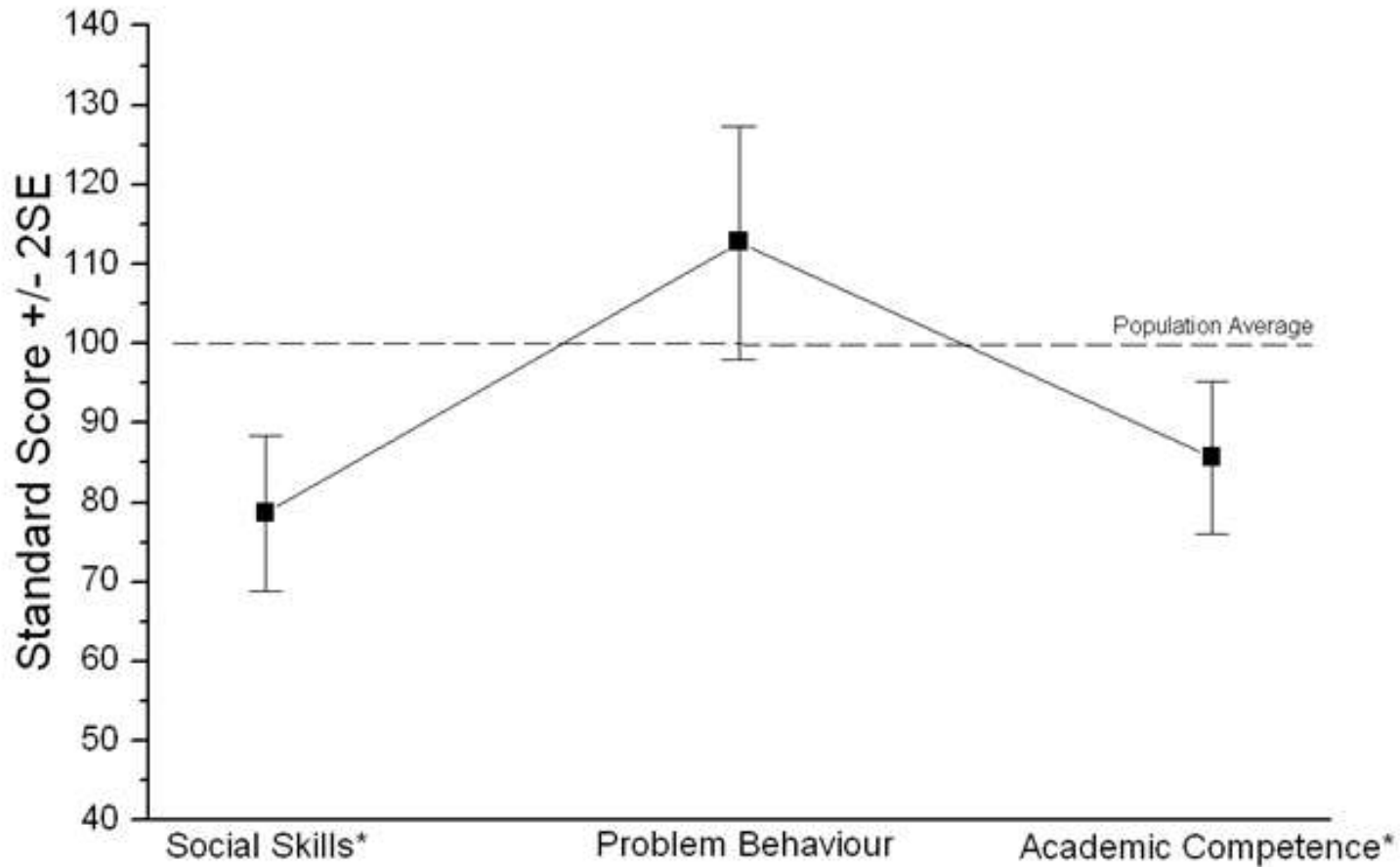


Cardiovascular health, social determinants of health, and non-metropolitan populations



Remote area school education



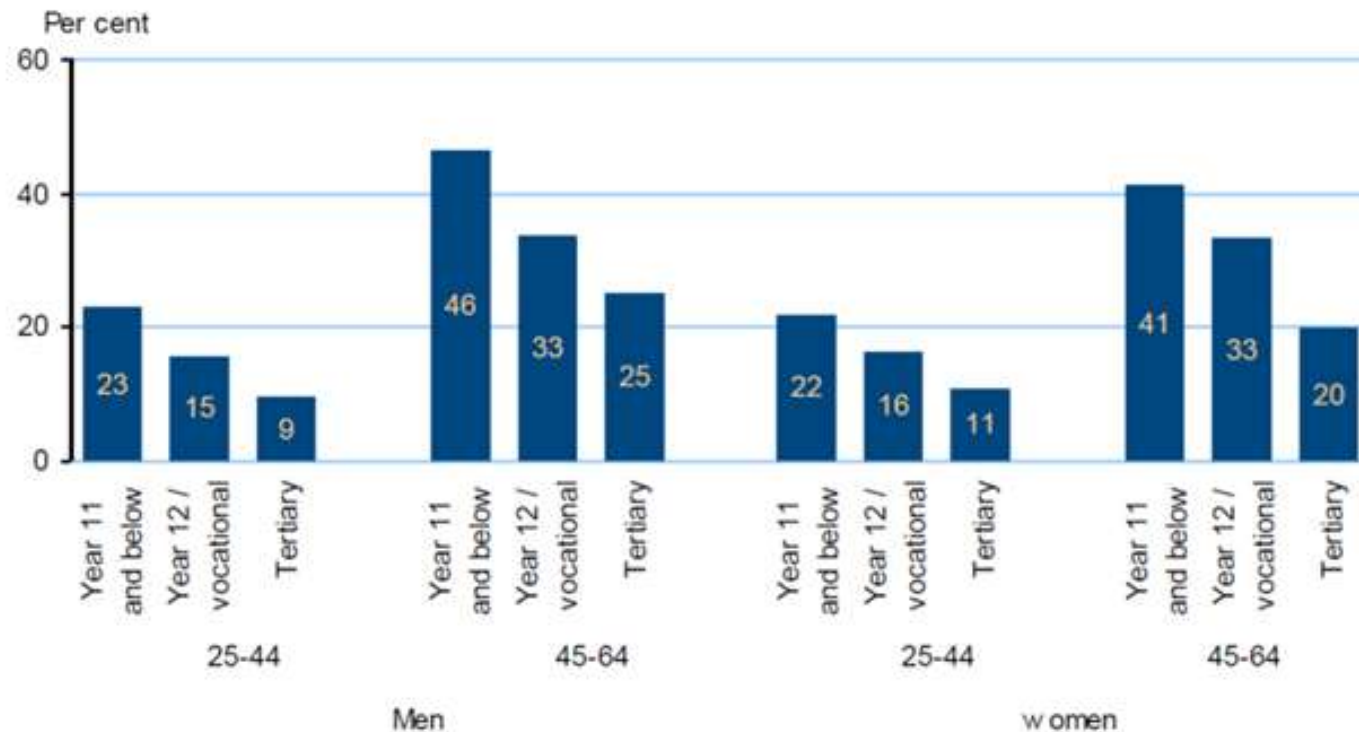
Social Skills Improvement System Rating Scale (SSIS) results derived from teacher assessment of student participants at RFDS Well Being Centre program in Far North Queensland



Royal Flying Doctor Service
The furthest corner. The finest care.

Health outcome by educational attainment

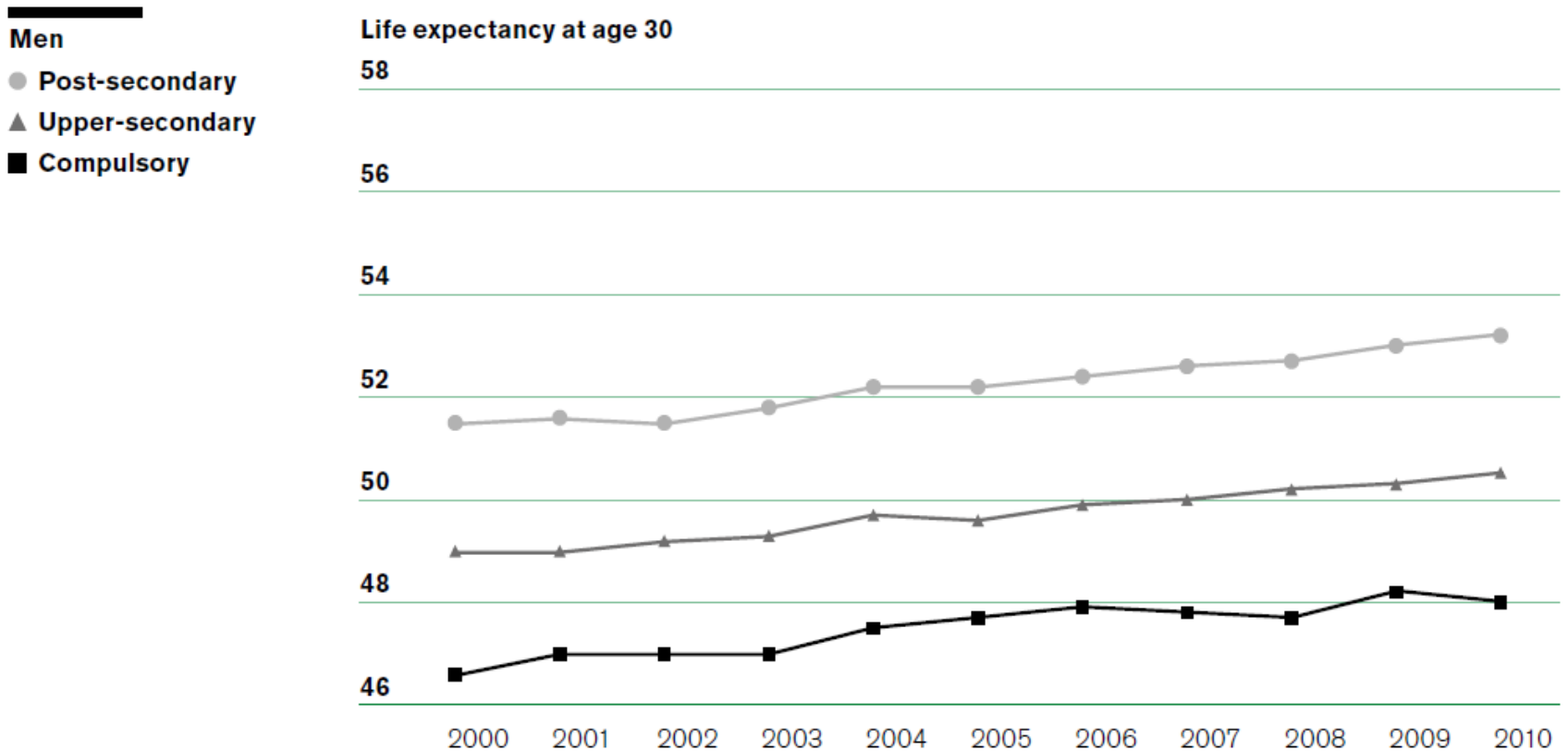
Figure 11 Per cent of persons reporting a long-term health condition, by sex, age and education



Source: HILDA Wave 8 datafile.



Life expectancy by educational attainment



Statistics Sweden, (2011), Life expectancy in Sweden 2001-2010



Royal Flying Doctor Service
The furthest corner. The finest care.

“The structural determinants such as **safe pregnancy, early childhood experiences, educational attainment, secure employment, safe housing, and conditions of daily life** constitute the social determinants of health and are responsible for a major part of health inequalities.

There is **no necessary biological reason why there should be a difference in life expectancy** between social groups in any given country. Change the social determinants of health and there will be dramatic improvements in health equity.”

Source: WHO Commission on Social Determinants of Health *“Closing the Gap”* 2008.



Royal Flying Doctor Service
The furthest corner. The finest care.

Heart Foundation CVD Geographical Snapshot

METROPOLITAN VS. REGIONAL/REMOTE

	Population Aged 18+ ('000)	% of people with diseases of the circulatory system
Total New South Wales	5,544.8	22.5
Sydney - Total	3,296.2	19.9
Rest of NSW - Total	2,248.6	26.3
Total Victoria	4,316.9	20.6
Melbourne - Total	3,013.3	19.3
Rest of Victoria - Total	1,303.6	23.6
Total Queensland	3,388.1	21.7
Brisbane - Total	906.4	18.1
Rest of Qld - Total	2,481.7	23.0
Total South Australia	1,260.7	22.6
Adelaide - Total	990.1	21.3
Rest of SA - Total	270.6	27.4
Total Western Australia	1,747.0	18.6
Perth - Total	1,331.0	16.8
Rest of WA - Total	416.0	24.4
Total Tasmania	382.3	28.0
Hobart - Total	166.6	27.6
Rest of Tasmania - Total	215.7	28.3
Total Australian Capital Territory	278.3	22.4
Australian Capital Territory	278.3	22.4
Total Australia	17,042.2	21.5



Royal Flying Doctor Service
The furthest corner. The finest care.

Heart Foundation CVD Geographical Snapshot

TOP 20 REGIONS BY CVD PREVALENCE

Region	State / Territory	Location	Population Aged 18+ ('000)	% of people with CVD	National Ranking: CVD
Southern Highlands and Shoalhaven	NSW	Regional	88.0	35.7	1
Ballarat	VIC	Regional	106.8	32.3	2
Weston Creek	ACT	Metropolitan	15.9	32.2	3
Central Coast	NSW	Regional	239.1	31.1	4
Hunter Valley exc Newcastle	NSW	Regional	180.9	30.4	5
Launceston and North East	TAS	Regional	106.4	29.9	6
Sydney - Outer West and Blue Mountains	NSW	Metropolitan	236.4	29.8	7
Richmond - Tweed	NSW	Regional	197.4	29.6	8
South Australia - South East	SA	Regional	123.3	28.2	9
South Canberra	ACT	Metropolitan	29.1	28.1	10
Hobart	TAS	Metropolitan	166.6	27.6	11
Cairns	QLD	Regional	135.4	27.5	13
Mandurah	WA	Regional	65.8	27.5	12
Melbourne - Outer East	VIC	Metropolitan	343.8	27.4	14
West and North West	TAS	Regional	83.9	27.3	15
Newcastle and Lake Macquarie	NSW	Regional	328.2	27.2	16
Riverina	NSW	Regional	143.2	26.8	17
Western Australia - Wheat Belt	WA	Regional	108.9	26.5	18
Mornington Peninsula	VIC	Metropolitan	212.3	25.9	19
Brisbane - East	QLD	Metropolitan	169.0	25.8	20

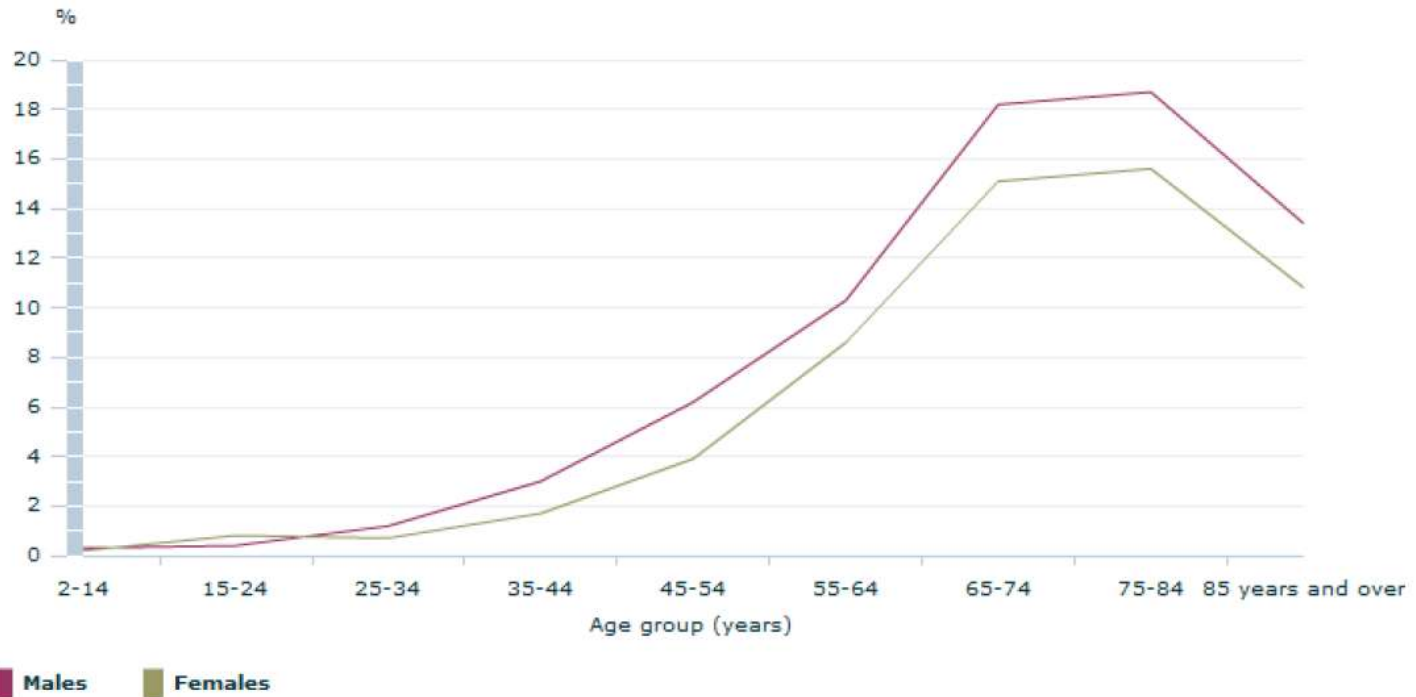
Heart Foundation analysis of ABS Australian Health Survey Data 2011/12, released 14 August 2014



Royal Flying Doctor Service
The furthest corner. The finest care.

Diabetes disparity as a cardiovascular risk factor

Persons aged 2 years & over - Proportion with diabetes(a), 2011-12



In 2011/12, 1 million or 4.6% of Australians aged over 2 years had diabetes. People living in areas of the most disadvantage were more than 2 times likely to have diabetes than those living in areas of least disadvantage. People living in remote Australia were 3.7 times more likely to have diabetes.

Source: Australian Bureau of Statistics, Australian Health Survey: Update Results 2011-12,



Royal Flying Doctor Service
The furthest corner. The finest care.

Indigenous cardiovascular disparity

When in hospital, compared with other Australian patients, Indigenous Australians have:

- twice the in-hospital coronary heart disease death rate
- 40% lower rate of angiography
- 40% lower rate of coronary angioplasty or stent procedures
- 20% lower rate of coronary bypass surgery.

15 practical clinical reforms outlined to reverse post admission health outcome disparity focused on more effective continuum of care.



Source: AHHA/Heart Foundation, (2010), *Better hospital care for Aboriginal and Torres Strait Islander people experiencing heart attack*



Royal Flying Doctor Service
The furthest corner. The finest care.

Social Determinants of Health

SDH (as described in page 10) are the conditions in which we live, the ways we work and play, the arrangements that shape our lives and societies, especially the distribution of these determinants, that vary across populations and thereby either increase or decrease a community's opportunities to be healthy. The unequal distribution of the SDH across populations is considered to be one of the driving forces leading to differences in health status, creating health inequities - the unfair and avoidable differences in health status seen across countries, regions and populations. The map below highlights key determinants for CHM. Drawing attention to these areas of concern within a region, helps to understand the underlying inequities.

School Participation

Higher levels of education are associated with higher rates of employment and earnings for individuals. Participation in schooling and learning is an important protective factor for young people, reducing the risk of substance misuse, depression, social isolation and homelessness. Evidence shows that health inequities will be lessening levels of educational attainment.

Map 2.3 demonstrates the variability across the region for post-compulsory school participation, which is low (compared with other like health regions) even for example the very remote regions have relatively low participation rates (30.9% in South, Central and McDonnell 30.6% in Border and New Spring Creek 40%), compared with the more urban centres of Darwin and Alice Springs where most 15-19 year olds participate (over 60% in both). Interestingly, within the greater Darwin area participation is an extremely low 16.4%.

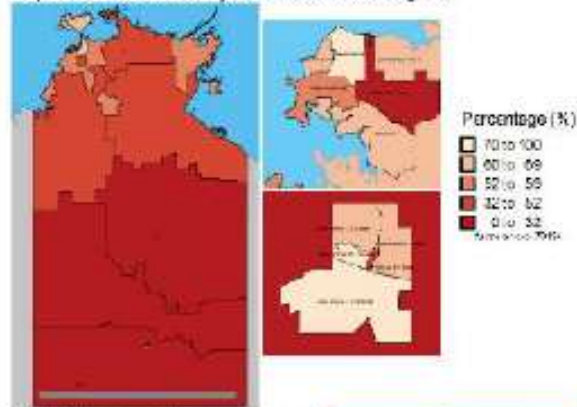
Unemployment

Unemployment is a social problem and is associated with poor physical and mental health outcomes. The health effects are linked to psychosocial consequences, financial problems, social isolation, reduced life opportunities, and risk higher in regions where unemployment is widespread. Map 2.4 suggests that unemployment across the NT is widespread with over 11% reporting unemployment rates of between 10-24% across further analysis highlights the difference between urban and remote and very remote regions is demonstrated by Darwin (14.3%) and Alice Springs (10.2%), generally low levels of unemployment.

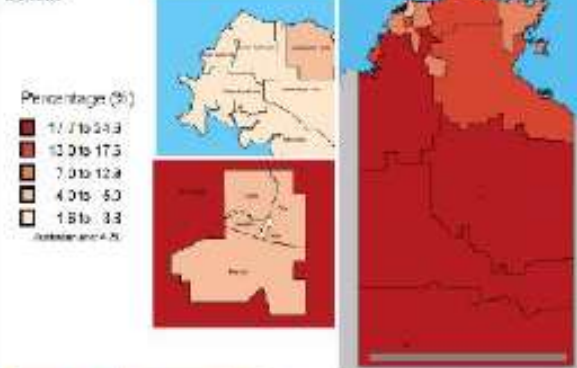
Families

Parents and social networks have a major impact on the health of children. Those who are more socioeconomically disadvantaged have the worst health. Welfare dependent families may face issues including, experience high rates of stress and live in areas of unstable social development opportunities for their kids. The NT has a significantly higher number of welfare dependent families and remote areas when compared with other NTs. The necessary income and urban divide is evident in map 2.5, with only the Darwin region keeping pace with its national average (10.1% of the total).

Map 2.3 Full time secondary School Attendance at age 16



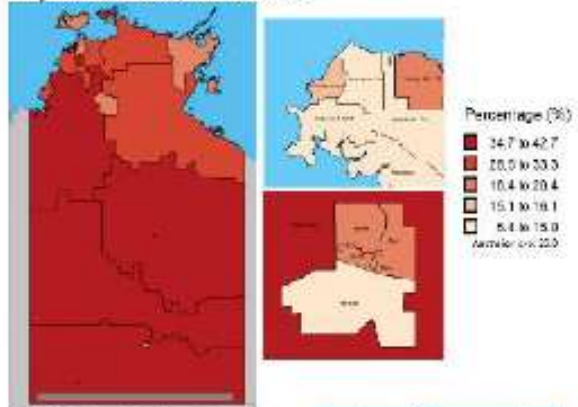
Map 2.4 People receiving unemployment benefit



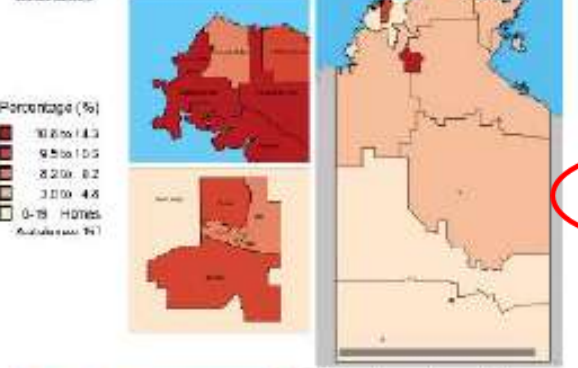
Map 2.5 Low income, welfare dependant families (with children)



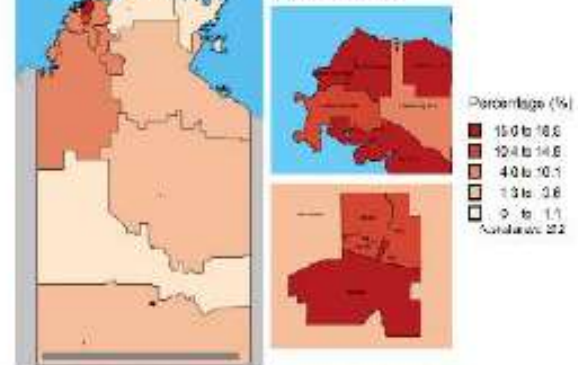
Map 2.6 Total concession card holders



Map 2.7 Households receiving rent assistance



Map 2.8 Low Income households with rental stress



Wealth and Income

Wealth and income are two of the most important determinants of health, with an individual's access to each shaping the economic and social fabric. Those people with a higher income enjoy better health and longevity than those with lower incomes. Lack of income can be a barrier to a variety of ways to maintain good health and without adequate financial resources health is compromised.

Total Personal Income	NT	National
Less than \$10,000	6.1%	4.2%
\$10,000 to \$19,999	22.4%	20.1%
\$20,000 to \$29,999	25.4%	20.3%
\$30,000 to \$39,999	21.9%	12.8%
\$40,000 to \$49,999	4.1%	4.2%
\$50,000+	19.9%	33.3%

Over 40% of income recipients in 2019-20 were a part of the population receiving below the poverty line of income that is over 50% earning more than \$100 per week which is a greater proportion than the National Average.

Concession Card Holders

Concession card holders (a proxy for health care costs) are a percentage of the population which is a poor measure for disadvantage. Map 2.6 shows that the remote areas of the Northern Territory are significantly above the Australian average (27.5%) and a remote urban area are below the national average rate (held at 24.4%). 10.5% of the population claiming a concession card.

Housing

Housing wellbeing is measured by a range of indicators and indicators suggest in particular the three elements of housing that impact on health are suitability, affordability, and security of tenure. Anecdotal evidence suggests that Darwin and Alice Springs housing prices are affordable. Recent research suggests affordability is only an issue for some disadvantaged areas in these cities. The combination of high income and high housing costs may be causing stress in households that are unable to meet high housing costs. This is particularly true in Darwin.

Rent Assistance

High housing costs will lead to the people to seek assistance with 12.7% of the population receiving rent assistance in more provinces in the urban areas of the Northern Territory. This doesn't mean that other housing stressors are not present in these areas.

Rental Stress

The private rental sector does not provide housing options consistent with security, affordability and security issues, with tenants having the capacity to change or influence their tenancy arrangements with home owners. Map 2.8 shows rental stress affects over 40% of income disadvantaged people more than 10% of total income earners, indicating housing stress relating to affordability across the urban areas of the NT.

Martin.lavery@rfdso.com



Royal Flying Doctor Service
The furthest corner. The finest care.