Submission to Department of Health and Ageing relating to the

Review of the Rural, Remote and Metropolitan Areas (RRMA) Classification

May 2005
Summary
The National Rural Health Alliance (NRHA) welcomes this review of the Rural, Remote and Metropolitan Areas Classification scheme (RRMA). It is important that government has the means to target policies and programs in such a way as to maximise their effectiveness while containing costs.

The Alliance’s very reason for existence is to improve the health of one of Australia’s disadvantaged groups: those who live in rural, regional and remote areas. However, the Alliance’s existence and approach are underpinned by a concern for equity and access (“a fair go”), so that it is sympathetic to the relief of disadvantage wherever it exists. The Alliance’s approach to poor health and relative disadvantage in some parts of the capital cities is that it should be targeted by special programs, but not at the expense of resources or efforts directed to rural and remote areas.

Notwithstanding the importance of targeted programs for workforce, public health etc, it is almost certainly the case that the stronger factors in determining access to health services are what might be called the ‘macro policies in health’, such as the structure of Medicare, the PBS and the private health insurance rebate. For example, a good case can be made for the assertion that an overall increase in the schedule fee under Medicare would be more effective than targeted workforce programs in increasing the supply of GPs. Similarly, a revised structure for Medicare that allowed it to cover primary care by other providers in areas where there were no GPs would be more significant for improved health (especially in remote areas) than scholarships for health professionals.¹

The Alliance has a strong interest in the measurement of the three elements “at the centre of this review – geography, workforce supply and health and well-being” (page 3 of the Discussion Paper). However, the Alliance favours five elements or indices, rather than three, with the extra two being population size and access to other health services (not just access to health professionals). So our preference is that the emphasis of future work in the area be on building and maintaining the five separate series, not on the composite single index. The instruments should be well constructed and based on up-to-date data, and used separately or in combination as determined by the subject of a particular policy or program.

With separate indices, close targeting to particular programs would be possible. For example, program resources under policies relating to the shortage of GPs can be distributed with the assistance of an index of GP availability. The Department’s Discussion Paper refers to the “More Doctors for Outer Metropolitan Areas Program” which “explicitly target(s) areas with an undersupply of doctors”. There are certainly some difficulties associated with the use of Medicare data and there may well be the need for work to incorporate other data such as those available from the AIHW’s labour force survey, from the Medical Colleges, the Department’s GP Branch and the ABS. Also, it would be desirable to relate the supply of GPs to the real demand for them, as determined not only by simple population numbers but by the rates of morbidity in the population and the types of interventions (and so the time needed for

¹ The Alliance has made these points in things like its submissions to the Medicare inquiries and to various Senate Inquiries.
each) required. There would also need to be consideration of how to avoid penalising areas that had invested successfully in their own programs for recruitment and retention of GPs, and areas where a culture of self-care is well developed. This is all likely to be quite challenging; but to retreat from direct measures of the ratio of GPs to ‘Need for GPs’ to a proxy such as RRMA which measures ‘remoteness’ is to fall back too far.

The five indices would be:

1. a measure of remoteness as currently conceptualised in RRMA and ARIA; for this, the Alliance prefers RRMA, notwithstanding its imperfections and anomalies; the reasons for this preference are detailed below;
2. a measure of town size; this would often be used in conjunction with the measure of remoteness, as is the case currently with ARIA and RRMA;
3. measures of the ratio of particular health professionals to the need for their service (as in the example above for GPs); it would be important to have such measures for all health professions;
4. a measure of the community’s access to health care; the Rural Workforce Agency Victoria has done considerable work on a proposed National Index of Access to Health Care which is referred to in the Discussion Paper; and
5. a measure of health status or the need for health care; SEIFA is already available as a reasonably proxy for this.

The existence of these five would enable programs related to particular issues to be better targeted. An allied health program would be assisted by the measure of allied health professionals to allied health need. A public health program relating to low income or attitudes to diet would be assisted by consideration of the SEIFA scores for particular areas. Programs related to outreach services or new health infrastructure could be guided by a new National Index of Access to Health Care.

Existence of the five indices would also permit useful analyses, for example on the health impact of particular levels of access to health professionals; the health impact of distance on places with equivalent access to health services; or the relationship between town size and health service or health status. Analyses like these are not possible with just the one indicator of remoteness.

Although we do not see the five being normally used together in a composite index, there are some uses to which a composite – for which a new name would be required – could be put. All places, city and country, could be scored on the combined place/access/status index and it would provide a useful tool for policy makers concerned with overall health need.

This situation would be much preferable to the one that currently exists and it is an ambitious undertaking. However, as the Department’s Discussion Paper says, “An enormous increase in computing power and functionality of geographic information systems and the continuing increase in the availability of spatial data has allowed the development of more sophisticated geographic classifications than was possible ten years ago”.

Recommendations

Recommendation 1: RRMA should be seen as a useful index of remoteness and, once updated, should be used in conjunction with four other indices that would be developed and maintained.

Recommendation 2: work should be undertaken, in consultation with public and professional interest groups, to develop and apply four other indices related to health and for use with health policies and programs. The four would measure the population size of the settlement, town or regional centre; the ratio of particular health professionals to the need for their service; the community’s access to health care; and the level of health need in the place. The third would include the further development of a National Index of Access to Health Care, and the fourth would require further work on SEIFA as an indicator of health status.

Recommendation 3: as soon as possible after the completion of the new indices, they, and not a proxy measure, should be used individually as the basis of administration of programs related to the variable they measure, or in combination if more appropriate. RRMA and other remoteness classification systems would then cease to be used as proxies for workforce shortages, health status and access to health services.

Recommendation 4: RRMA should be updated, using ABS data from 2001 and with an updated list of place names.

Recommendation 5: information about the structure of RRMA and its scores should (continue to) be freely and publicly available, including through simple on-line access to the RRMA score for each place.

Recommendation 6: targeted health programs that involve the distribution of or access to resources should have a public appeal process, to allow asserted anomalies in respect of any particular scores and any allocations to be tested by a relevant group.

Recommendation 7: attention should be given to the likelihood that there will be changes in these indices over time, and that concordance tables will therefore be needed to allow for time series analyses.

Recommendation 8: work should begin to formulate a new composite index of ‘health-related status’ that incorporates the two indices of place, the two on access, and the one on health status.
Background: RRMA and anomalies

"Taxonomy (the science of classification) is often undervalued as a glorified form of filing - with each species in its prescribed place in an album; but taxonomy is a fundamental and dynamic science, dedicated to exploring the causes of relationships and similarities among organisms. Classifications are theories about the basis of natural order, not dull catalogues compiled only to avoid chaos." Stephen J Gould, 1990

The NRHA notes Gould’s view that taxonomy is a dynamic science and welcomes the review of RRMA.

It has often been asserted (including by the Alliance) that, as with all such instruments, there are occasional “anomalies” with RRMA scores. It is instructive to consider what this might mean.

What it usually means is that a case has been identified where a RRMA score for a particular place, relative to the scores for other places, does not seem to some person or persons (who may or may not be familiar with those places) to reflect accurately the relative ‘somethingness’ of those places. This somethingness may merely be population size, or it may be a notion of how well serviced the places are, or how rural (by which is often meant agricultural), or how far from a capital city. The point is that ‘anomalies’ in RRMA scores are (a) subjective, (b) determined according to differing sets of characteristics by different people, and (c) likely to be of small significance compared with the different levels of well-being (health, income, job status, safety etc) of individuals within the one place.

Other RRMA anomalies may be caused by human errors in systems that record or transmit the RRMA score for a particular place.

The Alliance is familiar with both sorts of anomaly. As national manager of RAMUS the Alliance is ‘a power user’, as it were, of RRMA. Some of the specific anomalies have been causes celebres – often meaning that there have been Ministerials associated with them. The hypothetical cases might include the following:

“**When I was born there we had an outside toilet and the road to Hobart was dirt.**”

“My dad was a dairy farmer so we can’t have been a 2.”

“When the base data were collected in 1991 there were two GPs in town; now there are none.”

“Even though it is only 100 kms from Perth we have no town water, no town sewerage and in fact very little town!”

Apart from its inherent attraction to students of geography, the challenge of classifying Australian places by size and density, remoteness, or ‘liveability’ was of
little interest or importance until it became the basis of policies that allocated benefit – usually money.

Today RRMA is used for determining the eligibility requirements for several Australian Government programs for medical students and practitioners, including the Rural Australian Medical Undergraduate Scholarship (RAMUS) Program administered by the NRHA. Some of these programs are listed in the Table below:

### Programs in which eligibility is determined by RRMA

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Eligibility criteria</th>
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<tbody>
<tr>
<td>Rural Australian Medical Undergraduate Scholarship (RAMUS) Program</td>
<td>RRMA 3-7</td>
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<tr>
<td>Medical Rural Bonded Scholarships</td>
<td>RRMA 3-7 (specialists)</td>
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<td>RRMA 4-7 (GPs)</td>
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<td>District of Workforce Shortage</td>
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<td>HECS Reimbursement Scheme</td>
<td>RRMA 3-7</td>
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<tr>
<td>Practice Incentive Program (PIP)</td>
<td>RRMA 3-7</td>
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<td>• Rural loading</td>
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<tr>
<td>• Practice Nurse Incentive</td>
<td>RRMA 3-7</td>
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<tr>
<td>Rural Other Medical Practitioner Program (ROMPP)</td>
<td>RRMA 4-7</td>
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<tr>
<td>Rural Locum Relief Program (RLRP)</td>
<td>RRMA 4-7</td>
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<tr>
<td>Relocation Subsidy Grants for Permanent Resident OTDs</td>
<td>RRMA 3-7</td>
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<tr>
<td>Workforce Support for Rural General Practitioners (WSRGP) Program</td>
<td>RRMA 4-7</td>
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All of the so-called anomalies illustrated by the synthetic quotations above could be fixed by a combination of public information, an appeals process and an update of the data on which the classification is based. They do not represent a case for abandoning RRMA.

### Proposals for RRMA

**For the immediate future**, the National Rural Health Alliance supports the retention and updating of RRMA as a measure of remoteness, not its abolition. In their existing forms, the Alliance believes that RRMA is preferable to ARIA and the ASGC Remoteness Areas Index. It is relatively simple and uses everyday terms.

RRMA needs to be updated, and to be based on 2001 census data and a revised list of places.

Administration of the Rural and Remote Health Professions Scholarship Scheme (for practising ‘allied health’ professionals) uses ASGC Remoteness because universities in Hobart and Darwin (RRMA 1) do not have any Schools teaching the classical ‘allied health’ disciplines. However, for administration of this Scheme a special category had to be created comprised of ‘Inner Regional’ less all suburbs listed as ‘Outer Metropolitan’ in the Government’s Outer Metropolitan Area programs.
RRMA is not (nor is intended to be) a measure of health status or of access to health care. There is a need for indices of both of these. There is also the need to give greater weight to population size and the Alliance is suggesting a separate index of this.

Changes to RRMA will make it harder to undertake time series analysis of programs based until the change on RRMA-I. It will be important to prepare for concordance tables so that analyses can be undertaken in future.

Programs using RRMA (or indeed other systems) should have processes of open disclosure on the classification method and for appeals. Information on actual RRMA scores should continue to be freely and publicly available, including on-line.

**Four other indices**

In the medium term the Alliance would like to see the development and application of five indices: an updated RRMA to reflect relative remoteness (ie distance from other places) and four others. The other four would be:

- a measure of town population size; this would often be used in conjunction with the measure of remoteness, as is the case currently with both ARIA and RRMA;
- measures of the ratio of particular health professionals to the need for their service; there would be one for each major health professional grouping;
- a measure of the community’s access to health care eg the proposed National Index of Access to Health Care; and
- a measure of health need, probably based on the ABS’s Socio-Economic Indexes for Areas (SEIFA).²

These four would be used separately or augment RRMA and be used in combination with it when that was useful. The augmentation could be weighted, with more or less emphasis being given to one or more of the four extra criteria according to the specific purpose for which the augmented RRMA is being used. For example, more weight could be given to SEIFA disadvantage for programs concerning the allocation of public health resources related to poverty and nutrition. A program targeting a student’s rural origin would place more weight on geographical analysis, while another targeting a lack of medical practitioners would place more emphasis on workforce analysis.

There is further work to be done on these four and the Alliance would like to be

² The ABS’s Socio-Economic Indexes for Areas (SEIFA) for 2001 contains four indexes: an Index of Advantage/Disadvantage (which takes into account variables relating to income, education, occupation, wealth and living conditions); an Index of Disadvantage (which is derived from attributes such as income, educational attainment, unemployment, and dwellings without motor vehicles and focuses on low income earners, relatively lower educational attainment and high unemployment); an Index of Economic Resources (income, expenditure and assets of families, such as family income, rent paid, mortgage repayments, and dwelling size); and an Index of Education and Occupation.
involved in it. A number of principles should apply to the factors of which the indices are comprised:

- the factors included should be applicable across all metropolitan, rural and remote areas and have the capacity to apply to small areas;
- the factors should be based on readily available national collections that are reliable, of good quality and regularly updated;
- the choice of geographical unit should enable the measurement of small area differences, without violating confidentiality requirements; and
- they should be sufficiently stable for longitudinal assessment of policy effects through time-series analysis.

**Notions of ‘rurality’ and ‘remoteness’**

Much discussion has been generated over the years by what is meant by ‘rurality’ and ‘remoteness’, how the two differ, and how both differ from ‘metropolitan-ness’ (the characteristics of metropolitan areas). For obvious reasons the Alliance is very interested in these questions, including because some of its Member Bodies and individual correspondents feel that remote (as distinct from rural) interests often “miss out”. More than two million Australians live in population ‘clusters’ of less than 200 people.

The five indices postulated (remoteness, population size, access to health professionals, access to health services, and health status) would appear to have all that is required to develop a composite index of health-related status. Such an aggregated index would have considerable policy value.

But it would not be an indicator of rurality or remoteness. These are spatial notions. Remoteness (of a family, community) is determined by distance from others. For a community, distance determines size; people and firms choose not to be distant from others and so do not settle there. Distance and size become the key characteristic of a place, and they have major consequences for other variables. There is poor access to health professionals and health services in general; there follows a tendency for late or no diagnosis, poor survival rates, more serious sequelae from a given rate of morbidity.

In Australia the spatial factors (distance and size) are compounded by two others: those relating to culture and the economic base. Some Aboriginal peoples and Torres Strait Islanders have traditional attachments to places that are isolated and remote, and want to live there despite remoteness. Some economic activity has to be in places that are – or would otherwise be – remote. This means that the remote areas include a significant proportion of Aboriginal people and Torres Strait Islanders, and a significant proportion of people working in mining, fishing and forestry. Some of the cultural and historical features of Australia’s Indigenous people mitigate against good health; and mining, fishing and forestry are the nation’s most dangerous industries.

Added together all of these things mean that health outcomes are poorer in rural and remote areas. But poor access to health professionals and health services is not a defining characteristic of remote areas; it cannot be, because people who have low income, or no private transport, or who live in a town where the doctor’s list is closed, or who do not speak English and do not know what an OT does, also have poor
Neither is poor health a determining factor of rurality or remoteness. It cannot be, because poor suburbs in western Sydney have poor health. But, in aggregate, poor health is a consequence of remoteness.

In terms of access to health facilities and health professionals, there is a hierarchy of places from those that have no local health professional services at all, (eg a station in north central western Australia where no one possesses any health training; a new suburb in a growing coastal city), to a tertiary hospital which has the biggest range of professionals and equipment available in Australia. All of the latter are in major cities. RRMA may have done a fair job historically at reflecting this hierarchy but more direct measures are now possible.

A clear distinction should therefore be drawn, especially where the interest is in cause and effect, between the fact that people in rural and remote areas have poor health, and any suggestion that poor health or poor access is a determining factor of rurality or remoteness.

Qualitative characteristics of particular localities are also significant. It would in theory be useful to include in an index of ‘health-related status’ measures of such things as community relationships and resources, environmental ‘attractiveness’ or ‘liveability’, as well as attitudes and characteristics of individuals such as stoicism, independence, self-sufficiency and resourcefulness. These do not merely describe people and their communities, but are also identifiable health risk factors.

** RRMA’s advantages over other spatial measures **

The current RRMA has a number of advantages over ARIA and the ASGC Remoteness Areas classification:

** RRMA is relatively user-friendly:** it uses familiar words that connote the sort of place involved. ‘Capital city’, ‘other metropolitan areas’, ‘rural’ and ‘remote’ centres are terms to which people can relate. In particular, they are better than the absurd-sounding “Inner Regional” in the ASGC Remoteness Areas index, that covers a multitude of sins.

** RRMA uses simple rounded population sizes –** 5,000, 10,000, 25,000 and 100,000, whereas ASGC uses ARIA scores such as 10.43.

** RRMA has seven classes,** which is still manageable but which provides greater scope for reflecting the great diversity of rural, regional and remote areas than a five- or six-point scale. (“In rural and remote Australia, when you

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3 It may be useful to distinguish two sorts of poor access: one, due to there being none available locally and no other means (eg videoconference); and where they are locally available but access is denied by economic, social or cultural barriers.

4 And if it had more points on the scale it could reflect the differences between Hobart and Sydney; see page 12.

5 See above for reference to the lengths to which administration of the ARRHPSS had to go. The SLAs of Hobart, Deniliquin and Crookwell are all classified ‘Inner Regional’!
have seen one community - you have seen one community.

Limiting factors of the ASGC Remoteness Classification noted by the AIHW include:

- some of the population living in geographically large SLAs can live in areas that are substantially more (or less) remote than the ‘official’ level of remoteness allocated to those SLAs; and
- it does not take account of levels of car ownership (some population groups may not have access to road transport, private or public) and road quality/conditions.

ARIA scores are the building blocks for the ASGC Remoteness areas index and those scores are often anomalous. Urana (population 1,200), Wellington and Dubbo – a hierarchy of places in central-southern NSW - have an identical ARIA score.
Attachment 1

Specific comments on the Department’s Discussion Paper

Perhaps because of the political brief given, the premise for the Discussion Paper is that a single new measure will be developed that will incorporate “measures relating to workforce shortage and the health and wellbeing of a region”. (p.3) The next paragraph says that the “purpose of this review is to develop a measure of access to health services”, but this is not what RRMA is for. As the Discussion Paper says (page 8) one of the other challenges is to determine “the best way to develop a workforce supply measure”, but the Alliance’s view is that it is not necessary “to build this into a new classification system”, only for there to be the capacity to use them in conjunction with each other when necessary.

While it is true that “RRMA has long been used as a proxy for access”, it is not reasonable for RRMA to be used also as a proxy for health status or workforce shortages. The idea that “geography, workforce supply and health and wellbeing – are key factors that influence levels of access” is confusing. Geography influences the level of access; workforce supply is a measure of access; and both of them in turn influence health and well-being. The relationship between the three factors and access is in no way equivalent.

The next paragraph on page three includes the surprising and circular argument that hypothetical region 1 has a workforce supply problem “that stems from its difficulty attracting doctors”.

RRMA is criticised on page four on the grounds that proximity to an urban centre will have changed since 1994 because some areas have expanded. It is worth noting that where the ‘accuracy’ of a RRMA score has been eroded over time, the scores generated in 1991–1994 will be higher than they should be (not lower). In policy terms this means that, in its un-updated form, RRMA provides more generous scores on remoteness than should be the case. An update of RRMA scores would therefore result in some who are currently eligible becoming ineligible.

It is harsh to suggest that “one of the major problems with the RRMA classification is that it has not been officially updated to reflect the needs and characteristics of areas”. Updating RRMA will only change the things that it properly measures: the size of a place and its straight-line distance to other places, which may have changed if those other places have expanded. An update could never reflect changes in the health needs or characteristics of a particular place.

The extent to which parts of a particular SLA are “heterogenous in terms of remoteness” is paltry compared with the heterogeneity of health and access among individuals and families within it, as determined by their socio-economic status, access to a private motor vehicle, employment situation etc.

The reference to “an affluent coastal area with many doctors and a generally ‘healthy’ population” on page four is a clear example of the reason for not using RRMA as a
proxy for factors other than relative remoteness. And it also reminds us that remoteness is not the same as the absence of services.

Consideration of the uses and abuses of RRMA raises a number of conceptual issues about remoteness. The idea that Hobart and Darwin are “more remote than the other capital cities” (a view shared by many of the Alliance’s correspondents) is so curious as to be explicable only by reference to misuse of the word ‘remote’. If the phrase relating to Hobart and Darwin has any meaning in relation to remoteness (ie “far distant in space” – the Macquarie), it must mean that they are distant from even larger cities. Apart from being inappropriately Melbourne- and Sydney-centric, this would also logically lead to other selective uses of the term ‘remote’. What follows, for instance, are constructs such as “Sydney is remote from Geraldton” and “Melbourne is remote from Cairns”. This is not a useful path to follow.

There is further treatment of the notion of rurality or remoteness above on pages 8-9.