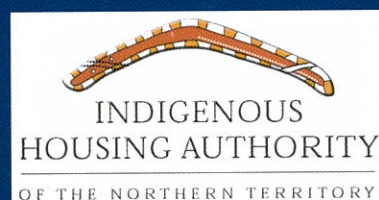


Proposed Health Service Zones

Health-Related Housing and Infrastructure in Northern Territory Aboriginal Communities



Ben Hoffmann & Ross Bailie



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The ideas and opinions presented in this research report are the authors' own, and do not necessarily reflect the ideas and opinions of the CRCATH, its board, executive committee or other stakeholders.

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Executive Summary

The establishment of proposed health zones for the planning and delivery of primary health care services is a significant development in primary health care reform in the Northern Territory, and one that has implications for the rest of Australia. This report presents a detailed analysis of a related component of primary health care – health-related community infrastructure. The data used is from the second CHINS (collected in 1999) data set for managed communities with a population of 50 or more in the Northern Territory. Analyses were conducted only for key CHINS variables that had health implications for community inhabitants. Response options of each variable were categorised (where possible) according to health risk. Results were summarised at the Territory, and proposed Health zone levels, with some reference to community level data where appropriate. It is expected that this report will make a useful contribution to the equitable planning and development of health-related infrastructure for the health zones.

General community details

Data were analysed for 131 communities, with a summed stable population of 39938 (Aboriginal and non-aboriginal people). This represented just over 19% of all communities in the NT, and just under 82% of the population living within discrete Aboriginal communities within the NT.

Water

Bore water was the most common main source of drinking water in large communities throughout the NT, being used in 71% of communities and by 85% of the population of these communities. North East Arnhem had the greatest number of people utilising bore water of all the zones (14% of the NT total). Six zones had all communities primarily utilising bore water. Six communities contained a summed total of 24 permanent dwellings that were not reticulated. Thirty four communities with a combined sum of 35% of the population experienced water restrictions in the 12 months prior to the survey. Six zones containing 34 communities had no communities affected by water restrictions. Just over 41% of all large communities experienced water restrictions four or more times in the 12 months prior to the survey. Most (52%) communities tested their water monthly using a variety of methods.

Electricity

The community of Baikal (population of 60) from Eastern Arnhem-Alyawarra was the only community that stated to not have electricity. Nine communities from six zones had a combined total of 44 permanent dwellings not connected to electricity. Eighty one percent of the communities experienced power interruptions in the 12 months prior to the survey. Twenty percent of all affected communities experienced 20 or more power interruptions. No zone was unaffected by power interruptions.

Sewerage

The community of Baikal was the only community with permanent dwellings that stated to not have a sewerage system. Eight communities within five zones had a combined total of 44 permanent dwellings not connected to a sewerage system. Just over half (52%) of the communities experienced sewerage overflows or leakages in the year prior to the survey. Seven communities experienced 20 or more overflows or leakages. A total of 713 permanent dwellings on 57 communities were affected by overflows or leakages.

Dwellings

Most (69%) permanent dwellings required only minor or no repairs, with 9% requiring replacement. The zone of South East Arnhem required one quarter of its dwellings to be replaced. A total of 2253 people were living in temporary dwellings on 74 communities. The community of Wadeye had the greatest number of people living in temporary dwellings (704). Noteworthy zones include Katherine East, with all 13 large communities containing people living in temporary dwellings, North East

Arnhem (7 of 11 communities), and Alice Springs (13 of 17). Two zones, Tiwi and Western Arrente, had no communities with people living in temporary dwellings. A total of 1230 (25%) permanent dwellings on 79 communities were beside unsealed roads. The community of Maningrida had the most (106) permanent dwellings beside unsealed roads. Thirty seven communities had no permanent dwellings beside sealed roads.

Public phones

A total of 115 communities contained a summed total of 191 public telephones. Forty one (21%) of these public phones were not working. The community of Wadeye, with a population of 2200, had no working public telephones, and the community of Numbulwar (population of 1192) had no public telephones. The zone of Alice Springs had the least number of working phones (5) relative to the number of phones present (13), followed by Katherine West (7 of 13 phones working). By population, South East Arnhem residents were clearly most disadvantaged, with only one working phone per 1372 people.

Accessibility

Sixty communities were not accessible by road all year, affecting 22574 people or 57% of the total population. The three zones of Alyawarra-Anmatjere, Central Barkly and Northern Barkly had all communities accessible by road all year. The three zones of Katherine West, Luritja-Pintupi and Tiwi had all applicable communities not accessible by road all year. Nineteen communities had restricted air access, and a further 29 communities had no air access. Notably, nine of the ten communities in the Alyawarra-Anmatjere zone had no air access, affecting 585 people. By population, 61 percent of people had air access all year, 23 percent had restricted air access, and the remaining 16 percent had no air access within the community. Nine communities that did not have air access also had restricted road access. A further 13 communities that at restricted air access also had restricted road access.

Primary school

Most (61%) communities had a primary school located within the community. Only 10 communities were further than 10 km from a primary school. The community of Manyallaluk from Katherine East was the furthest from a primary school (between 50 and 99 km).

Hospital

Half of the communities were located further than 250 km from the nearest hospital. Only 25 communities were within 10 km of a hospital. Similarly, 56% of the population were further than 250 km from a hospital, and only 9% were within 10 km of a hospital. Most communities within most zones were further than 100 km from a hospital.

Health centre

Most (70%) communities had a health centre located within the community. Only 8% of the communities were further than 50 km from a health centre. By population, 91% of people had a health centre within their community, and only 4% were further than 50 km from the closest health centre. Four communities from the Eastern Arrente-Alyawarra and West Arnhem zones had to travel further than 100 km to the nearest health centre.

Access to health professionals and programs

The health professionals that communities had the most access to were: Male Indigenous health worker, Female Indigenous health worker, Nurse and Doctor. All remaining health workers were either poorly accessible or not accessible at all. The two communities of Yanyula from South East Top End and Amoonguna from Alice Springs had no access to any of the selected health workers. Specified health programs were conducted in most (82%) of the applicable communities. Nine communities did not conduct any health programs, whereas 63 communities conducted all of the programs. To some extent, the frequency of conduct of all health programs was consistent within a

community (i.e. either all programs were conducted frequently, or they were all conducted infrequently).

Ponding

Forty four communities were affected by ponding in the 12 months prior to the survey. Of the communities affected by ponding, most (52%) were affected only once, but nine communities experienced ponding five or more times. Thirty communities experienced flooding in the 12 months prior to the survey. Half of these affected communities experienced flooding only once, but six communities were flooded five or more times. A total of 150 permanent dwellings in 14 communities were affected by flooding. A total of 1045 people were estimated to have been affected by flooding.

Rubbish collection

A total of 87% of the communities had an organised rubbish collection service. Sixteen communities with a combined population of 1396 had no organised rubbish collection. All but the two communities of Wurankuwu from Tiwi and Watiyawana from Luritja-Pintupi with an organised rubbish collection collected rubbish from each dwelling. Rubbish was mostly (60% of communities) disposed of at an unfenced tip, except within the zones of Alice Springs, Central Barkly and Darwin who most commonly used a tip located outside of the community. The community of Baikal was the only community to burn rubbish.

1. Introduction

A process of establishing new primary health care services within an agreed number of proposed health zones is currently underway in the Northern Territory. This process is being overseen by the Northern Territory Aboriginal Health Forum (NTAHF), a body comprising representatives of the Aboriginal Medical Services Alliance of the Northern Territory (AMSANT), Territory Health Services (THS), the Office of Aboriginal and Torres Strait Islander Health (OATSIH), and the Aboriginal and Torres Strait Islander Commission (ATSIC).

The introduction of this system for the planning and delivery of primary health care services within a defined number of health zones follows a major new approach for funding Indigenous health - the Primary Health Care Access Program (PHCAP) - in the 1999/2000 Commonwealth budget. The PHCAP initiative is built on a planning process carried out between 1997-2000 that included an audit and review of primary care services and resources available to NT Indigenous communities¹.

The NTAHF reached agreement on a series of 21 area units (health zones) against which to map Indigenous populations, health resources and health services. It is expected that the zonal re-arrangements should lead to better resourcing of primary health care services and greater Aboriginal community control, and to better processes and ultimately to improved health outcomes. It should be noted that as processes develop, the precise boundaries of the health zones may be amended.

Community infrastructure (such as water quality, waste disposal, drainage, housing, and health facilities), is an essential requirement for improved health outcomes. Within Australia, the inadequacies of housing and health infrastructure for Indigenous people has been highlighted over the last two decades (Scott & Co. 1973, Nganampa Health 1987, Pholeros *et al.* 1993, Runcie & Bailie 2000), and this interest has been instrumental in determining housing priorities and policy (Gray 1992) that aim to improve general living conditions and the health of Indigenous Australians.

In 1989, the National Aboriginal Health Strategy (NAHS) Working Party made several recommendations for improving health infrastructure on Aboriginal communities (NAHS 1989). One initiative from these recommendations was the Community Housing and Infrastructure Needs Survey (CHINS). This survey was conducted by the Australian Bureau of Statistics (ABS) on behalf of, and with funding from, the Aboriginal and Torres Strait Islander Commission (ATSIC). The first survey (HINS) was conducted in 1992, and addressed the needs of Indigenous communities in remote and rural areas, and the housing needs of communities in urban settings, at a National level (ATSIC 1994, Jones 1994). A second survey (CHINS) was conducted in 1999, and collected information about housing, housing management and general infrastructure on Aboriginal communities throughout Australia. Results of this survey have (again) been collated and analysed at the National level (ABS 2000b).

The general aim of the CHINS was to assess community and housing related infrastructure to contribute to the process of planning future development in discrete Indigenous communities (ABS 2000b).

While it is referred to as a survey, the CHINS was a complete enumeration of Indigenous housing organisations and discrete Indigenous communities. For the purposes of this survey "discrete Indigenous communities" were defined as "a geographic location, bounded by physical or cadastral (legal) boundaries, and inhabited or intended to be inhabited predominantly by Indigenous people, with housing or infrastructure that is either owned or managed on a community basis" (ABS 2000a). It was recognised that the application of this definition involved a degree of subjectivity, and in cases of doubt the location was *included* as a community. Locations were not included as communities if they had no usual population at the time of the survey. The survey included communities in urban and sparsely settled areas in all States and Territories, but excluded Indigenous people living within urban areas outside of discrete Indigenous communities. This resulted in the exclusion of 11% (5871 people) of the Indigenous population of the NT (ABS & AIHW 2001).

¹ The 'Health zones' (Bartlett *et al.* 1997, Bartlett & Duncan 2000) have arisen from the Health Forum's joint planning process. There are 21 proposed zones.

In conducting the survey the ABS compiled a comprehensive list of all discrete communities, and a substantial effort was apparently made to ensure complete coverage. Data for the survey were collected through personal interviews with key members of communities who were knowledgeable about housing and infrastructure issues. Such people included community council chairpersons, administrators, coordinators, clerks, housing officers, water and essential services officers. Information about health services was generally collected from health service administrators. Interviews were conducted by trained interviewers. Extensive testing and validation was apparently undertaken to confirm the suitability of the methodology. Results from the validation indicated that aggregate data are fit for the purposes intended. However, for a number of communities some items were found to be associated with substantial reporting error. It was therefore advised that for the following items included in this atlas, reliance should not be placed on the data at a fine level of geographic detail: population, total dwellings owned or managed, condition of dwellings, and incidence of ponding.

This report follows two reports by Hoffmann and Bailie (2001a,b) which summarised the data in the 1999 CHINS data set, for the Northern Territory at the Territory, ATSIC region, and community levels. This report provides an analysis of the larger communities within the newly proposed 21 health service zones. While some community level results are provided, results at this level of analysis are to be found within relevant sections of Hoffmann & Bailie (2001b).

The information provided in this report should assist the evaluation and development of policies and programs that are designed to improve housing and infrastructure for Indigenous Australians living in the defined health zones.