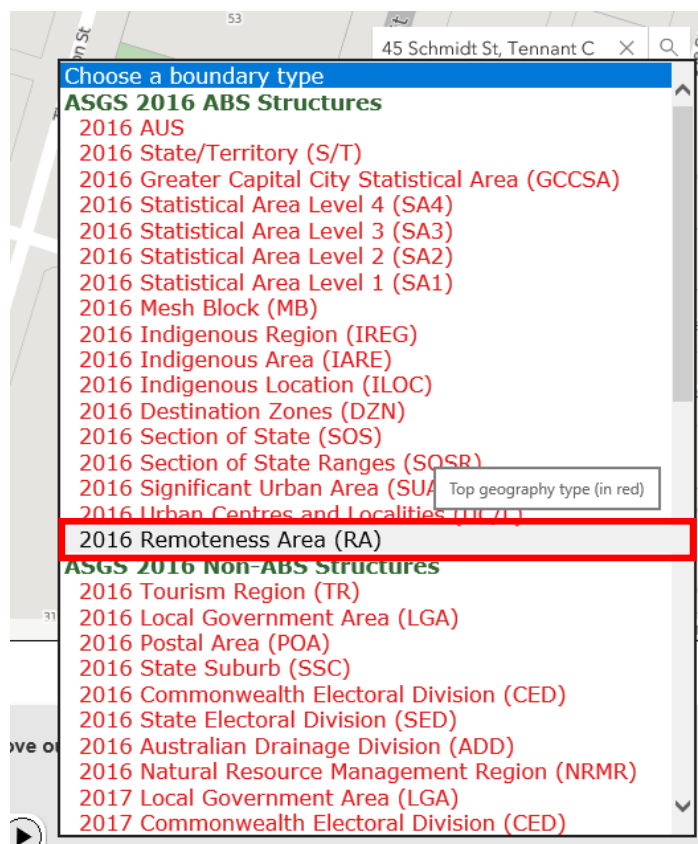


Figure 3. Address located



Next, click on 'Choose a boundary type' and select 2016 Remoteness Area (RA), as shown in Figure 4. It is important that the 2016 version of the geographic boundaries is chosen.

Figure 4. Select boundary type '2016 Remoteness Area (RA)'



Click on the map close to the address chosen. This will bring up a box with the Remoteness Area category for this address, as shown in Figure 5. The address "45 Schmidt St, Tennant Creek" is located in Very Remote Australia.

Translating this into the table of location and need multipliers shows that the relevant figure will appear on the bottom line of

Table 2.

Figure 5. Remoteness Area classification

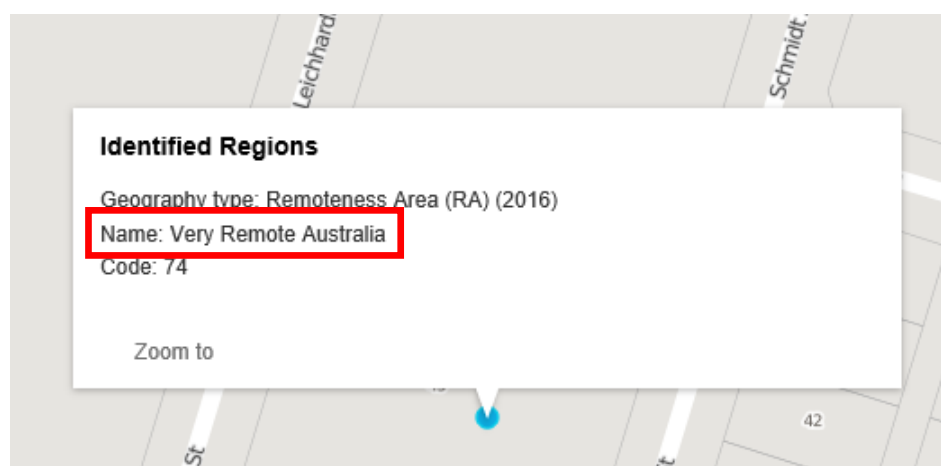


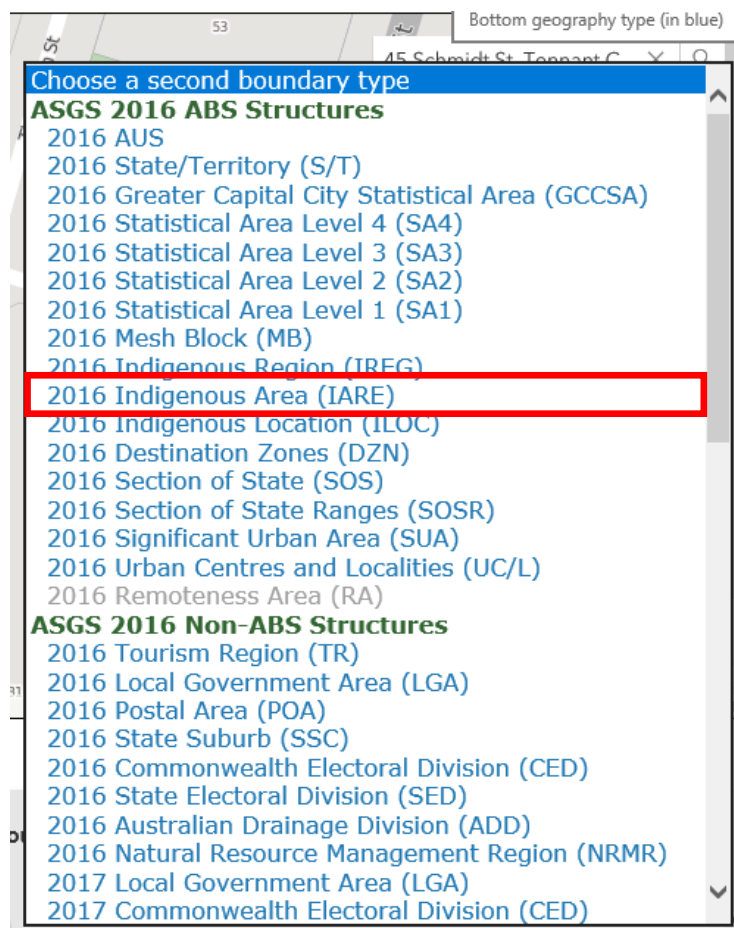
Table 2. Location and need multipliers, Very Remote Australia highlighted

	5 (least need)	4	3	2	1 (most need)
Major Cities of Australia	1.00	1.18	1.77	2.52	3.22
Inner Regional Australia	1.11	1.30	1.96	2.78	3.56
Outer Regional Australia	1.26	1.48	2.23	3.17	4.06
Remote Australia	1.73	2.03	3.05	4.34	5.55
Very Remote Australia	1.75	2.05	3.09	4.38	5.61

Step two – Finding the need multiplier

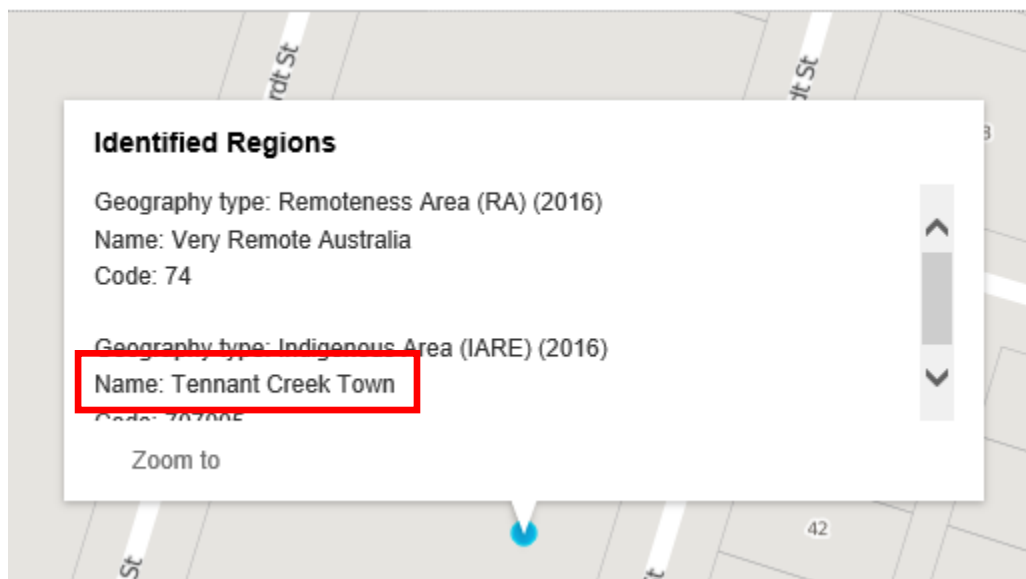
Returning to the ABS map, select ‘Choose a second boundary type’ and select ‘2016 Indigenous Area (IARE)’, as shown in Figure 6.

Figure 6. Select boundary type ‘2016 Indigenous Area (IARE)’



Again, click on a location on the map close to the original address. A dialogue box will show both the Remoteness Area and Indigenous Area classifications, as shown in Figure 7. In this case, the target address is located in the Tennant Creek Town Indigenous Area.

Figure 7. Indigenous Area classification



In order to determine the health care need group for this location, open the Aboriginal and Torres Strait Islander Atlas, produced by the Public Health Information Development Unit (PHIDU) at Torrens University. The Atlas is available at the following link:

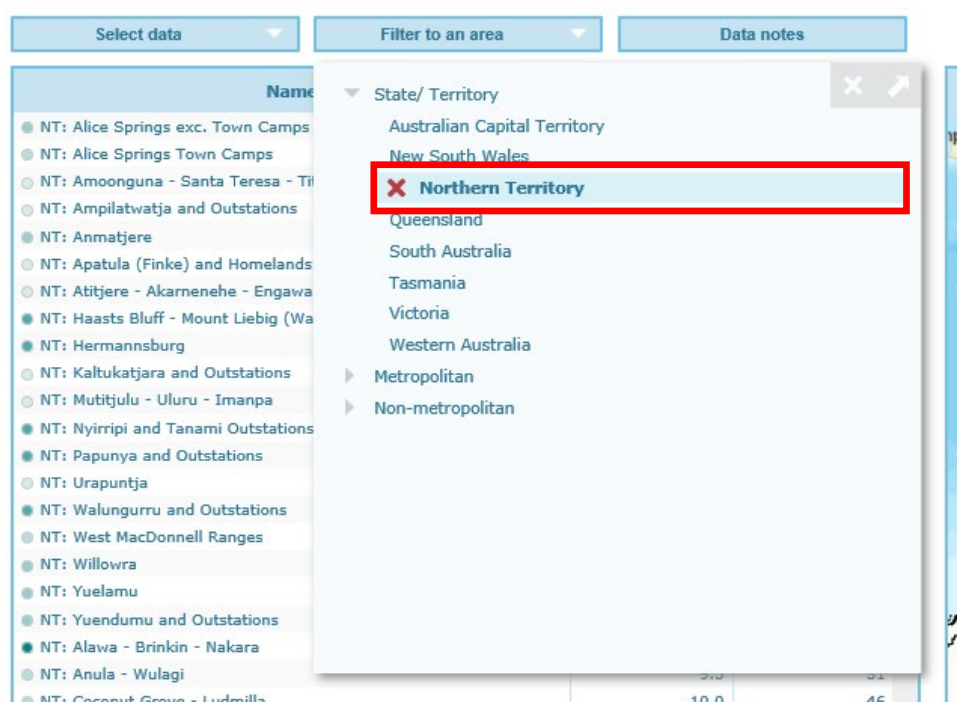
[Aboriginal and Torres Strait Islander Atlas](#)

The Atlas contains a large number of data indicators for the Aboriginal and Torres Strait Islander population covering health topics and some of the social determinants of health such as education and housing. In order to determine the correct health need multiplier for the Funding Model, locate data on the Indigenous Relative Socioeconomic Outcomes (IRSEO) index.

Choose 'Filter to an area', 'State/Territory' and the relevant state or territory, as shown in Figure 8.

Figure 8. Filter to an area – Northern Territory

Aboriginal and Torres Strait Islander Social Health Atlas, Published 2018



Choose 'Select data' and select 'Summary measures of Indigenous outcomes, 2016'. Choose the item under this heading, 'Indigenous Relative Socioeconomic Outcomes Index', as shown in Figure 9.

Figure 9. Select data – IRSEO 2016

Aboriginal and Torres Strait Islander Social Health Atlas, Published 2018

The screenshot shows the 'Select data' dropdown menu with the following items:

- ▶ Aboriginal male population, 5 year age groups - Per cent, 2016 erp
- ▶ Aboriginal female population, 5 year age groups - Per cent, 2016 erp
- ▶ Aboriginal total population, 5 year age groups - Per cent, 2016 erp
- ▶ Indigenous status - Per cent, 2016 erp
- ▶ Indigenous status by age - Per cent, 2016 erp
- ▶ Aboriginal education
- ▶ Aboriginal early childhood development: Australian Early Development Census - Per cent, 2015
- ▶ Aboriginal early childhood development: Australian Early Development Census - Per cent, 2012
- ▶ Aboriginal early childhood development: Australian Early Development Census - Per cent, 2009
- ▶ Aboriginal Learning or Earning - Per cent, 2016
- ▶ Aboriginal families - Per cent, 2016
- ▶ Aboriginal housing, 2016
- ▶ Internet access at private dwellings with Aboriginal households - Per cent, 2016
- ▶ Aboriginal labour force - Per cent, 2016
- ▼ Summary measure of Indigenous outcomes, 2016
 - ▶ **Indigenous Relative Socioeconomic Outcomes Index**
 - ▶ Aboriginal mothers and babies - Per cent, 2012 to 2014
 - ▶ Aboriginal immunisation - Per cent, 2018
 - ▶ Disability
 - ▶ Aboriginal median age at death - Years, 2011 to 2015
 - ▶ Aboriginal premature mortality by sex - Standardised ratio, 2011 to 2015
 - ▶ Aboriginal premature mortality by selected cause - Standardised ratio, 2011 to 2015
 - ▶ Home and Community Care Program - Per cent, 2014/15
 - ▶ Aboriginal admissions by sex (excluding same-day admissions for renal dialysis) - Standardised ratio, 2014/15 to 2016/17
 - ▶ Aboriginal admissions by age (excluding same-day admissions for renal dialysis) - Standardised ratio, 2014/15 to 2016/17
 - ▶ Aboriginal admissions by selected principal diagnosis, 2014/15 to 2016/17
 - ▶ Aboriginal admissions by selected principal diagnosis and age - Standardised ratio, 2014/15 to 2016/17
 - ▶ Aboriginal same-day admissions for renal dialysis - Standardised ratio, 2014/15 to 2016/17
 - ▶ Aboriginal admissions for potentially preventable conditions - Standardised ratio, 2014/15 to 2016/17
 - ▶ Aboriginal admissions for potentially preventable conditions by age - Standardised ratio, 2014/15 to 2016/17
 - ▶ Aboriginal admissions for potentially preventable diagnosis - Vaccine-preventable conditions - Standardised ratio, 2014/15 to 2016/17
 - ▶ Aboriginal admissions for potentially preventable diagnosis - Acute conditions - Standardised ratio, 2014/15 to 2016/17
 - ▶ Aboriginal admissions for potentially preventable diagnosis - Chronic conditions - Standardised ratio, 2014/15 to 2016/17

Locate the correct Indigenous Area in the list – in this case, Tennant Creek Town. As shown in Figure 10, the index figure for this location is 85.

Figure 10. Select the Indigenous Area – Tennant Creek Town

Aboriginal and Torres Strait Islander Social Health Atlas, Published 2018

Select data		Filter to an area		Data notes
Name	Index	Number		
<input type="radio"/> NT: Katherine Town	77	2,177		
<input checked="" type="radio"/> NT: Lajamanu	95	529		^
<input checked="" type="radio"/> NT: Laynhapuy - Gumatj Homelands	94	451		
<input type="radio"/> NT: Litchfield	14	2,308		
<input type="radio"/> NT: Malak	37	468		
<input checked="" type="radio"/> NT: Maningrida and Outstations	96	2,371		
<input type="radio"/> NT: Marrara - Winnellie - Berrimah	73	453		
<input checked="" type="radio"/> NT: Marthakal Homelands - Galiwinku	95	2,315		
<input type="radio"/> NT: Millner - Jingili	28	319		
<input type="radio"/> NT: Moil - Wagaman - Wanguri	35	469		
<input type="radio"/> NT: Mutitjulu - Uluru - Imanpa	38	539		
<input checked="" type="radio"/> NT: Ngukurr	90	1,074		
<input type="radio"/> NT: Nhulunbuy - Gunyangara	83	694		
<input type="radio"/> NT: Nightcliff - Rapid Creek	10	316		
<input checked="" type="radio"/> NT: North-West Arnhem	90	1,963		
<input checked="" type="radio"/> NT: Numbulwar and Outstations	97	690		
<input checked="" type="radio"/> NT: Nyirripi and Tanami Outstations	97	229		
<input type="radio"/> NT: Palmerston	31	3,812		
<input checked="" type="radio"/> NT: Papunya and Outstations	98	429		
<input checked="" type="radio"/> NT: Parnngurr - Milingimbi and Outstations	95	2,177		
<input checked="" type="radio"/> NT: Tennant Creek Town	85	1,530		
<input checked="" type="radio"/> NT: Thamarrurr inc. Wadeye	97	2,240		
<input type="radio"/> NT: Tiwi - Lyons - Leanyer	19	755		
<input checked="" type="radio"/> NT: Tiwi Islands	93	2,180		
<input checked="" type="radio"/> NT: Urapuntja	100	561		
<input type="radio"/> NT: Victoria River	85	375		
<input type="radio"/> NT: Walangeri	88	405		
<input checked="" type="radio"/> NT: Walungurru and Outstations	100	376		
<input type="radio"/> NT: West MacDonnell Ranges	88	703		
<input checked="" type="radio"/> NT: Willowra	99	272		
<input checked="" type="radio"/> NT: Wutunugurra - Canteen Creek	97	323		
<input type="radio"/> NT: Yirrkala	92	675		
<input checked="" type="radio"/> NT: Yuelamu	99	205		
<input checked="" type="radio"/> NT: Yuendumu and Outstations	98	655		v

Clear ✖ Filter ✖

For the Funding Model, index numbers are categorised into one of five groups, as shown in Table 3. This shows that an index of 85 is in category 1, most relative health care need.

Table 3. IRSEO index numbers and groups

	Index numbers
5 (least need)	0 – 20
4	21 – 40
3	41 – 60
2	61 – 80
1 (most need)	81 - 100

Using this information, the correct multiplier will be found in the far right column of Table 4.

Table 4. Location and need multipliers, most need highlighted

	5 (least need)	4	3	2	1 (most need)
Major Cities of Australia	1.00	1.18	1.77	2.52	3.22
Inner Regional Australia	1.11	1.30	1.96	2.78	3.56
Outer Regional Australia	1.26	1.48	2.23	3.17	4.06
Remote Australia	1.73	2.03	3.05	4.34	5.55
Very Remote Australia	1.75	2.05	3.09	4.38	5.61

Step three – Finding the location and need multiplier

With the information from the ABS and PHIDU maps, we now know that 45 Schmidt Street, Tennant Creek is located in Very Remote Australia and is in category 1 of the IRSEO. The correct multiplier for services in this location is 5.61, as shown in Table 5.

Table 5. Location and need multipliers, Very Remote and most need highlighted

	5 (least need)	4	3	2	1 (most need)
Major Cities of Australia	1.00	1.18	1.77	2.52	3.22
Inner Regional Australia	1.11	1.30	1.96	2.78	3.56
Outer Regional Australia	1.26	1.48	2.23	3.17	4.06
Remote Australia	1.73	2.03	3.05	4.34	5.55
Very Remote Australia	1.75	2.05	3.09	4.38	5.61

For more information on multipliers, please see the **Funding Model Technical Factsheet – Location** the **Funding Model Technical Factsheet – Health care need**.

Who do I contact for more information?

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