The Australian Urban - Rural Dichotomy and Its Impact on the Delivery of Indigenous Health Services

[The writer briefly examines the geographical disposition of the urban rural indigenous populations and identifies and discusses the differing health profiles between rural and urban communities impacting the effective delivery of health services to the Australian indigenous population.]

The 'Australian Bureau of Statistics' (ABS) expands on the standard differences between urban and rural areas and the population therein by sub-dividing both 'urban' and 'rural 'as per the table below.

For the purposes of this paper, we will select the 'Major Cities' category as representing 'urban 'and, the 'remote' and 'very remote 'to represent the rural category. Given that the figures stated in the table below were published by the ABS in 2018, it should be acknowledged that there may have been some changes in the percentage's distributions over the last three years, but generally speaking, the below figures provide us with a fairly accurate overview of the urban -rural population divide. Thus, the urban -rural percentage divide is rather revealing when examined in terms of indigenous and non -indigenous distributions. Major cities retain only one point seven (%1.7) per cent of the indigenous population while ninety -eight percent (%98) of the major cities are inhabited by non-indigenous populations. Conversely, sixty-five (%65) of the indigenous population occupy ether the remote or very remote areas. While the percentages of non-indigenous populations in these two areas are at a higher per cent, eighty-two per cent (%82) and fifty -three percent (%53) respectively, it has to be remembered that the indigenous population in Australia is currently estimated to be seven hundred and forty-five thousand (745,000) individuals or just 3 per cent of the total population as of 11 May 2020 '.

Tale 1:
Proporation of people in each remoteness areas that are: indigenous Australians and non-Indigenous,2016

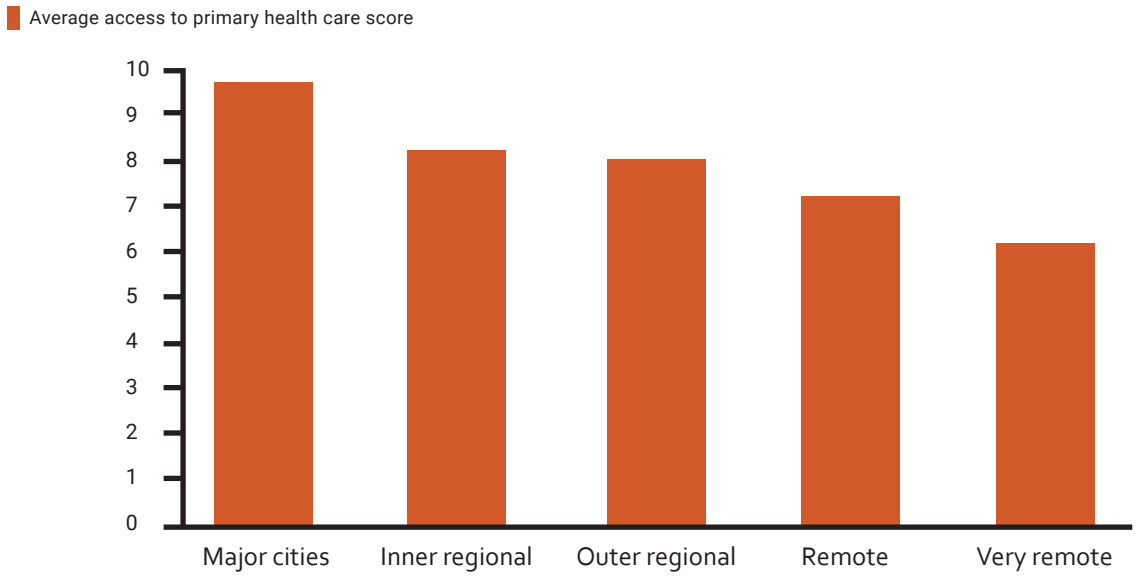
	Major cities	Inner regional	Outer regional	Remote	Very remote
Indigenous	1.7%	4.4%	7.9%	18%	47%
Non-Indigenous	98%	96%	92%	82%	53%
Total	100%	100%	100%	100%	100%

Source: ABS 2018b.

The ABS further expands on the differences in population numbers vis-à-vis urban and rural as follows:

SOS Identifiers and Names		
Identifier	**Name**	**Defenition**
0	Major Urban	Major Urban represents a combination of all Urban Centres with a population of 100,000 or more
1	Other Urban	Other Urban represents a combination of all Urban Centers with a population between 1,000 and 99,999
2	Bounded Locality	Bounded Localities represents a combination off all Bounded Localities Rural Balance
3	Rural Balance	Rural Balance represents the Reminder of State/Territory

The Australian Institute of Health & Welfare (AIHW) points out that 'Australians living in remote or very remote areas have, on average, higher rates of risky health behaviours such as smoking, poorer access to health services, and worse health than people living in regional or metropolitan areas[1] ' The AIHW further states that 'there is a strong association between socioeconomic status and health—the lower someone's socioeconomic status, the worse their health is likely to be' [2] As for accessing health services by such groups in those remote communities the following graph reveals a startling picture of primary health care scores in 2011. As can be seen the urban centres significantly outperform the remote and very remote rural populations.



Source: AIHW for the corning
Access to health services provided by GPs by remoteness area, total population, Australia, 2011

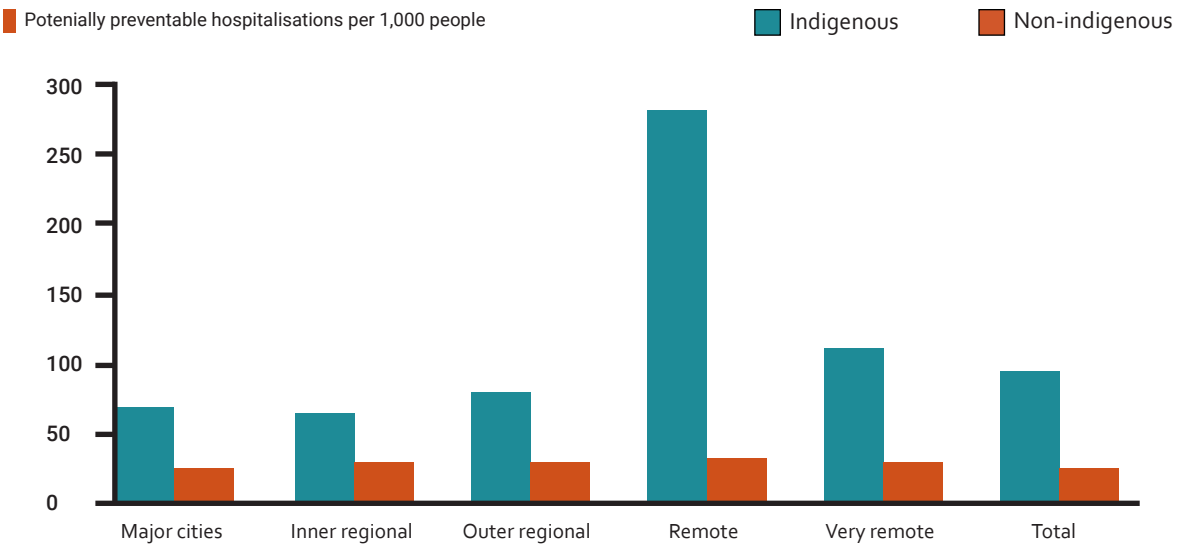
However, when looking at 'hospitalisations' in the urban and rural indigenous communities there is a clear differentiation between the types of conditions which may well influence the primary health score as displayed above.

1. AIHW 2012
2. AIHW 2014 Australia's health 2014. Australia's health series no. 14. Cat. no. AUS 178. Canberra: AIHW.

The table below provides a comparison of the urban-rural conditions presenting for hospitalisation:

Urban	Rural
A higher rate of ■ Mental & Behavioural disorders' ■ Cancer ■ Diseases of the nervous system ■ Congenital anomalies **compared to rural indigenous communities**	**A higher rate of** ■ Injuries ■ Infectious diseases ■ Dialysis ■ Respiratory illnesses ■ Circulatory conditions ■ Skin-related conditions **compared to urban indigenous communities**

One of the central issues regarding the indigenous hospitalisations rates, especially, when examining them in comparison with their non-indigenous counterparts' is the 'lack of access to, or use of, primary care services', resulting in 'admissions for potentially preventable conditions reflect[ing] hospitalisations that might have been prevented through the timely and appropriate provision and use of primary care' [3] The following graph clearly illustrates, not only the number so preventable hospitalisations, but also the pre-dominance of rural admissions.



Note: These rates are calculated using the 2011 Estimated Resident Population (ERP) by remoteness, and thus differ from previously published hospitalisation rates using the 2006 ERP by remoteness applied to population projections from the 2006 Census of Population and Housing.

Age – standardised hospitalisation rates for potentially preventable conditions by Indigenous status and remoteness, July -2010June 2012

3. Ibid, page 8

But let's not get caught up too much on the accuracy of the data presented by researchers. In terms of the Australian indigenous peoples, many residing 'in remote and rural Australia are frequently between places' [4]. Memmott, Long, Bell, Taylor and Brown compiled a list of observed reasons why such indigenous mobility occurs thereby resulting in either skewed or data duplication.

THEY ARE AS FOLLOWS:

People might be found

- Walking between the household of one relative and that of another;
- Leaving the house, they shared with other relatives and moving into another house within the same community, after living in a regional centre for a while.
- Ploughing through bull dust on a bush track on their journey to join relatives on an outstation.
- Travelling off road to a story place or in search of bush foods.
- In the early morning cruising along a highway in a community bus to a town such as Mt Isa to use health services or to participate in a regional sporting event; t
- In a dinghy during the middle of the dry season following a dugong or turtle, or at Christmas time travelling to an Island community to attend a tombstone opening.
- In a light plane travelling to a community or regional centre to attend a 'law' meeting.
- Slowing down for a cattle grid as they return to work on a station after a weekend with family and friends in their home town.
- Travelling to a place of incarceration or flying to a major city for specialist medical treatment.
- In one place travelling to other places in their thoughts and the words of narratives and songs.

Moreover, there is then an obvious link between this mobility bias by the indigenous population and both the availability and continuity of medical services. Therefore, it follows, that 'more data will allow services and policies to respond more accurately to the lifestyle and aspirations of the communities to which they are targeted.[5] (Young & Doohan 220-1989:200.). When investigating aboriginal mobility, it needs to be noted that there are 'a range of 'un-official settlements', or places where people reside for periods of time' [6]

4. Between places: Indigenous mobility in remote and rural Australia authored by Paul Memmott, Stephen Long, Martin Bell, John Taylor and Dominic Brown for the Australian Housing and Urban Research Institute Queensland Research Centre Aboriginal Environments Research Centre, and Queensland Centre for Population Research, University of Queensland November 2004
5. Young & Doohan 220-1989:200.)
6. Ibid page 10

The continuing issue of the disparity between urban and rural medical services is also reflected in an observed tendency for already mobile indigenous populations to congregate at those urbanised centres where medical services are readily available. Memmott, long. Bell, Taylor and Brown point out that 'the physical separation of population from major services across remote Australia generates substantial population mobility ' [7] As a result of this mobility research revealed that many service centres provide support to such mobile communities; such communities' comprising fairly significant numbers. The table below reveals the numbers of indigenous communities linked to existing urbanised services centres.

Service Center	Communities Serviced	Service Centre	Population serviced
Alice Springs	259	Alice Springs	15,112
Broome	61	Darwin	7,963
Kathereine	50	Kathereine	7,254
Kununurra	42	Thursday Island	6,674
Maningrida	39	Nhulunbuy	4,426
Nhulunbuy	32	Mount Isa	3,803
Halls Creek	30	Cairns	2,910
Darwin	28	Broome	2,777
Tennant Creek	27	Weipa	2,227
Derby	26	Cooktown	1,894
Fitzroy Crossing	26	Halls Creek	1,863
Galwinku	26	Kununurra	1,720
Borroloola	22	Derby	1,676
Gununa	22	Fitzroy Crossing	1,452
Docker River	18	Tennant Creek	1,428
Port Keats	17	Jabiru	1,299
Thursday Island	16	Bambaga	1,187
Mount Isa	14	Alyangula	998
Cairns	13	Bambaga	962
Port Hedland	13	Maningrida	795
Jabiru	12	Ceduna	752
Kunbarllanjnja	12	Yulara	678

Source: ABS 1999 CHINS CURF, and reproduced from Taylor 2002.

7. Between places: Indigenous mobility in remote and rural Australia authored by Paul Memmott, Stephen Long, Martin Bell, John Taylor and Dominic Brown

The map clearly indicates the major role played by Alice Springs in servicing large areas of central Australia. In all, 259 communities nominate Alice Springs as their primary source of a range of services (inclusive of medical), and this encompasses a population of some fifteen thousand (15,000). In the North, Darwin and Katherine are clearly identified as major centres for the provision of medical services to mobile indigenous communities. Similarly, Thursday Island, Broome and Nhulunbuy. A set of smaller services centres also emerge and are represented by 'Mt Isa, Cairns, Cooktown, Weipa and Bamaga in Queensland; Tennant Creek, Jabiru, Maningrida and Yulara in the Northern Territory; and Derby, Halls Creek, Fitzroy Crossing and Kununurra in Western Australia ' [8] It should also be pointed out that 'a significant pattern of movement was the pattern of trans-continental Aboriginal and Torres Strait Islander travel associated with a lively system of trade'[9] . It is also crucial to emphasize that indigenous people are also driven by kinship. As is stated 'the great driving force of Indigenous mobility (including the 'walkabout') in remote Australia is kinship'. [10]

In terms of accessibility to these services centres by indigenous communities it is unsurprising that there is relationship between 'accessibility' and 'population growth ', a fact which Haberkorn tabulated in a paper in 1999.

Level of accessibility	Rate of population growth 1991 - 96	Population density (pesrsons per km²)
Highly accessible	6,2	77,2
Accessible	5.1	4.1
Moderately accessible	3.6	1.0
Remote	1.2	0.2
Very remote	2.9	0.0
Total Austrailia	5.8	2.3

Source: Haberkorn et al. (1999:105).

As the table clearly shows there is a high correlation between a centre earmarked as 'Highly Accessible' and a resulting high population density of seventy-seven point two (77.2) persons per square kilometre. Conversely, a 'very remote' level of accessibility results in a zero-population density number.

Now let us look at...

these Australian rural communities and attempt to determine the differentiation from their urban counterparts, both in terms of medical services accessibility but also the underpinning values and belief systems common among such rural populations. It should come as no surprise to any Australian, both indigenous and non-indigenous, that the rural 'ideology embraces dogma which views farming as a noble endeavour because those engaged in such business are hardworking, are characteristically persevering and they epitomize the Australian image of family. ' And that this ideology is 'embraced by rural communities, politicians and other Australians and has traditionally been linked to the myth that living in the country equates with a healthy lifestyle'[11] The irony, of course, is that, as far as the indigenous communities are concerned such a 'healthy lifestyle' clearly does not exist.

8. Ibid
9. Ibid
10. Ibid
11. Health and Health Practice In Rural Australia: Where Are We, Where To From Here? Karen Francis, PhD, RN page 28

Before examining some of the more widespread disease presentations in the rural indigenous communities' let us firstly acknowledge that, without appropriate rural-based medical personnel, neither prevention nor treatment can occur.

So, while it has been demonstrated that rural indigenous communities are clearly disadvantaged by virtue of their remoteness from higher density population centres and their resultant higher level of medical personnel, let's examine the actual composition of rural medical personnel and, consequently, the implications for the delivery of effective health services to the remote indigenous communities'. The rural health workforce includes 'nurses (%65 of the total health workforce), medical doctors, indigenous health workers, allied health staff, pharmacists and others ' [12] . However, the actual availability of acceptable medical services, specifically in terms of medical doctors is a different story. Best acknowledges 'that the shortage of rural doctors has been a government priority for many years '.[13]

Many of the common reasons for the reluctance of doctors to practice in rural communities are as follows:

- **family education**
- **housing**
- **resourcing needs**

The commonality of requirements between doctors and other health professionals in respect of issues and support structures 'are similar to those reported by nursing and allied health professionals '.[14]

So, what is happening to address these issues?

Australian governments, Federal, State and Territorial, have been forced to focus on these issues and their first ports of call have been to overhaul the medical curricula in the universities' operating within their various jurisdictions'. As a result of these initiatives' there is emerging evidence that 'indicates that students who are recruited from rural communities and educated in rural universities are more likely to practice in the bush after graduation' [15]. Still, it has to be admitted that the continuing requests for continuing professional development remains a major factor in the low medical recruitment rates in rural areas. The issue of professional isolation is reported 'as a key factor impacting on health professionals› decisions to work and/or stay in rural practice' [16].

12. Ibid page 28
13. Best, J. (2000). Rural health stock take. Commonwealth Department of Health and Aged Care, Canberra
14. Op. Cit. Karen Francis page 30
15. Dunbabin, J.S. & Levitt, L. (2003). Rural origin and rural medical exposure: Their impact on the rural and remote medical workforce in Australia. Rural and Remote Health, 3. Retrieved August 13 ,2005
16. Wilkinson, D., & Blue I. (Eds.). (2002). The new rural health. South Melbourne: Oxford University Press.

However, the Australian Government has introduced a number of schemes in an attempt to address this continuing need for professional development **as follows:**

Scholarship Programmes	▪ John Flynn Medical Scholarship Scheme, ▪ Rural Australian Medical Undergraduate Scheme (RAMUS), t ▪ Undergraduate and Postgraduate Rural and Remote Nurses Scholarship Scheme (CURRNS) and the ▪ Undergraduate Allied Health Scholarship Scheme (CRRAHS).
University Initiatives'	▪ University Departments of Rural Health
Rural Nursing	▪ Association for Australian Rural Nurses (AARN), ▪ Council Remote Area Nurses Australia (CRANA) ▪ Council of Aboriginal and Torres Strait Islander Nurses (CATSIN
Doctors	▪ Rural Doctors Association of Australia (RDAA), ▪ Australian College of Rural and Remote Medicine (ACRRM),
Professional Oversight	▪ Services for Australian Rural and Remote Allied Health (SARRAH).
Specialised Medicare Support	▪ rebates for practice and nurse-initiated interventions, ▪ incentive programs have been made available to support general ▪ medical practice development in rural areas.

Source Health and Health Practice In Rural Australia: Where Are We, Where To From Here? Karen Francis, PhD, RN

Current models of rural health service provision include:

multi-purpose centres', regional health services general practice, nurse practice models, case management, outreach arrangements, e.g., mobile services (Royal Flying Doctor Service 'RFDS'), visiting medical specialists, and oral health services. The success of each of these existing models vary considerably according to both the geographical context in which they are implemented and to the degree of resources allocated to each implementation strategy. But it has to be recognised that the aforementioned models / initiatives are not the total solution. As Francis points out the 'popular portrayal of rural communities as crippled by adversity ... reduce the potential for these communities to attract and retain health professionals ' [17] It bears mentioning that even when placements do occur in rural areas, whether it be in the medical, government, or private sectors, attrition rates are not very promising: ' turnover rates in the public sector are %42 within a two year period ; annual rural exit rates of almost %29 compared to %19 in urban centre ; and an average ' length in rural [medical] practice of 18-13 months' [18] Ian Falk (University of Tasmania) devotes significant research into the current and emerging challenges facing rural and regional Australia[19] Falk identifies and elaborates upon key challenges facing rural communities reminding us that ' in order to manage change in the complex environment of a living, dynamic community, it is first of all essential to understand those dynamics [and] the relationship between the local behaviour and the broader national and international socioeconomic scenarios'[20] . Globalisation' is certainly a factor when examining the connectivity of rural communities. But such connectivity can come at a cost; in other words, there must be a 'balance' between the connection to community and the acceptance and influence of external inputs via the internet and other platforms therein.

17. Op. Cit. Karen Francis page 34
18. Recruiting and Retaining Allied health Professionals in Rural Australia; Why is it so difficult? Struber Cape York Health Service District Queensland Health page 2
19. Challenges Facing Rural Regional Australia In New Times Ian Falk-Chapter 1
20. Ibid page 6

As Falk points out,' the challenge for regions and communities is to balance the need for external information and influences with the need for a sense of place -the need for individual and group identity in a community-of-common-purpose '[21] The case of what is referred to as 'urban drift' continues to be an influencing factor on both the stability and cohesion of rural communities. This observed nearly all-pervasive preference (especially among the rural youth) for ease of access to work, medical services, and further education and training, has led to the observed occurrence of 'rural poverty [which] remains an unrecognised and un-talked about phenomenon' [22]

Although education and its access (from primary through to tertiary) continues to be a common concern among both urban and rural communities' the rural context suffers from a number of constraints'. Due to the centralised nature of educational planning, administration, and curriculum oversight, the specific needs of rural communities' (especially that of indigenous communities') are often not factored into either the planning or curriculum development process. As is pointed out, 'even when resources are managed out of regional offices, these offices usually reflect a high level of centralist policy and practices.'[23] Even when the re-occurring discussion of the nation's literacy and numeracy needs, the rural context is not adequately addressed; in fact it would appear to be ignored (on the whole).

WHAT HAS BEEN SUGGESTED IS THAT 'SCHOOLS ...

work closely with their regions and communities to help achieve common goals'[24] -not only regarding the basics of numeracy and literacy but also a close examination of the specific needs (both educationally and in training) of rural communities. A corollary to this brief look at education and training in the rural communities is the observation that having a job must equate to paid work and that anything else is unacceptable – especially in the economic context of the nation -duly emphasised in urban environments with their focus on industry and commerce. The point being made refers to the observation that 'contributions to community of many kinds are equally as valued and rewarded as paid work '[25] However, it has to be admitted that the spectre of 'unemployment' predominates within rural communities. This of course refers to 'paid work' as it is this sector which drives all our economic measurements which, in turn, ultimately lead to both policy and planning considerations' in both the urban and rural sectors -again, with an observed emphasis on the urban sector.

21. Ibid, page 7
22. Ibid page 7
23. Ibid page 7
24. Ibid page 8
25. Ibid page 9

The indigenous rural communities are regularly bombarded with changes, both legal and social, to traditional institutions' such as family, marriage, and gender. Words or terms also take on enhanced meanings. The term 'environment' has taken on a whole taxonomy of terms and areas. What the writer is supporting is that, especially in terms of rural communities', 'consensus about meanings often must be achieved before rational discussion or planning can occur.'[26] (particularly relevant to rural indigenous communities).

So, in terms of our rural indigenous communities'

what can be done?

Well, there is the proverbial 'light at the end of the tunnel'.

The 'The National Strategic Framework for Rural and Remote Health 'was developed through collaboration between the Commonwealth, and States and the Northern Territory governments by the Rural Health Standing Committee. It presented a national strategic vision for health care for Australians living in regional, rural and remote areas. Falling out of this crucial document have been a range of policies, initiatives', and programmes, to address the previously identified areas of rural communities' concern (inclusive of rural indigenous communities) . Their stated vision is worthy of note as it addresses, up front, the myth that rural and remote Australian are not as healthy as other Australians. Instead, by listing the following goals, it clearly addresses the shortfalls in health provision to the rural communities, thereby dispelling, one would hope, that urban-based health services are in anyway superior to their rural counterparts.

The stated goals are as follows:

Rural and remote communities will have:

1. Improved access to appropriate and comprehensive health care
2. Effective, appropriate and sustainable health care service delivery
3. An appropriate, skilled and well-supported health workforce
4. Collaborative health service planning and policy development
5. Strong leadership, governance, transparency and accountability.[27]

Based on these goals a range of policies and programmes, across all jurisdictions', have been and are currently being implemented focused in five pre-identified outcome areas: The Framework addresses each goal under five outcome areas.

THESE ARE:

Outcome area 1: Access
Outcome area 2: Service models and models of care
Outcome area 3: Health workforce
Outcome area 4: Collaborative partnerships and planning at the local level
Outcome area 5: Strong leadership, governance, transparency and performance.

In conclusion, while conceding that there is a fair way to travel in the equitable provision of medical services to our rural communities, there are currently a range of programmes and initiatives in place which are being regularly assessed in terms of the framework's intended outcomes as listed above. These outcomes will be explored in a future paper published.by this Institute.

26. Ibid page 10
27. National Strategic Framework for Rural and Remote Health page 7

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