

Chapter 5

Australian Standard Geographical Classification for Remoteness Areas

Introduction

5.1 The Department of Health and Ageing provides incentive payments to doctors based on the geographic area they work in. The greater the relative remoteness of that area, the greater incentive payment they will receive. This chapter discusses how incentive payments are determined and paid to doctors working outside metropolitan areas.

5.2 In order to determine remoteness, the Department of Health and Ageing uses a remoteness classification structure developed by the Australian Bureau of Statistics (ABS), called the Australian Standard Geographical Classification—Remoteness Areas (ASGC-RA). The terms of reference ask the committee to inquire whether this system 'ensures appropriate distribution of funds and delivers intended outcomes.'

5.3 To address this question, the committee first considers geographical classification systems developed and used by the ABS more generally. It then sets out how the Department of Health and Ageing applies the ASGC-RA to determine payments for GPs working outside metropolitan areas. In the second part of this chapter, the committee examines the arguments presented in relation to whether the current structure of incentive payments delivers intended outcomes. The committee concludes that while the ASGC-RA measure is a useful tool to determine remoteness, better outcomes may be achieved if it were overlaid with other measures rather than as the sole determinant of incentive payments.

Need for a geographical statistical classification system

5.4 The ABS developed and uses a geographical classification system for its statistics for two main reasons. The first and most important reason is that such a system helps the ABS provide accurate, representative data to decision makers (an output need). The second reason is that a geographical classification system makes it easier for the ABS to label and use the statistics it collects (an input need).

Statistical output need

5.5 The ABS's role is to provide decision makers with a statistical service. In doing so, it collects and releases survey data. The ABS collects an enormous amount of data, from everyone in Australia in *Census of Population and Housing* (the census) years, and from samples of people at other times. The ABS is often asked to provide data that reflects the characteristics of people across Australia, or in a particular area of Australia. For example, decision makers in government might want to know the age range of people who live and work in a particular place, so they can decide if there should be a school built in the area.

5.6 The ABS needs to be sure that its data is labelled appropriately by location to accurately represent the statistical characteristics of people who live in Australia, or

who live in a specific part of Australia. Decision makers need to develop policy responses based on accurate information about the different characteristics of people living in different areas of the country. The ABS uses a geographical classification system so it can provide decision makers with data that is representative of whichever small or large area of Australia they need to know about.

Statistical input needs

5.7 As well as providing accurate, representative statistics to decision makers, the ABS also needs a system to help it collect and use its own data. For example, the ABS adopted a geographical classification system that has a hierarchical structure. This is efficient for the ABS because a hierarchical structure allows data about small areas to be added together to produce data about large areas. Another benefit of a uniform classification system using numerical data is that it can be integrated into current computer systems.

5.8 In addition, the ABS has certain privacy responsibilities. The ABS is authorised to collect data under the *Census and Statistics Act 1905*, but it must do so in compliance with the *Privacy Act 1988*.¹ This means that the ABS does not ask people to identify themselves and provide their address on surveys, or allow individuals to be otherwise identified. Instead, the smallest unit in the ABS's geographical classification system is especially designed to maximise accuracy about where a person lives while ensuring the privacy of individuals.

Geographical classification systems

5.9 Other organisations use geographical classification systems as well as the ABS. More familiar systems of spatial categorisation include state and territory boundaries, postcodes, electoral divisions and suburbs. These systems each have a specific purpose, for example, postcodes were introduced by the Postmaster General's Department (now Australia Post) to make its own job of mail routing easier.

5.10 Like Australia Post, the ABS has its own geographical classification system. The latest iteration is the Australian Statistical Geographical Standard (ASGS). The ASGS is a new system which the ABS began to progressively release and use from 1 July 2011.² The ASGS supersedes the older Australian Standard Geographical Classification (ASGC). The ABS notes that there are significant differences between the two classification systems,³ which the committee will discuss later in this chapter.

1 Office of the Australian Information Commissioner, *Your Privacy Rights FAQs*, <http://www.privacy.gov.au/faq/individuals/q16>, (accessed 11 April 2012).

2 Australian Bureau of Statistics, *Australian Statistical Geography Standard (ASGS): Volume 1 – Main Structure and Greater Capital City Statistical Areas, July 2011*, <http://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/0A9EA8C0BC932712CA257801000C6478?opendocument>, 2010, p. 1 (accessed 11 April 2012).

3 Australian Bureau of Statistics, *Australian Statistical Geography Standard (ASGS): Volume 1 – Main Structure and Greater Capital City Statistical Areas, July 2011*, <http://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/0A9EA8C0BC932712CA257801000C6478?opendocument>, 2010, p. 1 (accessed 11 April 2012).

5.11 The last part of the ASGS to be released will be the Remoteness Area Structure, due in December 2012. The ASGC Remoteness Area (ASGC-RA) Structure has been used by the Department of Health and Ageing to determine incentive payments for doctors since 1 July 2010⁴. The Department previously used the Rural, Remote and Metropolitan Areas (RRMA) system to determine remoteness.

Australian Standard Geographical Classification–Remoteness Area

5.12 The ASGC was developed by the ABS in 1985, and underwent significant change following a review of statistical geography in 1990.⁵ The Remoteness Area structure, which classifies Australian locations according to their relative remoteness, was added in 2001. The ABS had previously used just two labels to describe remoteness, 'regional' and 'urban'.

5.13 The ASGC-RA includes six categories, of which five are relevant⁶ to this chapter:

- Major Cities of Australia (RA-1);
- Inner Regional Australia (RA-2);
- Outer Regional Australia (RA-3);
- Remote Australia (RA-4); and
- Very Remote Australia (RA-5).

5.14 In developing the ASGC-RA, the ABS considered similar work being undertaken by the University of Adelaide's National Centre for Social Applications of Geographic Information Science (GISCA).

ARIA

5.15 In 1998, the then Department of Health and Aged Care engaged GISCA to develop a remoteness index to compare relative access to services. The result was the release of the Accessibility/Remoteness Index of Australia (ARIA) in 1999.

5.16 ARIA is another system that gives each location in Australia a code. Similar to other systems, it has changed over time. The first version of ARIA was applied to data from the 2001 Census. Some improvements were made in the next version, ARIA Plus (ARIA+), which applies to data from the 2006 Census. A new version, ARIA++, will be used for 2011 Census data.

4 Department of Health and Ageing, *Committee Hansard*, 11 May 2012, p. 68.

5 Australian Bureau of Statistics, *1216.0 - Australian Standard Geographical Classification (ASGC)*, [http://www.ausstats.abs.gov.au/ausstats/free.nsf/0/CEDCA4A828C5BFEBCA25722500049188/\\$File/12160_1994.pdf](http://www.ausstats.abs.gov.au/ausstats/free.nsf/0/CEDCA4A828C5BFEBCA25722500049188/$File/12160_1994.pdf)

6 The sixth category, 'Migratory', is not relevant to this chapter. It is used to describe people who were in transit on Census night.

ARIA+

5.17 At the time of writing, the current version is ARIA+. The process for determining a given location's ARIA+ code has three key steps:

- First, Australia is divided into areas of one square kilometre each;
- Second, the road distance to the closest service centre⁷ from each of those square kilometre areas is measured on a map;
- Third, this road distance is translated into a score between 0 and 15⁸ according to two rules:
 1. The greater the road distance to the service centre, the higher the score. For example, an area 80km from Melbourne would be classified with a higher remoteness score than an area 10km from Melbourne.
 2. The smaller the closest service centre, the higher the score. GISCA identifies five⁹ different sizes of service centres based on population. (For example, if one kilometre square area was located 10km from Melbourne and another area was 10km from Sale, the area 10km from Sale would be classified with a higher remoteness score because Sale has a smaller population than Melbourne).¹⁰

5.18 The above rules are applied by GISCA in a uniform manner to produce an ARIA+ score for each square kilometre in Australia between 0 (high accessibility of services) and 15 (high remoteness from services).¹¹

Development of ASGC-RA

5.19 The ABS considered the ARIA system and decided to incorporate some, but not all, of its components into the ASGC-RA. Like ARIA, the ASGC-RA determined

7 **Service Centres** - are populated localities where the population is greater than 1000 persons (greater than 200 in the case of ARIA++). The Urban Centre/Locality Structure of the 2001 ASGC has been used to define the areal extent and population of these areas. The ARIA+ analysis considers about 730 services centres in determining remoteness values across Australia. These service centres are a subset of the 11,879 populated localities. In instances where the ABS defined Urban Centres are split by a state boarder, such as in the case of Albury and Wodonga, the population and spatial extents for each of these Urban Centres have been combined and treated as one service centre. (Further information on Service Centre Categories is available at http://www.adelaide.edu.au/apmrc/research/projects/category/about_aria.html (accessed 25 July 2012).

8 This was 0 and 12 in the original ARIA.

9 There were only four different sized urban centres in the original ARIA.

10 University of Adelaide, 2011, *ARIA and Accessibility*, <http://www.adelaide.edu.au/apmrc/research/projects/category/aria.htm> (accessed 11 April 2012).

11 University of Adelaide, 2011, *ARIA and Accessibility*, <http://www.adelaide.edu.au/apmrc/research/projects/category/aria.htm> (accessed 11 April 2012).

remoteness based on road distance to an urban centre. However, the ABS decided that five primary categories (rather than 16) were sufficient to its remoteness categorisation needs. It also made other changes:

When developing the ASGC Remoteness classification, the ABS incorporated some fundamental adaptations to the original ARIA. The ABS:

- adopted ARIA Plus rather than the original ARIA to reflect the impact on remoteness of small centres with population between 1,000 and 5,000;
- did not adopt the original classes of remoteness recommended by GISCA and DH&AC [Department of Health and Aged Care]; and
- excluded all reference to 'accessibility' because some experts in the field had a particular view on the meaning of the word 'accessibility'.¹²

5.20 When asked specifically why they did not adopt the original classes recommended by GISCA and the Department of Health the ABS responded:

The class ranges recommended by GISCA/DH&AC were not adopted because their Highly Accessible class groups at least part of what some people call 'regional' Australia with the larger capital cities. While there is no single understanding of what 'regional' means, it is obvious that it does not include these very large urban concentrations. While the new Remoteness Structure does not attempt to define 'regional', ABS has chosen classes of Remoteness which are broadly compatible with at least one common interpretation of 'regional'.¹³

5.21 To convert the 15 ARIA categories into five remoteness scores, the ABS averaged the kilometre square ARIA scores into larger areas. The smallest area in the ASGC Main Structure was a Census Collection District (CD). First, the ABS found the average ARIA score of each CD. Second, the ABS considered how the CDs could best be fit into five remoteness categories. In doing so, the ABS sought to produce a classification system that showed comparative remoteness. It was not seeking to produce a classification system that was necessarily evenly spaced:

[T]he ASGC Remoteness classification groups locations together into comparative classes of remoteness so that data can be collected, analysed and disseminated for broad regions which are more or less remote. Locations within a given remoteness class are not necessarily equally remote but those in the Very Remote Australia class should be more remote than those in the Remote Australia class, etc...

12 Australian Bureau of Statistics, *ASGC Remoteness Classification: Use and Purpose*, [http://www.abs.gov.au/Websitedbs/D3110122.NSF/4a255eef008309e44a255eef00061e57/f9c96fb635cce780ca256d420005dc02/\\$FILE/Remoteness_Paper_text_final.pdf](http://www.abs.gov.au/Websitedbs/D3110122.NSF/4a255eef008309e44a255eef00061e57/f9c96fb635cce780ca256d420005dc02/$FILE/Remoteness_Paper_text_final.pdf), 2001, p. 3. (accessed 11 April 2012).

13 Australian Bureau of Statistics, answer to question on notice, 11 May 2012 (received 31 May 2012).

The break points between classes at the remote end of the spectrum were chosen largely based on the following criteria:

- Contiguity. An attempt was made to minimise discontinuities in the boundaries of regions.
- Broad agreement with the Rural Remote and Metropolitan Areas (RRMA) classification. While the ASGC Remoteness classification is conceptually different to RRMA and there is no direct concordance between the two, break points were chosen which generally recognised differences between areas previously identified in RRMA. For example both classifications single out areas in the south west of Western Australia, western Victoria and far eastern Victoria as being more remote than adjacent areas.
- Minimum population. An assumption was made that Very Remote Australia should encompass approximately the most remote 1 per cent of the population and that Remote Australia and Very Remote Australia together should represent approximately the most remote 3 per cent of the population.¹⁴

5.22 According to the above considerations, the average ARIA scores of Census Collection Districts were further amalgamated into five categories. As a result, six Australia cities were given 'major city' (RA-1) status: Perth, Adelaide, Brisbane, Sydney, Canberra and Melbourne. All other areas of Australia have an index of RA-2 to RA-5, depending on their relative distance from urban centres. This chapter later discusses the Department of Health and Ageing's policy to structure its incentive payments to doctors based on the remoteness score of the locations of the doctor's practice.

Potential for change following the release of the ASGS-RA

5.23 The ABS described briefly the implications of the changes to the new ASGS-RA system in their submission to the inquiry. This system was used to collect the census data in the 2011 Census, however the full effects of the changes will not be realised until late 2012 when the data analysis is complete:

ABS has undertaken a review of the ASGC, and will be implementing a new replacement for the ASGC, known as the ASGS from July 2011. The ASGS will be the basis for the 2011 Census of Population and Housing.

The implications for the remoteness structure are relatively minor. The concepts will remain the same; however a new base unit, the Statistical Area Level 1 will replace the CCD as the building block unit for the remoteness structure.

14 Australian Bureau of Statistics, , *ASGC Remoteness Classification: Use and Purpose*, [http://www.abs.gov.au/Websitedbs/D3110122.NSF/4a255eef008309e44a255eef00061e57/f9c96fb635cce780ca256d420005dc02/\\$FILE/Remoteness_Paper_text_final.pdf](http://www.abs.gov.au/Websitedbs/D3110122.NSF/4a255eef008309e44a255eef00061e57/f9c96fb635cce780ca256d420005dc02/$FILE/Remoteness_Paper_text_final.pdf), 2001, p. 2.

The effects of these changes will not be fully known until after the Census data is processed and a new remoteness structure is released towards the end of 2012. From preliminary investigations there will be less instances of the boundary line of Inner Regional and Outer Regional bisecting towns.¹⁵

5.24 When appearing before the committee the ABS explained the changes in more detail:

Those changes were really about changing a whole lot of other geographical classifications. You may be familiar with census collection districts, the smallest area you can get census data from. All of those areas are going to be changed according to some new classifications. It will not affect the remoteness classification in that we were still proposing releasing it with the same five categories. The unit that we built it up from, instead of being the CD, which was the old census unit, will be the new SA1, which is a replacement unit for census output. We do not expect that those changes will cause a lot of change to the remoteness classification itself, but the remoteness classification is due for update towards the end of this year, the end of 2012, because we do take the new census data and we produce a new list of all the towns of Australia and all their sizes, and ARIA is recalculated based on that information. We then take those ARIA values again and overlay them—in this case it will be with SA1s—to produce the five categories and the new map of remoteness for Australia, which will come out towards the end of 2012.¹⁶

Incentives for GPs to work outside major cities

5.25 In 2006, 68.4 per cent of Australians lived in major cities.¹⁷ People living in such cities enjoy high accessibility of services, including health services. However, people who live in other areas of Australia may find fewer health services are available locally. In order to address workforce shortages and retention in rural areas, the government introduced the Rural Health Workforce Strategy (the Strategy) in its 2009–2010 budget. Delivered by the Department of Health and Ageing, the Strategy includes incentives to GPs to live and work outside major cities.

5.26 Programs funded under the strategy are:

- GP Rural Incentive Program;
- HECS Reimbursement Scheme;
- Bonded Medical Placements;
- Medical Rural Bonded Scholarships;
- National Rural Locum Program;

15 Australian Bureau of Statistics, *Submission 124*, p. 6.

16 Australian Bureau of Statistics, *Committee Hansard*, 11 May 2012, p. 11.

17 The 2011 census data is not yet available. ABS, *Population Distribution, 2006*, <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4102.0Chapter3002008> (accessed 11 April 2012).

- Rural Locum Education Assistance Program;
- Scaling discounts for overseas trained doctors.¹⁸

5.27 The first four programs listed above apply to Australian doctors and vary according to how remote is the location of the practice. The more remote the location in which the doctor works, the greater the incentive. As discussed briefly in Chapter 4 the GP Rural Incentive Program (GPRIP) provides relocation and retention grants to doctors moving from metropolitan areas (RA-1) to more remote RA-2, RA-3, RA-4 or RA-5 locations. Figure 5.1 shows how these payments vary according to the relative remoteness of the location to which a doctor moves:

Figure 5.1—Relocation and retention payments under the GPRIP¹⁹

	One-off initial relocation grant	Retention payment after 0.5 years	Retention payment after 1 year	Retention payment after 2 years	Retention payment after 3–4 years	Retention payment after 5+ years
RA-2	\$15 000	0	\$2 500	\$4 500	\$7 500	\$12 000
RA-3	\$30 000	\$4 500	\$6 000	\$8 000	\$13 000	\$18 000
RA-4	\$60 000	\$5 500	\$8 000	\$13 000	\$18 000	\$27 000
RA-5	\$120 000	\$8 500	\$13 000	\$18 000	\$27 000	\$47 000

5.28 The HECS Reimbursement Scheme provides an incentive to doctors who work outside metropolitan areas by reducing their HECS obligations. The more remote the area in which a GP works, the quicker the HECS debt will be repaid. Doctors who work in metropolitan areas (RA-1) usually take six years to repay their HECS debts. Doctors who work outside metropolitan areas may be eligible for a reduced HECS liability so the time taken to repay HECS debts is reduced to five years in RA-2 locations, four years in RA-3 locations, three years in RA-2 locations and two years in RA-1 locations.

5.29 The Bonded Medical Placements (BMP) and Medical Rural Bonded Scholarships (MRBS) provide incentives for medical students to commit to working in rural areas. The BMP program provides HECS places to medical students on condition that they work in designated districts of workforce shortage (DWS) for a period of time following graduation. The length of this period of time can be reduced if the recipient works in DWS that are also outside metropolitan areas. The MRBS

18 DoctorConnect, *Scaling for overseas doctors*, <http://www.doctorconnect.gov.au/internet/otd/publishing.nsf/Content/scalingForOverseasTrainedDoctors>, (accessed 12 April 2012).

19 DoctorConnect, *GP Component FAQs, What are the incentive payment rates?*, <http://www.doctorconnect.gov.au/internet/otd/publishing.nsf/Content/gpComponentFaq>, (accessed 13 April 2012).

works in a similar way, but also provides \$24 000 each year to students while they study and requires six years' return of service in a rural or remote area.

5.30 Return of service obligations are reduced under both programs by 10 per cent if doctors work in RA-2 locations, 30 per cent in RA-3 locations, 40 per cent in RA-4 locations and 50 per cent in RA-5 locations.

5.31 All doctors working outside major cities are eligible to apply for locum assistance. The Rural GP Locum Program (RGPLP) offers subsidies to rural GPs to employ locums to provide cover for them while they take time off or undertake professional development. A further two programs; the Specialist Obstetrician Locum Scheme (SOLS) and the GP Anaesthetist Locum Scheme (GPALS) comprise this package of support. The program is administered by the Rural Workforce Agencies in each state and territory.²⁰

5.32 Different incentives apply to overseas trained doctors (OTDs) and foreign graduates of an accredited medical school (FGAMS). (Hereafter, both OTDs and FGAMS are referred to as 'overseas doctors', as opposed to other doctors practising in Australia, hereafter, 'Australian doctors'.) For their first ten years of service in Australia, overseas doctors are only able to access MBS provider numbers in DWSs. However, if overseas doctors work in districts of workforce shortage which are also located in RA-2 to RA-5 locations, they can reduce this ten year period. Like the return of service obligation of Australian doctors, the ten year period is reduced most quickly for overseas doctors who work in RA-5 locations, and reduced progressively less quickly for those working in RA-4, RA-3 and RA-2 locations.²¹

Use of the ASGC-RA to determine incentives

5.33 The ABS uses the ASGC-RA for its own statistical analysis purposes and suggests it may be too blunt to use as a policy tool in isolation:

[It] is well known that some policy makers use ABS definitions, both geographical and others, to directly target policy. For example, some organizations paid an additional allowance to staff stationed in 'rural' areas based on the definition found in the ASGC Section of State classification. The validity of using the ASGC in this way depends entirely on the relevance of the geographical concept to the desired policy outcomes. It is vitally important that anyone developing policies, funding formulae or intervention strategies understands the alignment, or lack of alignment, between a particular geographical classification and their business objective. No geographical classification should be used as a simplistic

20 DoctorConnect, *National Rural Locum Program*, <http://www.doctorconnect.gov.au/internet/otd/publishing.nsf/Content/NRLP> (accessed 25 July 2012).

21 Department of Health and Ageing, *Scaling for overseas trained doctors*, <http://www.doctorconnect.gov.au/internet/otd/publishing.nsf/Content/scalingForOverseasTrainedDoctors> (accessed 11 April 2012).

answer to complex questions. In most cases a variety of data overlays will be required to target a particular population.²²

5.34 Almost all submitters who discussed the use of the ASGC-RA noted their general dissatisfaction with the ASGC-RA in determining incentives to encourage greater service delivery in non-metropolitan areas:

The application of the Remoteness Area Classification has not ensured appropriate distribution of funds and should be reviewed.²³

...

The classification system in the health sector—ASGC-RA—used for the distribution of incentives, must be reviewed, and a key criterion of town size added to the formula.²⁴

5.35 This sentiment was echoed by Charles Sturt University's submission:

The key challenge for the Australian health workforce reform is correcting the mal-distribution of rural doctors and other health professionals.

The mal-distribution occurs at two levels: (1) mal-distribution of doctors and health professionals between rural and metropolitan areas; and (2) mal-distribution of doctors and health professionals between Inner Regional, Outer Regional, Remote and Very Remote areas.²⁵

5.36 The RDAA noted that cities such as Hobart, Townsville and Cairns have been assigned a 'more rural' classification than in the previous RRMA system.²⁶ The RDAA consider that this has contributed to inequity and has had a negative budgetary impact:

For RDAA, the key problem with the ASGC-RA is that it gives a large weighting to physical road distance from a capital city and a relatively small weighting to population size...As such, the ASGC-RA can fail to represent the extent of health disadvantage experienced in some rural and remote areas...

In RDAA's view, the GISCA report [2010; discussed following] does not address the major problems that smaller towns face competing with attractions and services available in large regional centres. Unless major changes are made to increase the classification differential between these towns and cities, the small towns will continue to lose out to the major regional cities in attracting much-needed doctors.²⁷

22 Australian Bureau of Statistics, *ASGC Remoteness Classification: Purpose and Use*, Census Paper No. 03/01, 2003, p. 12.

23 Dr Pieter Mourik, *Submission 12*, p. 3.

24 Services for Australian Rural and Remote Allied Health, *Committee Hansard*, 11 May 2012, p. 1.

25 Charles Sturt University, *Submission 68*, p. 24.

26 Rural Doctors Association of Australia, *Submission 67*, p. 15.

27 *Submission 67*, pp 15–16.

5.37 Professor John Humphreys from the Centre of Research Excellence in Rural and Remote Primary Health Care (CRERRPHC) also discussed the effectiveness of using resources in the current manner:

Under the existing ASGC scheme for targeting workforce incentives there are clearly problems. The existing schema is not equitable and, I would argue, is not effective. This is particularly because of the inherent heterogeneity in the ASGC categories 2 and 3...Currently we have a situation where doctors who are practising in large, well-supported communities, in environmentally attractive areas, in resource rich areas—places such as Coffs Harbour, for instance—are eligible for the same types of incentives as those who work in small inland, remote communities. As you will be aware, this is clearly inequitable. It is also an ineffective use of resources.²⁸

5.38 Several submitters to the inquiry, while accepting that ASGC-RA was a useful geographical tool, objected to the use of the scheme as the sole determinant of the rate of incentive payments. The National Rural Health Alliance Inc. (NRHA) were supportive of its use, but stated both in their submission, and in their appearance before the committee that it needed to be supplemented in order to provide equitable outcomes:

The Alliance's view is that, for a number of reasons, the ASGC-RA is the most appropriate basis of a rurality classification system to be used for various purposes, including for the allocation of public resources. However it should be seen as a necessary but not sufficient part of such a classification system. For any particular purpose, ASGC-RA should be augmented by one or more additional filters or lenses suitable for that purpose. For instance, it will make sense for many purposes to add to the basic ASGC-RA ranking or score a measure of population size. Also, for access to GPs, for example, it would make sense to include the existing ratios of GPs to population as happens for the definitions of Districts of Workforce Shortage and Areas of Need...The ASGC-RA system is the baby that needs to be clothed and fed, not thrown out with the bathwater.²⁹

Concerns about disparity between areas classed in the same ASGC-RA category

5.39 The AMA identified that most disparity exists in the classification system RA-3, although there are 'anomalies with the other bands especially the RA-2 (Inner Regional) band.³⁰ The committee received evidence from other submitters about disparities between locations classified RA-2 and RA-3.

5.40 Dr Mara of the RDAA summed up the anomalies currently in the system:

My wife when I was coming here said, 'Just ask them if there is a difference between Gundagai, Cootamundra, Tumut, Cloncurry, Cairns, Coffs

28 Professor John Humphreys, Centre of Research Excellence in Rural and Remote Primary Health Care, *Committee Hansard*, 5 June 2012, p 16.

29 National Rural Health Alliance, *Submission 95*, pp 3–4.

30 Australian Medical Association, *Submission 42*, p. 16.

Harbour, Hobart and myriad other towns that are in the same classification system.' I think if any one of you have visited those communities you would know that there is a difference between a small country town such as Gundagai—where we have a main street, a Chinese restaurant, a cafe and a war memorial—and major regional centres like Coffs Harbour or Wagga Wagga. That crucial difference, which I think we all understand inherently, is not being applied in the current system of incentives or geographical classifications across Australia.³¹

Inner Regional (RA-2)

5.41 General Practice Victoria (GPV) noted that a disparity exists amongst Victorian locations classed as Inner Regional, RA-2.

GPV [General Practice Victoria] has received many complaints that the revised classification system announced in 2009 was too blunt an instrument to enable appropriate workforce distribution across rural Victoria. The changed classification of RA-2 regardless of differences, within this broad classification, in population size of towns, and differences in the ability of people from one town to the next to access a wide range of health and community services.³²

5.42 GPV cited a representation made by Central Victoria General Practice Network and Murray Plains Division of General Practice 'regarding the crude application of the RA classification' that gives communities with population bases ranging from 2 000 to 100 000+ the same relocation and retention grants. GPV then presented the following suggestions:

The provision of incentives to RA-2 communities are appropriate and should not be scaled back but there is a need for refinement at two levels. First, there is a need to have a classification system that distinguishes between large regional towns and small rural towns. Secondly, for the purpose of incentives, there is a need to overlay the geographical system with data about health status of local populations, socio-economic status, provision of health services, transport and workforce availability.³³

5.43 The Young District Medical Centre (NSW) expressed the view that it is difficult to attract GPs, especially those from overseas, because Young is classed in the same category as significantly larger centres including Wagga, Bathurst and Orange.³⁴

31 Dr Paul Mara, Rural Doctors Association of Australia, *Committee Hansard*, 11 May 2012, p. 13.

32 General Practice Victoria, *Submission 49*, p. 5.

33 General Practice Victoria, *Submission 49*, p. 5.

34 Young District Medical Centre, *Submission 37*, p. 2.

Outer Regional (RA-3)

5.44 Outer Regional (RA-3) is used to describe 9.5 per cent of Australia.³⁵ This proportion of the country encompasses a range of locations from cities to small towns. To take Far North Queensland as an example: Cairns, a coastal city of northern Queensland with a population of 153 075³⁶ is classed as RA-3. So too is Mareeba (pop. 21 438),³⁷ an hours' drive away, and Herberton (pop. 974),³⁸ an hour and forty-five minutes from Cairns. No extra incentive applies to a doctor who chooses to establish a practice in Herberton rather than Cairns.

5.45 Mr Hook, the Chief Executive of Tropical Medical Training explained how they as an organisation took a decision to 'top-up' payments to registrars to mitigate for the impact of the classification in North Queensland:

We were worried when Mackay became RA2, and Townsville and Cairns were RA3. We felt that the difference in the RRIPS payments was going to make a draining of registrars out of Mackay. We as an organisation, out of our core funding, without being given any extra money, top up our registrars' RRIPS payments to the equivalent of RA3, just to make sure there is no disparity between the two.³⁹

5.46 One of the factors in the Department of Health and Ageing deciding to use the system was on the grounds of its currency. In the first of the department's two appearances before the committee they defended its decision to use the ASGC-RA by stating that they decided to use it because it was "kept up to date", and would include census data collected periodically by the ABS.⁴⁰

5.47 However, the department did acknowledge that there are issues inherent in the system and concerns have been raised with them:

Senator NASH: Is the department aware of the concerns in the sector about the size of populations and the ability to deliver a service for towns—I am talking particularly about the inner regional areas—that is illogical and inappropriate when it comes to the incentive payment?

35 ABS, *Population Distribution*, 2006, <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4102.0Chapter3002008> (accessed 11 April 2012).

36 ABS, *3218.0 Regional Population Growth, Australia*, Table 3-Estimated Resident Population, Statistical Local Areas, Queensland, 30 March 2012, <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/3218.02010-11> (accessed 11 April 2012), hereafter, ABS, *3218.0 Regional Population Growth*.

37 ABS, *3218.0 Regional Population Growth*.

38 ABS, *2006 Census QuickStats : Herberton (L)* (Urban Centre/Locality) 25 October 2007, <http://www.censusdata.abs.gov.au/ABSNavigation/prenav/LocationSearch?collection=Census&period=2006&areacode=UCL326800&producttype=QuickStats&breadcrumb=PL&action=401> (accessed 11 April 2011).

39 Mr Rod Hook, Tropical Medical Training, *Committee Hansard*, 23 April 2012, p. 15.

40 Department of Health and Ageing, *Committee Hansard*, 11 May 2012, p. 68.

Ms Shakespeare: Yes. It has been raised over the period of time that the system has been operating, since 1 July 2010, and there has been a review.⁴¹

...

We hear from people about their concerns about the RA classification. That is one thing that we have to take into account. Anecdotally, the information we are getting from stakeholders is that it is not really working effectively for them.⁴²

5.48 The review referred to was commissioned by the department in late 2010. GISCA (which developed ARIA) were asked to investigate the effectiveness of ASGC-RA in specific areas that had been brought to the attention of the department:

[The] Department engaged GISCA in the University of Adelaide to investigate 23 small communities that are classified within the same category as larger, better serviced, rural communities and provide advice...

The review was completed by GISCA in early 2011 and identified that overall the ASGC-RA classification system is working well.

Sixteen of the 23 identified communities (69 per cent) had positive improvements in GP FWE numbers which is consistent with the national trend. Of those, 5 communities have shown a significant improvement.⁴³

5.49 The Department of Health and Ageing later noted in its submission that:

Whilst the Government is aware that there is the potential in some rural areas containing large, well serviced centres, to create a disincentive for doctors going to smaller towns outside these centres, the new classification system has only been in operation for just over twelve months. Boundary issues are not uncommon with that of any other geographical classification system.⁴⁴

5.50 The point that the scheme had only been in place for a short time was reiterated in the Department's evidence:

The other thing that the government needs to consider is that this system has not been in operation for very long and workforce programs—have an impact over a long period of time. If we are chopping and changing very quickly it does not allow you to see the impact of the programs.⁴⁵

5.51 The Department announced that a review of workforce programs will commence shortly and implied during their second appearance before the committee that consideration of the effectiveness of using ASGC-RA on its own to determine work force incentives will be considered as part of the review:

41 Department of Health and Ageing, *Committee Hansard*, 11 May 2012, p. 68.

42 Department of Health and Ageing, *Committee Hansard*, 10 June 2012, p. 16.

43 Department of Health and Ageing, *Submission 74*, Attachment A, p. 8.

44 Department of Health and Ageing, *Submission 74*, Attachment A, p. 9.

45 Department of Health and Ageing, *Committee Hansard*, 11 May 2012, p. 69.

The department is now commencing a review of all health workforce programs, which include a number that are linked to the use of the RA classifications. For instance, the General Practice Rural Incentives Program is a workforce program. That is where we have incentive payments provided to general practitioners. The amount of that is based on which RA location they are in. We have HECS reimbursement which is scaled according to RA.

Several programs use it as a reference point, so that will be looked at through our review of workforce programs, which we expect will take place over the remainder of the calendar year.

There is certainly an opportunity there for us to get further information from stakeholders about the issues. The issues that have been raised with us are generally about RA2 and RA3.⁴⁶

Other classification systems

5.52 Prior to the introduction of ASGC-RA to determine remoteness for doctors' incentives in July 2010, the Department of Health and Ageing used the Rural, Remote and Metropolitan Areas (RRMA) system. The committee did not receive evidence that this system was preferred:

The departments alternate between RRMA and RA2+. RRMA is the old classification where Alice Springs is RRMA 6, a remote centre, and everything else is RRMA 7. The problem with that is there is no gradient in that between Kintore and Hermannsburg, they are the same, whereas RA2+ is better from that point of view. It has gradients in the remote areas. But there are some concerns—RA2+ is not as good for Alice Springs, for instance, but Alice Springs probably did better than it should have out of RRMA. So I think RA2+ is fairer and better, even though every now and again someone will give an example of where RA2+ does not seem to be working. Overall I think it is better than RRMA was. RRMA is still being used in a lot of areas as well, so there is not a universal agreement.⁴⁷

5.53 The Australian Health and Hospitals Association suggested that the ASGC-RA was limited because it 'does not consider inter town and region differences.'⁴⁸ AHHA suggested instead that:

Funding should be linked to population health needs and address the needs of individuals and communities with respect to their health. There needs to be an alternative classification methodology for assessment and distribution for funds and resources for healthcare using more robust population health models.⁴⁹

46 Department of Health and Ageing, *Committee Hansard*, 10 June 2012, p. 16.

47 Dr John Boffa, Central Australian Aboriginal Congress, *Committee Hansard*, 20 February 2012, pp 15–16.

48 Australian Health and Hospitals Association, *Submission 72*, p. 14.

49 Australian Health and Hospitals Association, *Submission 72*, p. 14.

5.54 The AMA's submission included a detailed analysis of the effectiveness of the ASGC-RA measure. The AMA identified three issues that it believes are most relevant to discussions about the ASGC-RA: 'the arbitrary effect of bands; relative prices; and reliance on a purely geographical indicator.'⁵⁰ It suggests that the best solution would be to implement a payment formula based not on categories, but on the location of each individual claimant.⁵¹ The AMA also made a number of other recommendations in the case that categories were to be retained in determining GP incentive payments:

The AMA recommends that:

- (1) consideration be given to implementing ARIA scores as a continuous variable instead of grouping localities into ASGC-RA bands;
- (2) failing the adoption of recommendation (1), the fall-back option is to adopt a more granular band structure (more bands, narrower bands);
- (3) there be a great deal more stakeholder engagement in relation to the scales of payment that attach to the ASGC-RA bands (if bands are retained);
- (4) the scales of payment be the subject of regular review and indexation;
- (5) the ASGC-RA system should be retained as the geographic indicator;
- (6) the Government work with stakeholders to ascertain whether ASGC-RA should be supplemented by other indicators, which capture some of the social, professional and economic aspects of remoteness; and
- (7) the Government commission a fully independent review of the impact of ASGC-RA.⁵²

5.55 The work of Professor Humphreys and his team at the CRERRPHC has been widely quoted in this inquiry. The RDAA and the NRHA both discussed the model at the committee's first hearing in Canberra.

5.56 Professor's Humphreys summarised the problem with the ASGC-RA system:

The fundamental problem is that dependence on geographical criteria alone does not adequately reflect the issues that are responsible for the difficulties associated with recruitment and retention of doctors into rural areas.⁵³

5.57 The model proposed by the Professor Humphrey's team (hereafter referred to as the "Humphreys model") is multi-layered, comprising geographical data, population data, and data from the national *Medicine in Australia: Balancing Employment and Life (MABEL)* study. The latter is the results of the survey that examines the professional and non-professional factors that impinge on the decision-

50 Australian Medical Association, *Submission 42*, p. 16.

51 Australian Medical Association, *Submission 42*, p. 18.

52 Australian Medical Association, *Submission 42*, pp 19–20.

53 Professor John Humphreys, Centre of Research Excellence in Rural and Remote Primary Health Care, *Committee Hansard*, 5 June 2012, p 16.

making of a doctor in terms of where, and for how long they practice in a specific area.

5.58 The professional factors, or indicators used in the survey, are termed sentinel factors and according to the CRERRPHC provide 'a more sensitive measure directing where recruitment and retention incentives should be provided, with remoteness only required to discriminate between the smallest communities'.⁵⁴

5.59 These sentinel factors are:

- Total Hours = Total Hours worked in their usual week (excluding after hours on-call);
- Public Hospital = whether the GP undertakes work in a public hospital;
- On-call = whether the GP is called out to attend patients two or more times (per week) after hours;
- Time-off = whether it is difficult for the GP to take time off;
- Partner employment = whether there are good employment opportunities locally for the GP's partner;
- Schooling = whether the choice of schools locally is the answer.⁵⁵

5.60 Based on the results of the exercise the CRERRPHC proposes a 6-level classification model that "provides a better basis for equitable resource allocation of recruitment and retention incentives to doctors based on the attractiveness of non-metropolitan communities, both professionally and non-professionally, as places to work and live".⁵⁶ The model is illustrated in figure 5.2:

54 Centre of Research Excellence in Rural and Remote Primary Health Care, *Submission 32*, p. 2.

55 Humphreys et al, Who should receive recruitment and retention incentives?, *Aust. J. Rural Health* (2012), No. 20, pp 3-10.

56 Centre of Research Excellence in Rural and Remote Primary Health Care, *Submission 32*, p. 12.

Figure 5.2: Proposed new 6-level rurality classification⁵⁷

Proposed new 6-level rurality classification			
New 6 level classification	Population Size	ASGC-RA	Example locations
1	(All)	ASGC-1	Most capital cities, Wollongong, Newcastle, Geelong, Sunshine Coast, Gold Coast
2	>50 000	(All)	Bendigo, Ballarat, Hobart, Mackay, Launceston, Rockhampton, Townsville, Cairns, Darwin
3	15 000 – 50 000	(All)	Coffs Harbour, Shepparton, Mt Gambier, Bundaberg, Busselton, Mildura, Albany, Broken Hill, Whyalla, Burnie, Kalgoorlie, Alice Springs, Mt Isa
4	5 000 – 15 000	(All)	Ulladulla, Sale, Warwick, Ararat, Gympie, Lithgow, Victor Harbor, Port Augusta, Emerald, Bairnsdale, Horsham, Moree, Ayr, Parkes, Broome, Port Lincoln, Esperance, Katherine, Karratha
5	0 – 5 000	ASGC – 2 & 3	Gundagai, Leongatha, Strathalbyn, Pinjarra, Cooroy, Latrobe, Port Sorell, Naracoorte, Bega, Kerang, Chinchilla, Margaret River
6	0 – 5 000	ASGC – 4 & 5	Bourke, Kununurra, Roxby Downs, Charleville, Queenstown, Derby, Tennant Creek, Halls Creek, Ceduna, Nhulunbuy, Weipa

5.61 The NRHA also discussed proposals that they had been working on to improve the scheme. They referred to the Humphreys model :

We have ASGC-RA and population size of the place, which is basically what John Humphreys has got, and then we are adding a third one which is a proxy for whatever it is that makes a particular place attractive or not attractive, because it is a measure of how they have done historically.⁵⁸

...

The alliance has been working on a composite measure, which would include three criteria for any particular place. It is ASGC-RA classification, it is population size and an index reflecting its success in the past in

57 Centre of Research Excellence in Rural and Remote Primary Health Care, *Submission 32*, p. 12.

58 National Rural Health Alliance, *Committee Hansard*, 11 May 2012, p. 27.

recruiting and retaining health professionals. This last is a proxy for the range of variables which results in a particular place being one to which it is easy or difficult to attract and retain staff. Many of the alliance's member bodies have approved this approach, while some others with particular interests in the matter have sought further conceptual work, modelling and more time prior to any public promotion by the alliance of the final measure system.⁵⁹

Committee View

5.62 The committee acknowledges that there will never be a perfect model that does not result in some anomalies as a result of the methodology used. That said, the overwhelming evidence provided to the committee during its inquiry did not support the use of the ASGC-RA scheme in its current form as the sole determinant of classifying areas for workforce incentive purposes. Even the evidence in general support of the scheme was heavily conditional on it being augmented with further datasets to provide a more accurate representation of workforce conditions across the country.

5.63 The committee was impressed with the comprehensive nature of the Humphreys model, and the merging of geographical, population and professional and non-professional indicators certainly seems to provide a more accurate picture of the rural workforce. The committee is also supportive of the use of historical recruitment and retention data when classifying areas as proposed by the NRHA.

5.64 The use of current workforce data is an area the committee would like to see utilised in a revised system. The committee notes that the goal of the incentive program is to encourage doctors to work outside metropolitan areas because these areas have lower service provision. The committee also notes that the DWS measure is used to ensure overseas doctors fill existing gaps in service provision. The key government website that provides information about the Rural Health Workforce Strategy (RHWS), *DoctorConnect*, states that:

DWS is a key mechanism that the Australian Government uses to achieve an equitable distribution of medical services across Australia.⁶⁰

5.65 However, incentives do not currently apply to Australian doctors to work in DWS. Given the aim of the RHWS incentive program is to address service gaps in rural areas, the DWS would help to identify such service gaps alongside the ASGC-RA.

5.66 The upcoming review of the rural health workforce policy area by the department is the ideal opportunity for a broad and comprehensive re-evaluation of the classification schema. The committee is strongly of the view that the current system is untenable and requires amendment. The geographical data from the new ASGS-RA

59 National Rural Health Alliance, *Committee Hansard*, 11 May 2012, p. 24.

60 Department of Health and Ageing, *District of workforce shortage*, <http://www.doctorconnect.gov.au/internet/otd/publishing.nsf/Content/dwsFactsheet> (accessed 12 April 2012).

system will need to be augmented with further layers of data. The committee is supportive of the methodology and data utilised by the Humphreys model and would like to see this incorporated into a new scheme.

Recommendation 8

5.67 The committee recommends that the classification systems currently used for workforce incentives purposes be replaced with a scheme that takes account of regularly updated geographical, population, workforce, professional and social data to classify areas where recruitment and retention incentives are required.

Recommendation 9

5.68 The committee recommends that the revised workforce incentive scheme include a comprehensive, public evaluation process.