

**Research synthesis  
of social and  
economic outcomes  
of good housing for  
Aboriginal and  
Torres Strait  
Islander People**

authored by

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with

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for

**Department of Prime Minister and  
Cabinet**

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### Research synthesis of social and economic outcomes of good housing for Aboriginal and Torres Strait Islander People

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Professional Services has worked extensively for a range of state and territory governments and non-government agencies. Professional Services outputs have included reports, annotated bibliographies, brief papers, publications, dissemination events and facilitated research engagement workshops. Examples of previous research and reports are on our website <http://www.ahuri.edu.au>.

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## **Acronyms and abbreviations used in this report**

AATSIHS	Australian Aboriginal and Torres Strait Islander Health Survey
ABS	Australian Bureau of Statistics
ACARA	Australian Curriculum, Assessment and Reporting Authority
AHMAC	Australian Health Ministers' Advisory Council
AHURI	Australian Housing and Urban Research Institute Limited
AIFS	Australian Institute of Family Studies
AIHW	Australian Institute of Health and Welfare
ANAO	Australian National Audit Office
CNOS	Canadian National Occupancy Standard
COAG	Council of Australian Governments
CRA	Commonwealth Rent Assistance
DFV	Domestic and Family Violence
DPMC	Department of Prime Minister and Cabinet
DSS	Department of Social Services
FaHCSIA	Department of Families, Housing, Community Services
ICHOs	Indigenous Community Housing Organisations
LSAC	Longitudinal Study of Australian Children
LSIC	Longitudinal Study of Indigenous Children
NAPLAN	National Assessment Program – Literacy and Numeracy
NATSISS	National Aboriginal and Torres Strait Islander Social Survey
NPARIH	National Partnership Agreement on Remote Indigenous Housing
NPARSD	National Partnership Agreement of Remote Indigenous Service Delivery
PC	Productivity Commission
SCRGSP	Steering Committee for the Review of Government Service Provision
SHS	Specialist homelessness services
WAACHS	Western Australian Aboriginal Child Health Survey
WHO	World Health Organisation

## Executive summary

This is a research synthesis of the available evidence, since 2005, that demonstrates the extent to which housing can facilitate non-shelter outcomes (health, education, economic development, safety) for Indigenous individuals and communities, especially (but not limited to) remote Indigenous communities.

### Scope and quality of the evidence base

There is a limited evidence base on the links between Indigenous housing and non-shelter outcomes, with the impacts of housing on health being the most researched of the areas. The available evidence is more concerned with identifying and describing problems and their causes, rather than offering possible solutions or evaluating the impact of policy interventions.

Consequently, where appropriate and available, findings from the general literature on housing are included in this report as a proxy for research related specifically to Indigenous housing. However, due to the unique characteristics of the housing and cultural circumstances of Australian Indigenous peoples, especially those living in remote and very remote Indigenous communities, the findings of the impacts of housing on non-shelter outcomes from general and international literature are not directly transferrable.

Overall, the synthesis finds that there is a pressing need for data collection and structured research and evaluation on the links between Indigenous housing and non-shelter outcomes.

### Indigenous housing circumstances

Indigenous people, especially in remote and very remote areas, tend to experience poorer housing circumstances than their non-Indigenous peers.

Key characteristics of Indigenous housing include:

- high numbers of households in insecure housing
- high proportion of renters
- high proportion of households in social housing
- low levels of home ownership
- poor housing affordability
- high levels of homelessness
- high prevalence of overcrowding
- high mobility (temporary and forced)
- neighbourhood effects / living on low socio-economic areas
- low-quality housing and housing disrepair
- remoteness.

## Key findings

The problems with Indigenous housing are well documented. Yet, there is surprisingly little rigorous evidence of the effectiveness of interventions to address the housing circumstances and attendant non-shelter outcomes of Indigenous people.

### Housing and health

- Indigenous people experience poorer health outcomes and have a lower life expectancy compared to the general population. For Indigenous people born in 2010–2012, life expectancy was estimated to be 10.6 years lower than that of the non-Indigenous population for males (69.1 years compared with 79.7) and 9.5 years for females (73.7 compared with 83.1).
- Poor housing and poor housing circumstances can negatively affect physical health and mental health and wellbeing outcomes. In 2014–15, 28 per cent of Indigenous people aged 15 years and over lived in dwellings with major structural problems, such as cracks in walls or floors, plumbing problems and wood rot or termite damage. This rose to 36 per cent in remote areas.
- Building quality, housing design and appropriateness, housing affordability, security of tenure and location (e.g. socio-economic characteristics of the area; urban, regional, remote) are key housing factors that affect health outcomes.
- Housing negatively affects Indigenous health via poor building quality and maintenance (especially in remote areas), which negatively affects healthy living practices and contributes to physical ill health and the spread of communicable diseases.
- Poor housing design, especially in remote areas, contributes to overcrowding.
- Reductions in crowding can lead to improvements in physical and mental health. However, simply building more housing is not a sufficient strategy to overcome overcrowding.
- Indigenous people experience high levels of precarious housing. Insecure tenure indirectly affects mental health and wellbeing by way of the household stress it creates. Sustaining tenancy programs can be effective for Indigenous people.
- Culturally appropriate management of Indigenous housing can provide householders with more culturally appropriate housing and a greater sense of control over their housing circumstances
- Programs to improve Indigenous housing can be an effective and cost efficient means of improving Indigenous health. However, housing improvements on their own are unlikely to be effective and they should be pursued simultaneously with housing related health improvement programs and adjustments to the housing policy environment.

### Housing and education

- Indigenous children have poorer education outcomes compared to their non-Indigenous peers. In 2012–13 nationally, the proportion of Indigenous people aged 20–24 years who had achieved a Year 12 or equivalent level of education was 58.5 per cent, compared to 86.5 per cent of non-Indigenous people (DPMC 2016).
- There is a significant evidence gap in the current knowledge base on the relationship between housing and education outcomes for Indigenous children.

- Housing is a foundational factor for facilitating education outcomes, but is only one of many variables. Factors influencing education outcomes are geophysical (e.g. remoteness, access to schools and employment opportunities for families), cultural (e.g. ways of learning, discrimination) and economic (i.e. poverty, access to resources).
- Absenteeism is a key factor in the lower educational attainment of Indigenous students, and is due to factors including overcrowding, poor health, disability, discrimination and family or household attitudes to education.
- Children and young people make up a high proportion of Indigenous homeless persons. One in four Indigenous people who were homeless in 2011 were under 18 years of age and 28.2 per cent were children under 12 years.
- Homelessness negatively affects children's education outcomes.
- Overcrowding and high mobility negatively affect education outcomes.

### **Housing and economic development**

- Indigenous people have low rates of labour force participation and high rates of unemployment compared to non-Indigenous people; these trends are more pronounced in remote areas. In 2014–15 only 46 per cent of Indigenous people aged 15 years and over were employed (49 per cent in non-remote areas, 36% in remote areas). The unemployment rate for Indigenous people aged 15 years and over was 20.6 per cent (27.4% in remote areas, 19.3% in non-remote areas).
- The impact of housing provision on employment and economic development outcomes is mainly through involvement of Indigenous people in the construction and ongoing maintenance of housing.
- Housing procurement processes in remote Indigenous communities have the potential to provide significant employment and capacity-building opportunities for Indigenous people. While numerous best practice housing procurement examples exist, the existing research indicates that achieving this potential has proven difficult.
- The design of contracts for housing procurement can play an important role in enhancing or creating positive social and economic outcomes as part of the construction process.
- Mainstream housing procurement contracts that are driven by economic imperatives, such as minimising financial risk and maximising financial gain in set timeframes, contribute little towards achieving economic development outcomes in remote Indigenous communities that are characterised by a largely unskilled, highly mobile labour force.

### **Housing and safety**

- There is a very limited evidence base on the links between Indigenous housing and safety.
- Indigenous people experience high rates of crime and violence. In 2014–15 approximately 22 per cent of Indigenous adults reported being a victim of physical or threatened violence. This level of violence is 2.5 times the rate for non-Indigenous people.
- Existing research addresses the issue primarily in terms of family violence and poverty, overcrowding, substance abuse and lack of security features on housing.

- In order to be successful, housing related interventions need to be coupled with community level interventions such as fostering community leadership and providing access to relevant services.

## **Homelessness**

- Indigenous people experience higher rates of homelessness than the general population. Indigenous people make up 3 per cent of the Australian population, yet constituted 23 per cent (53,301) of specialist homelessness services clients in 2014–15.
- Definitions of 'home' and 'homelessness' differ between Indigenous and non-Indigenous Australians. Indigenous homelessness is not necessarily a lack of accommodation. It can include 'spiritual homelessness' and 'public place dwelling' or 'itinerancy'. It can be defined as losing one's sense of control over, or legitimacy in, the place where one lives, or an inability to access appropriate housing that caters to an individual's particular social and cultural needs.
- Homelessness is associated with negative health and wellbeing, education, employment and safety outcomes.
- Poor physical and mental health are risk factors for homelessness. Vice versa, homelessness is a contributor to poor physical and mental health.
- Providing housing to homeless people can improve people's access to health and other services.
- Family violence is a key contributor to homelessness among Indigenous women and children.
- Women need support for themselves and their children through mechanisms that provide financial and housing stability, where such supports are desired.

## **Policy development opportunities and further research**

The evidence on Indigenous housing and non-shelter outcomes is uneven and is overwhelmingly concerned with detailing the causes of problems rather than:

- empirically establishing the links between housing and non-shelter outcomes
- offering viable practical and policy solutions
- undertaking rigorous evaluations of housing interventions.

This poses considerable constraints for evidence informed policy development due to a lack of robust evidence and policy development frameworks. Addressing the issues requires policy and practice based solutions founded on solid evidence.

Practical steps towards evolving a policy solutions agenda will need to comprise development of a strong evidence base to inform policy development, outreach to affected communities and a whole of government approach to tackling the issues.

Key principles that should underpin the proposed policy development approach to research are:

- Indigenous housing and living environments must be understood holistically, whereby economic, socio-cultural and environmental concerns are considered in an integrated manner.

- A holistic view of policy development should be adopted that encompasses interventions to housing hardware, housing provision and housing management, in conjunction socio-cultural and community capacity building approaches, as well as policy adjustment programs and processes.
- A programme of rigorous independent research evaluating the effectiveness of housing interventions against measurable outcomes in relation to project aims.
- A programme of rigorous research aiming to establish the links between housing and non-shelter outcomes for Indigenous people.

## **The possible impact of a stall in investment**

A comment on the likely impact of a stall in investment on Indigenous housing and the associated non-shelter outcomes is beyond the scope of this report.

This report shows that good housing can contribute to positive non-shelter outcomes in the fields of health, education, economic development, and to a lesser extent, pending further research, safety. The report also documents that housing is interconnected with socio-cultural, economic and environmental aspects of Indigenous communities.

Consequently, it may be inferred that any reduction in the support for Indigenous housing is likely to have flow on effects for non-shelter outcomes and therefore a cessation of funding is likely to have adverse consequences.

# 1 Introduction

The Minister for Indigenous Affairs, Senator the Hon Nigel Scullion, has asked for an independent Remote Housing Review of the National Partnership Agreement on Remote Indigenous Housing (NPARIH) and the Remote Housing Strategy (the Strategy).

The Review will assess the effectiveness of the NPARIH and the Strategy to identify what has worked or not worked under these programmes, including an analysis of the various challenges and opportunities for the participating jurisdictions. It will identify the level of residual demand for housing for people living in remote Indigenous communities and options for addressing these needs in the future. It will also consider the changes needed to make remote Indigenous housing more sustainable including the role for governments and the private sector as well as for Aboriginal and Torres Strait Islander people. Furthermore, it will identify opportunities to use housing investment to leverage stronger outcomes in Indigenous education and employment, business engagement, home ownership and broader government priorities, including the Council of Australian Governments' Closing the Gap targets.

The Expert Panel conducting the Review is interested in identifying what evidence exists to demonstrate the extent to which there are improved social and economic wellbeing outcomes for individuals and communities from addressing homelessness and overcrowding and from the provision of fit for purpose housing, especially (but not limited to) remote Indigenous communities.

## 1.1 Objective

AHURI will conduct a research synthesis of the AHURI evidence base, as well as the Australian and international literatures since 2005 in order to:

- Review the impact of housing on social and economic wellbeing outcomes for Aboriginal and Torres Strait Islander people that can be drawn from studies on housing in remote and non-remote Australia, and internationally
- Review how housing supports the social and economic wellbeing of Aboriginal and Torres Strait Islander people in remote communities, including
  - the link between housing and Indigenous health outcomes
  - the link between housing and Indigenous education attainment
  - the contribution of housing to economic development outcomes
  - the importance of housing to Indigenous safety and wellbeing.
- Consider the likely impact of a stall in investment in constructing, refurbishing and maintaining remote Indigenous housing on the health, safety and wellbeing, education and economic development outcomes for Aboriginal and Torres Strait Islander people

## 1.2 NPARIH policy context

The NPARIH involves a partnership between the Commonwealth and the states and the Northern Territory and aims to address overcrowding, homelessness, poor housing condition and severe housing shortage in remote Indigenous communities (COAG 2008). The intent of the reforms more broadly was to contribute to the outcomes under the National Partnership Agreement of Remote Indigenous Service Delivery (NPARSD) and the National Indigenous Reform Agreement that emphasise closing the gap on Indigenous disadvantage, through targeting issues such as healthy homes, safe communities and schooling and economic participation.

NPARIH aims to deliver 4,200 new houses by June 2018 and to rebuild or refurbish approximately 6,700 existing houses by the end of June 2014 (DSS 2013a). At June 2013, 2,025 new houses and 5,887 refurbishments were complete (ahead of schedule) (DSS 2013a). However, implementation success has varied between sites and there is uncertainty about the continued funding of the reforms introduced by the NPARIH (Habibis et al. 2016). These capital investments were conditional on tenancy management reforms, which aimed to establish support structures for sustaining tenancies, reformed rent strategies, increased employment opportunities and improved data collection capacity (Habibis et al. 2016). Bilateral agreements between the Commonwealth and each of the states and the Northern Territory provide detailed targets for each funding period.

Prior to the implementation of the NPARIH in 2008, Indigenous housing was managed in most communities by Indigenous Community Housing Organisations (ICHOs), which were frequently small, local, family based and poorly resourced (Habibis et al. 2016). Low rent collection and high maintenance needs often meant that there were low expectations of landlord responsibilities (Habibis et al. 2016).

The NPARIH aims to improve Indigenous housing in remote communities and to establish Indigenous housing management standards similar to public housing programs in comparable locations elsewhere. Consistent with federal government policy preferences to restrict Commonwealth involvement in housing provision, NPARIH provides dedicated funding for remote Indigenous housing to the states and territories. Consequently, Indigenous housing in non-remote areas has become the responsibility of mainstream social housing programs administered by the states and territories under the NAHA. No dedicated funding sources are available to the ICHOs, which have undergone considerable decline as a result of the NPARIH reforms (Habibis et al. 2016).



## 2 Methodology

This paper applies a research synthesis approach to the analysis of the evidence. Research synthesis is a proven methodology for cost-effective and timely use of existing research findings for a specific policy concern. It facilitates evidence-informed policy and practice development and typically involves the following activities:

- search for primary studies
- quality appraisal and data extraction
- synthesis of findings and knowledge transfer.

The research synthesis methodology is based on Ray Pawson's 'realist synthesis' approach developed at the UK Centre for Evidence-Based Policy and Practice (Pawson 2006). The approach was developed to help identify which social policy interventions work for whom and in what circumstances. It is concerned with identifying the mechanisms and contextual conditions that facilitate a particular outcome of a social policy intervention.

The research synthesis used the following methodology:

- Search terms derived from the research questions were used to iteratively search the national and international research and grey literature in order to identify relevant studies published since 2005, including:
  - academic journal databases in the housing, homelessness and related social science fields
  - general internet searching of online policy communities and information clearinghouses (including government departments)
  - follow up of bibliographic references in found studies.
- A bibliography was prepared and analysed for overall themes, scope and quality of the evidence base. This included:
  - review of abstracts and executive summaries for an initial assessment of relevance to the research question and quality
  - where abstracts and executive summaries provided insufficient information to decide on inclusion or exclusion in the review, the full publication was reviewed
  - on the basis of this information, a list of publications for inclusion in the research synthesis was prepared.
- The selected studies were appraised and assessed for quality, research rigour and relevance to the policy concern. Data was extracted to construct a synthesis of the evidence, including detailed findings and overall conclusions.

### 3 Scope and quality of the evidence base

There exists limited rigorous research that addresses the links between Indigenous housing and non-shelter outcomes such as health, education, economic development outcomes and safety. The literature on Indigenous housing and health constitutes the majority of the evidence identified for this report, with considerably less research available on the domains of education, economic development and safety.

Consequently, where appropriate and available, findings from the literature on housing and non-shelter outcomes in the general population are included in this report as a proxy for research related specifically to Indigenous housing.

However, due to the unique characteristics of the housing and cultural circumstances of Australian Indigenous peoples, especially those living in remote and very remote Indigenous communities, the findings of the impacts of housing on non-shelter outcomes from general and international literature are not directly transferrable.

- Research on the impact of housing on Indigenous health and wellbeing focuses primarily on the effects of poor building quality, inappropriate housing design and overcrowding, which are more pronounced in remote and very remote areas.
- There exists a large body of evidence on the links between housing and education outcomes for children in the international literature, but there is very limited research on this topic as it relates to Australia and almost none relating to Indigenous people. The research synthesis was unable to identify any literature on the links between housing and Indigenous people's further education and training.
- There is limited evidence on the links between housing and economic development outcomes. What evidence exists highlights how the unique context of remote Indigenous housing and settlement poses particular challenges for achieving economic outcomes in these communities.
- There only a small body of research on the links between housing and safety.

In each of the latter three domains the evidence is more geared towards identifying and describing problems and their causes, rather than offering possible solutions or evaluating the impact of policy interventions.

Overall, the synthesis finds that there is a pressing need for data collection and structured research and evaluation on the links between Indigenous housing and non-shelter outcomes.

## 4 Definitions

### 4.1 Homelessness

Definitions of 'home' and 'homelessness' differ between Indigenous and non-Indigenous Australians.

Until recently, the most widely accepted definition of homelessness was the one developed by Chamberlain and MacKenzie (2008), which was based on cultural expectations of the degree to which housing needs were met within conventional expectations or community standards. In Australia, this meant having, at a minimum, one room to sleep in, one room to live in, one's own bathroom and kitchen and security of tenure.

In 2012 the ABS developed a new definition of homelessness informed by an understanding that homelessness is not 'rooflessness' (ABS 2012d). A person is considered 'homeless' under this revised definition if their current living arrangement exhibits one of the following characteristics:

- is in a dwelling that is inadequate
- has no tenure, or if their initial tenure is short and not extendable
- does not allow them to have control of, and access to space for social relations, including a sense of security, stability, privacy, safety, and the ability to control living space.

It is notable that the 2012 ABS definition includes people in severely overcrowded dwellings who are considered not to have control of, or access to, space for social relations.

Indigenous understandings and definitions of homelessness can differ from those described above and can include 'spiritual homelessness' (the state of being disconnected from one's homeland, separation from family or kinship networks or not being familiar with one's heritage) and 'public place dwelling' or 'itinerancy' (usually used to refer to Indigenous people from remote communities who are 'sleeping rough' in proximity to a major centre) (ABS 2014b; AIHW 2014a; Memmott et al. 2003).

Indigenous homelessness is not necessarily a lack of accommodation. It can be defined as losing one's sense of control over, or legitimacy in, the place where one lives (Memmott et al. 2003), or an inability to access appropriate housing that caters to an individual's particular social and cultural needs (Birdsall-Jones et al. 2010). Some public space dwellers who have chosen to live rough may not see themselves as homeless (Memmott et al. 2003).

Indigenous people are often highly mobile, may be connected to multiple communities through complex social and cultural relationships (e.g. mother's and/or father's country or 'skin' group) and can have multiple 'usual residences' where they feel at home (ABS 2014b). Statistical counting aside, Indigenous understandings of homelessness are important in terms of providing support services, as these understandings influence the types of response strategies required and implemented; some services required by Indigenous people who are homeless, for example, may be outside the scope of 'shelter' and entail broader personal or cultural supports (Memmott et al. 2003).

## 4.2 Overcrowding

Overcrowding is an indicator of Indigenous homelessness (ABS 2012d; Birdsall-Jones et al. 2010) and is associated with a range of negative outcomes in relation to physical and mental health and wellbeing, educational attendance and attainment, safety, and employment.

The concept of crowding is based on a comparison of the number of bedrooms in a dwelling with a series of household demographics such as the number of usual residents, their relationship to one another, their age and their sex.

The Canadian National Occupancy Standard (CNOS) is a commonly used measure to determine levels of overcrowding. CNOS assesses the bedroom requirements of a household based on the following criteria:

- there should be no more than two persons per bedroom
- children younger than 5 years of age of different sexes can reasonably share a bedroom
- children aged 5 years and over of opposite sex should have separate bedrooms
- children under 18 years of age and of the same sex may reasonably share a bedroom
- single household members aged 18 years or over should have a separate bedroom, as should parents or couples.

Using this measure, households that require at least one additional bedroom are considered to experience some degree of overcrowding. A 'severely' crowded dwelling is one that needs four or more extra bedrooms to accommodate the people who usually live there (ABS 2012a).

However, it is important to note that crowding in Indigenous households is not necessarily the same as density; it is a culturally defined concept that refers to loss of control over privacy and the ability to maintain avoidance relationships (Memmot et al. 2012; Ware 2013).

## 4.3 Social determinants of health

The World Health Organisation (2016) defines the social determinants of health as

*...the conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life. These forces and systems include economic policies and systems, development agendas, social norms, social policies and political systems.*

## 4.4 Healthy living practices

The housing for health approach developed by Health Habitat links a number of safety and health principles called the healthy living practices.

Healthy living practices link the safety and health of householders to the functions of key parts of the house and surrounding living environment. The healthy living practices are (Health Habitat 2016):

- washing people
- washing clothes/bedding

- removing waste water safely
- improving nutrition, the ability to store prepare and cook food
- reducing overcrowding
- reducing the negative effects of animals, insects and vermin
- reducing the health impacts of dust
- controlling the temperature of the living environment
- reducing hazards that cause trauma.

## 5 Indigenous housing circumstances

In 2008 research by Birdsall-Jones and Corunna found that the strongest influences in the structuring of Indigenous housing careers were entrenched poverty, accessibility of social housing, and the management practices of social housing providers. These findings remain as relevant today as they were then and shape the non-shelter outcomes in the domains of health, education, employment and safety.

Indigenous people, especially in remote and very remote areas, tend to experience poorer housing circumstances than their non-Indigenous peers and the housing in which many Indigenous Australians live is inadequate. Problems include the material condition of housing such as facilities, materials, services and infrastructure, and housing accessibility including affordability, security, cultural appropriateness and location (Habibis et al. 2016).

Indigenous households are more likely to live in precarious housing and their tenure patterns differ substantially from those of the general population (AIHW 2014b; Foster et al. 2011) (see Figure 1). Relative to the Australian population as a whole there are far fewer Indigenous home owners and many more renters, meaning that Indigenous households are less likely to enjoy secure housing tenure than other Australians. They are also overrepresented among social housing tenants, pointing to high levels of housing affordability stress.

Key characteristics of Indigenous housing include:

- high numbers of households in insecure housing
- high proportion of renters
- high proportion of households in social housing
- low levels of home ownership
- poor housing affordability
- high levels of homelessness
- high prevalence of overcrowding
- high mobility (temporary and forced)
- neighbourhood effects / living on low socio-economic areas
- low-quality housing and housing disrepair
- remoteness.

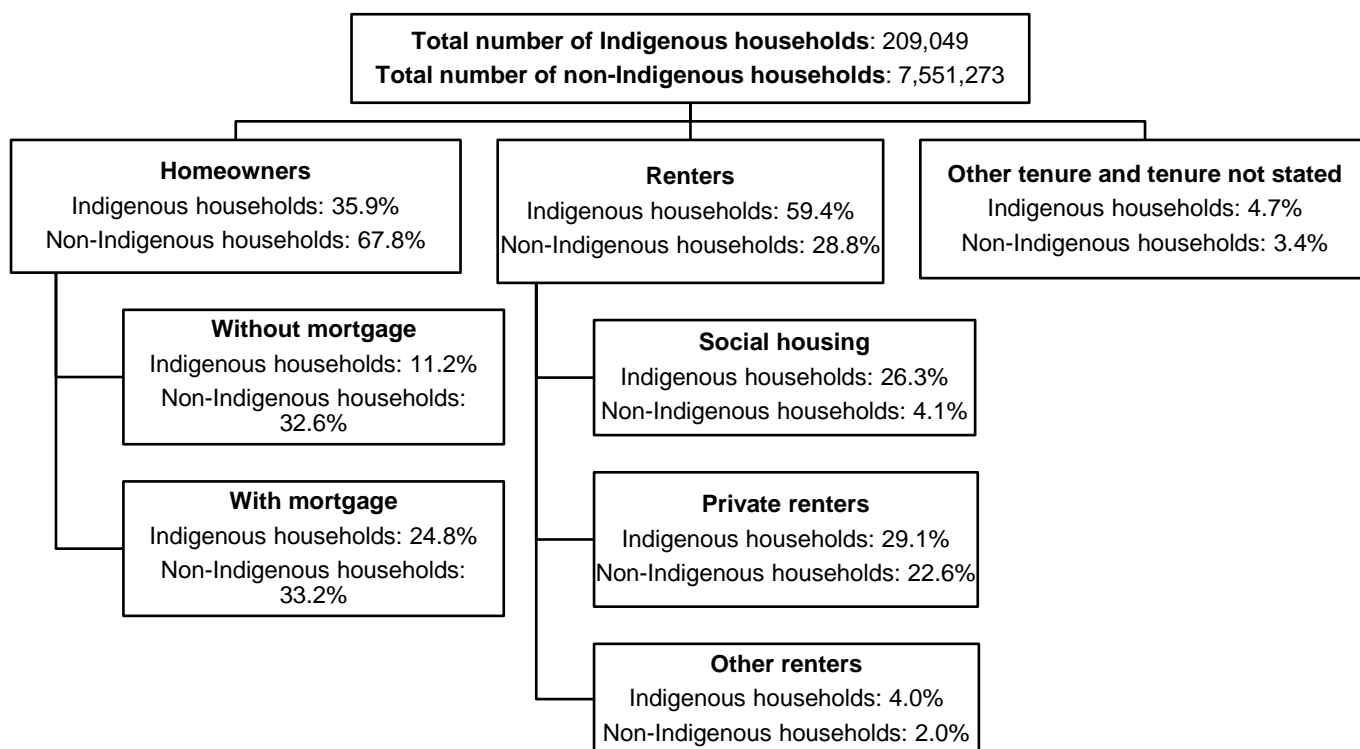
### 5.1 Indigenous home ownership

For a range of cultural, economic, structural and family reasons, Indigenous Australians have significantly lower levels of home ownership than do other Australians. Home ownership is a more secure form of housing than renting. It offers a greater level of control over one's environment than other forms of tenure and is a vehicle for the accumulation of wealth. Low levels of Indigenous home ownership mean that the majority of Indigenous households rely on the private rental market or social housing.

Indigenous home ownership is increasing slowly but steadily. Indigenous households represented 19 per cent of home owners in 1991 (Crabtree et al. 2012). In 2006,

households with at least one Indigenous member had a homeownership rate of 34 per cent, compared to 69 per cent of non-Indigenous people (ABS and AIHW 2008). In 2011, the rate of Indigenous home ownership had increased marginally to 36 per cent, with that for non-Indigenous households declining marginally to 68 per cent (AIHW 2014b).

**Figure 1: Indigenous households and non-Indigenous households by tenure type 2011**



Source: Based on data from AIHW 2014b

Figure 1 shows percentages of Indigenous households compared to non-Indigenous by housing type.

Homeownership rates were lowest in remote and very remote areas, where only 18 per cent of Indigenous people owned their own home in 2011 and 57 per cent of Indigenous households lived in social housing (AIHW 2014b).

Low levels of home ownership are not due to a lack of interest in home ownership among Indigenous households (Crabtree et al. 2012; Crabtree et al. 2015; Memmott et al. 2009). Where Indigenous families have a history of home ownership this shapes housing aspirations by creating the possibility of home ownership for younger generations (Birdsall-Jones and Corunna 2008).

Indigenous people face unique challenges in entering home ownership and in obtaining and sustaining private rental tenancies. These challenges include:

- persistent low levels of income and high unemployment (Crabtree et al. 2012; Crabtree et al. 2015; Mowbray and Warren 2007)

- geographical factors (e.g. living in remote areas) (Mowbray and Warren 2007)
- land tenure, where the land occupied is classified as 'inalienable' freehold and cannot be put forward as security to lenders (Memmott et al. 2009; Mowbray and Warren 2007)
- unstable housing pathways (Birdsall-Jones and Corunna 2008), including difficulty in sustaining housing situations following public housing exits (Wiesel et al. 2014)
- unsettled complex family dynamics, including family/domestic violence (Wiesel et al. 2014)
- mental and physical illness and disability (Wiesel et al. 2014)
- race-related discrimination and harassment in the private rental market (Wiesel et al. 2014).

## 5.2 Rental housing

The proportion of Indigenous households in social housing and in private rental is higher than that for the total Australian population (Figure 1). Mainstream housing policy settings and service delivery practices are not necessarily responsive to the needs and preferences of many Indigenous tenants (Flatau et al. 2004; Habibis et al. 2011). This puts them at risk of eviction from social housing and means that they experience lower housing security than others in the Australian housing community.

Social housing is delivered to Indigenous people via four funding streams: mainstream public housing; mainstream community housing; state owned/managed Indigenous housing; and Indigenous owned/managed housing. Recently there has been a strong trend towards undifferentiated mainstream responses to the provision of social housing to Indigenous people in both remote and non-remote locations (DSS 2013b; Habibis et al. 2014; Habibis et al. 2016; Habibis et al. 2013).

The percentage of Indigenous occupancy has risen in both public housing and in community housing. Much of this growth has resulted from greater targeting to Indigenous households, and some has resulted from the takeover of Indigenous managed community housing (Milligan et al. 2011).

The policy rationale for the 'mainstreaming' of housing for Indigenous clients has been grounded in principles of equality, human rights and citizenship. A significant outcome of current policy settings is an increasing expectation that mainstream housing providers will cater to the needs of Indigenous people in urban contexts (Milligan et al. 2011). However, in practice this has meant that service provision and tenancy management often does not meet the needs of Indigenous tenants (Habibis et al. 2014; Habibis et al. 2015).

Indigenous tenants, both in private and public rental, are one of the demographic groups most vulnerable to eviction. Indigenous households in mainstream public housing, for example, are much more likely than non-Indigenous households to receive tenancy termination notices and to be evicted (Flatau et al. 2005).

Factors which place tenancies at risk of failure include: mental and physical health disabilities; drug and alcohol dependency; poor knowledge of tenancy responsibilities; housing stress due to low income or debt; relationship breakdown; family/domestic violence; difficult to manage tenant behaviours; and overcrowding (Birdsall-Jones et al. 2010; Cooper and Morris 2005; Flatau et al. 2009; Flatau et al. 2005). These factors are more prevalent for Indigenous tenancies than for other tenancy types.



Flatau et al. (2009) identified a number of drivers of tenancy instability specific to Indigenous households:

- discrimination by landlords and neighbours
- failure of landlords and housing agencies to appropriately address cultural behaviour and imperatives such as duties of hospitality, extended family responsibilities and demand sharing
- lack of understanding of Indigenous patterns of occupation and use of housing (domiciliary behaviour)
- Indigenous belief systems and mourning customs
- inability to meet unforeseen expenses such as funeral costs
- Indigenous patterns of mobility
- in some cases, a lack of urban 'life-skills'
- the high number of Indigenous people living in regional and remote areas with limited available support services.

These factors combine to create Indigenous housing circumstances that are more precarious and less stable and secure than those of the general population.

### **5.3 Remoteness**

There are substantial social and cultural differences between remote and very remote Indigenous communities and regional and urban communities. Remote and very remote Indigenous communities are characterised by large, multi-family households with high levels of overcrowding, frequent population movement between houses and communities, low levels of formal skills and education and high levels of disability (Habibis et al. 2016). They are also characterised by language and cultural differences with many Indigenous Australians in remote areas fluent in a range of Aboriginal languages or dialects and speaking Aboriginal English or Kreol (also Kriol) as the dominant English language.

While remote areas are sparsely populated, the proportion of Indigenous Australians living in these areas is higher than in other areas of Australia. The remote and very remote Indigenous population of Australia comprises 142,900 people, or 21 per cent of the total Indigenous population of Australia (ABS 2011). Census data from 2011 shows that Indigenous people comprise about 3 per cent of the general population, but constitute 32 per cent of households in very remote areas and 12 per cent of households in remote areas (AIHW 2014b). The Indigenous population in remote areas comprises 15 per cent of the total remote population, rising to almost half of the very remote total population (Baxter, Gray & Hayes 2011 cited in Habibis et al. 2016).

Remoteness affects tenure type. In 2011 home ownership rates among Indigenous Australians in urbanised areas were lowest in remote areas (27%) and very remote areas (10%), and highest in inner regional areas (40%) and in major cities (39%) (AIHW 2014b). Overall, in remote and very remote areas combined, only 18 per cent of Indigenous households owned their own home (AIHW 2014b).

In 2011, social housing was the most prevalent tenure type for Indigenous households living in remote (40% social housing) and very remote (70% social housing) areas. Combined, 57 per cent of Indigenous households in remote and very remote areas

lived in social housing, as compared to 20–24 per cent of Indigenous households in non-remote areas.

Social housing in remote and very remote areas tends to be characterised by high levels of overcrowding and poor condition and facilities inclusive of materials, maintenance, service delivery, security, infrastructure, housing accessibility, cultural appropriateness and location (Habibis et al. 2016). These problems stem partly from the difficulties and cost of providing and maintaining housing in remote locations that can be difficult and costly to access, but also from the changeable policy trajectories for remote Indigenous housing and associated difficulties with policy implementation.

## 5.4 Homelessness

Indigenous people are over-represented in both the national homeless population and as users of specialist homelessness services (SHS).

- Indigenous people make up 3 per cent of the Australian population, yet constituted 23 per cent (53,301) of SHS clients 2014–15 (AIHW 2015).
- Indigenous users of SHS tend to be younger than their non-Indigenous counterparts. One in four Indigenous people who were homeless in 2011 were under 18 years of age and 28.2 per cent were children under 12 years. The largest age group for Indigenous clients was the 0–9 year age group (23%), followed by the 18–24 year age group (18%) (Australian Institute of Health and Welfare [AIHW] 2015). For non-Indigenous clients, these age groups comprised 14 per cent and 16 per cent, respectively, with the largest age groups for non-Indigenous clients being 25–34 years (20%) and 35–44 years (19%) (AIHW 2015).
- Indigenous SHS users are more likely to be female (62% in 2014–15 compared with 58% non-Indigenous homeless) (AIHW 2015).

The number of Indigenous clients has been steadily increasing since the beginning of the SHS data collection in 2011–12. 0 key trends over these four years are:

- The rate of service use by Indigenous clients has increased from 587 clients per 10,000 Indigenous people in 2011–12 to 693 per 10,000 in 2014–15.
- The gap between Indigenous and non-Indigenous rates of service use has been widening. Indigenous clients used SHS at a rate of 8.7 times that of non-Indigenous clients in 2014–15, up from 7.8 times in 2011–12 (AIHW 2015).

### 5.4.1 Remoteness

Remoteness has a profound impact on Indigenous homelessness rates. In 2011 around 12 per cent of Indigenous people who were homeless were living in major cities, with the remaining 17 per cent living in regional cities (AIHW 2014a).

Very remote areas and major cities have the highest rates of homelessness. Based on 2011 ABS Census of Population and Housing data, seven in 10 Indigenous people experiencing homelessness on Census night were in remote areas, of which 60 per cent were in very remote areas and 10 per cent in remote areas (AIHW 2014a). Severe crowding was a major factor in these statistics, with nearly all (97%) of the Indigenous people in very remote areas who were classified as 'homeless', and 71 per cent of those in remote areas, living in severely crowded dwellings (AIHW 2014a).

### **5.4.2 Intergenerational homelessness**

AHURI research by Flatau et al. (2013) explored the prevalence and structure of intergenerational homelessness in Australia (homelessness repeated across generations of the same family). The research was based on the Intergenerational Homelessness Survey carried out in 2009–10 and included 647 respondents from 70 agencies.

The findings from the research with specific relevance to Indigenous respondents include that:

- The rate of intergenerational homelessness for Indigenous respondents was significantly (69%) higher than for non-Indigenous respondents (43%).
- Indigenous respondents were more likely than non-Indigenous respondents to have experienced primary homelessness before reaching 18 years of age, with around a quarter of Indigenous respondents reporting a spell of primary homelessness before the age of 12 (compared with an eighth of non-Indigenous respondents).
- There was a strong association between the prevalence of intergenerational homelessness and high family risk factors in the parental home.
- Indigenous adult clients of homelessness services were significantly more likely than other adult clients to have been placed in foster care or residential care before the age of 18 (30% of Indigenous adult clients reported that they had been placed in foster care at some point before the age of 18).
- Seventy per cent of Indigenous respondents had lived with relatives prior to turning 18, compared to 42% of non-Indigenous respondents.

These findings indicate that among the population of people who experience homelessness, Indigenous people have often experienced longer and more traumatic early life experiences than their non-Indigenous counterparts. This finding highlights the fundamental importance of preventive and early intervention homelessness programs for children and young teenagers in relation to parental family/domestic violence, alcohol and drug use problems and entry into out-of-home care arrangements (Flatau et al. 2013).

### **5.4.3 Family violence and homelessness**

Domestic or family violence was the most commonly reported primary reason for Indigenous clients (22%) and non-Indigenous clients (21%) seeking assistance from SHS (AIHW 2014a).

Indigenous women and children face unique challenges. A qualitative study of Indigenous women's experience of homelessness in Queensland and the Northern Territory documented affordability constraints and perceived race-related discrimination (Cooper and Morris 2005) for Indigenous women seeking housing. The study also provides evidence of the effects of drug and alcohol abuse, sexual abuse, family violence and debt on Indigenous women's housing choices and homelessness.

### **5.4.4 Funding of Indigenous homelessness services**

Research on the funding of homelessness services (Flatau et al. 2016; Spinney et al. 2016) demonstrates that currently no federal or state/territory program specifically targets Indigenous people who are homeless or at risk of homelessness. Within the major funding programs (National Affordable Housing Agreement (NAHA) and National

Partnership Agreement on Homelessness (NPAH)), services for Indigenous people are overwhelmingly mainstreamed (Spinney et al. 2016). Within housing programs however, a range of Indigenous specific funds are available to increase the supply of housing in remote communities (NPARIH); to improve tenancy sustainment (NPARIH); for provision of short-term accommodation for travel related to access to education, employment, training and health (AHL); for health services, including primary care outreach to homeless Indigenous people (IAHP); and for a range of programs relating to homelessness, including mental health, criminal and juvenile justice, transport, substance use and family violence services (IAS) (Spinney et al. 2016).

None of these programs have Indigenous homelessness as their primary focus, suggesting that Indigenous homelessness funding arrangements are characterised by fragmentation and an absence of policy coordination. This means that homeless Indigenous Australians may not be receiving the kinds of support that are best suited to them, and current support may not be culturally appropriate (Spinney et al. 2016).

Funding uncertainty is a major issue, and the problems (including operational inefficiency, inability of organisations to innovate, and impacts on staff recruitment and retention) caused by this precarity are notably similar, regardless of the location or type of service, with larger organisations best placed to cope (Spinney et al. 2016).

## 5.5 Overcrowding

Indigenous households tend to be larger and experience overcrowding at far higher rates than the general population. Data from the 2011 ABS Census suggest that 24,700 Indigenous households were living in overcrowded homes in 2011 and 23 per cent of Indigenous households had five or more usual residents (compared to 10% of other households) (AIHW 2014b). The average size of Indigenous households was 3.3 people, compared with 2.6 people in other household types (AIHW 2014b).

Indigenous children, especially in remote communities, are much more likely to live in overcrowded dwellings than other children (AIHW 2014a). In 2008 more than half (58%) of all Indigenous children and youth lived in overcrowded housing; just under a third (92,700 or 31%) of all Indigenous children and youth lived in overcrowded housing in remote areas (ABS 2012b).

The larger size of Indigenous households may be due to a number of factors including:

- the greater prevalence of multi-generational and multi-family households in Indigenous communities (AIFS 2011; AIHW 2014b)
- lower income, higher rates of unemployment and housing supply and affordability issues leading to increased house-sharing arrangements (Birdsall-Jones and Corunna 2008).

The rate of overcrowding among Indigenous households varies according to tenure type. In 2011 Indigenous households were more than three times as likely as other households to be overcrowded. Social housing had the highest rate of overcrowding (23% compared to 5% of non-Indigenous households) followed by private renters (11% compared to 7% of non-Indigenous households). Indigenous home owners with or without a mortgage had the lowest rates of overcrowding (each at 7%, compared to 2% of non-Indigenous home owners) (AIHW 2014b).

Rates of overcrowding increased with remoteness, affecting between 10–12 per cent of households in non-remote areas, 20 per cent in remote areas and 39 per cent in very

remote areas (AIHW 2014b). Much of this difference is due to the high levels of overcrowding in social housing in remote areas. Forty-six per cent of Indigenous households in social housing in very remote areas, and 31 per cent in remote areas, are considered to be overcrowded (AIHW 2014b).

The concept of overcrowding can be subjective and is influenced by a number of factors including cultural and housing design considerations. The ABS and most other studies calculate overcrowding using the CNOS for housing appropriateness. However, questions have been raised about the cultural applicability of this standard to Indigenous Australian housing (Memmot et al. 2012). Thus while Indigenous people may be defined as living in overcrowded conditions under the CNOS, they may not themselves feel that their household is overcrowded (AIHW 2014b; Memmot et al. 2012).

A number of factors influence household size and contribute to overcrowding. These include income and employment, housing affordability, low vacancy rates and visitors. Temporary and semi-permanent visitors each contribute to overcrowding. They include people who would otherwise be homeless; people needing to access services (e.g. health or shopping); and people wishing to access the social and cultural life and structural support services of a particular location (Birdsall-Jones et al. 2010; Memmot et al. 2012).

The housing affordability crisis and low vacancy rates also contribute to overcrowding, as individuals and families are forced to choose between homelessness and living with often large numbers of kinfolk (Birdsall-Jones and Corunna 2008). Seasonal and culturally motivated movements by family members and strong family obligations can also exacerbate overcrowding (Memmot et al. 2012).

While Indigenous households do not necessarily see overcrowding as problematic, overcrowding can contribute to loss of personal control and stress (Memmot et al. 2012) and affect residents in a number of ways:

- put stress on household infrastructure (AIHW 2014b)
- adversely affect the physical health of residents through increased risk of exposure to infectious diseases and exacerbation of chronic infections (AIHW 2014b; DPMC 2016)
- be detrimental to the mental health of residents (AIHW 2014b) (Indigenous adults living in overcrowded housing are slightly more likely to experience high levels of psychological distress (33%) than other Indigenous adults (28%)) (ABS 2012c)
- impact employment opportunities (AIHW 2014b)
- affect children's attendance and attainment at school (AIHW 2014b; DPMC 2016)
- contravene housing department regulations and lead to householder stress and eviction (Memmot et al. 2012).

## **6 The link between housing and Indigenous health outcomes**

The general literature on housing and health provides strong evidence that poor housing and poor housing circumstances can negatively affect health in a number of ways. The impacts of housing on health can be measured in terms of physical health and mental health and wellbeing outcomes. Key housing factors that affect health outcomes are building quality and appropriateness, housing affordability, security of tenure and location (e.g. socio-economic characteristics of the area; urban, regional, remote).

There is a substantial literature on housing and health, yet it is difficult to pinpoint causal relationships between housing and health outcomes as many confounding factors are not easily explained. However, Foster et al. (2011) argue that while causality is notoriously difficult to prove within individual studies, by analysing a large number of studies one can gain insights into how housing affects health.

Housing is a key social determinant of health (Baillie 2007; Gibson et al. 2011; Phibbs and Thompson 2011; Shaw 2004). A major Australian study on housing and health found that housing can be considered a foundational element in physical and mental health, including disease prevention, and that adequate housing can be considered a preventative health intervention (Foster et al. 2011: 6).

Housing can affect health and wellbeing directly and indirectly through physical, chemical, biological, economic and social factors (Baillie 2007; Dockery et al. 2010; Ware 2013). The effects of these factors may be felt at the time of exposure or may occur later in life (Dockery et al. 2010; Phibbs and Thompson 2011; Ware 2013).

The directionality of the housing–health association is not always clear; poor housing may contribute to poor health, or poor health may contribute to households being accommodated in poor housing (due, for example, to loss of employment or income; reliance on government income supports or pensions).

There is sufficient evidence from the general literature on housing and health to indicate that housing quality is associated with physical health outcomes and improvements in the warmth and energy efficiency of housing can lead to improvements in general health, respiratory health and mental health (Braubach et al. 2008; Breysse et al. 2011; Chapman et al. 2009; Howden-Chapman et al. 2007; Jacobs et al. 2010; Thomson et al. 2013).

Housing affordability, tenure and location are more frequently associated with mental health and wellbeing outcomes. Housing has an indirect influence on health, at both the individual and neighbourhood group level, by being an important component of general socioeconomic status and influencing access to services (Baillie and Wayte 2006a; Baillie and Wayte 2006b).

Due to the unique characteristics of remote and very remote Indigenous communities, the findings of the impacts of housing on health from the general literature and internationally are not directly transferrable. The research on the impact of housing on Indigenous health and wellbeing focuses primarily on the effects of poor building quality, inappropriate housing design and overcrowding, which are more pronounced in remote and very remote areas.

The health problems faced by Indigenous people in remote and very remote areas centre around the three interrelated categories of infectious diseases, problems

resulting from social disruption and despair and ‘lifestyle’ related diseases resulting from poor nutrition, lack of exercise and emotional stress (Baillie and Wayte 2006b). Infectious diseases have the greatest impact on Indigenous children and are directly related to factors such as inadequate water supplies, washing facilities, sanitation and overcrowding (Baillie and Wayte 2006b: 179).

## **6.1 Indigenous people’s health outcomes**

Indigenous people experience poorer health outcomes and have a lower life expectancy compared to the general population.

For Indigenous people born in 2010–2012, life expectancy was estimated to be 10.6 years lower than that of the non-Indigenous population for males (69.1 years compared with 79.7) and 9.5 years for females (73.7 compared with 83.1) (AIHW 2017).

The 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS) (ABS 2014a) found that:

- Indigenous people were around half as likely as non-Indigenous people to have reported excellent or very good health (rate ratio of 0.6). Around two in five (39.2%) Indigenous people aged 15 years and over considered themselves to be in very good or excellent health; 7.2 per cent rated their health as poor.
- Indigenous people were more likely than non-Indigenous people to suffer from a range of long term health conditions, including asthma, heart and circulatory diseases, ear diseases or hearing problems, and diabetes.
- Indigenous people were more likely to experience a number of health risk factors including smoking on a daily basis, alcohol consumption above recommended daily limits, illicit substance use, overweight and obesity and low levels of exercise.

## **6.2 Building quality**

Research on the impact of building quality on health has primarily focused on the health consequences of inappropriately designed Indigenous housing and the links between dwelling condition and the housing infrastructure (bathrooms, kitchens, cooking facilities, toilets, sewerage) necessary to engage in ‘healthy living practices’ (see section 4.4 for a definition).

### **6.2.1 Maintenance and healthy living practices**

Indigenous Australians, especially in remote and very remote areas, are around 18 times more likely than other households to live in housing that is of poor quality, in poor condition and in need of major repairs (Mallett et al. 2011). They also experience multiple interruptions to water and electricity supply, and sewerage system faults are not uncommon (ABS 2008).

The 2014–15 National Aboriginal and Torres Strait Islander Social Survey (NATSISS) (ABS 2016) found that 28 per cent of Indigenous people aged 15 and over lived in dwellings with major structural problems, such as cracks in walls or floors, plumbing problems and wood rot or termite damage. This rose to 36 per cent in remote areas.

Housing infrastructure that enables healthy living practices includes facilities that assist in washing people, clothes and bedding; safely removing waste; and enabling the safe storage and cooking of food. In 2014–15, one in seven (15%) Aboriginal and Torres

Strait Islander people aged 15 years and over were living in a dwelling in which one or more of these types of facilities were not available or did not work (ABS 2016). People in remote areas were more likely (28%) than those in non-remote areas (11%) to have experienced problems with household facilities (ABS 2016). Poorly designed or maintained hardware has been linked with greater incidents of accidents (e.g. electrocution, burns, falls) (Bridge et al. 2003; Mullins and Western 2001; Rowley et al. 2008; World Health Organization 2006) and contributes to the spread of communicable diseases, such as gastroenteritis, and skin conditions (Bailie 2007; Phibbs and Thompson 2011).

A lack of potable water for drinking and cooking and inadequate waste water disposal systems are strongly linked with increased occurrences of gastroenteritis (Bailie 2007). Insufficient clean water for washing people and clothing has been linked with increased skin diseases and ear infections in young children (Bailie 2007; Bailie and Wayte 2006b).

Primary reasons for the poor condition of Indigenous housing have been identified as (Habibis et al. 2016; Lea and Pholeros 2010; McDonald et al. 2009; Ware 2013):

- inappropriate design for local climate conditions or cultural practices
- low-quality construction and materials
- 'high levels of wear and tear' due to small houses being used to accommodate large households
- limited maintenance.

Contrary to the often expressed notion that intentional damage significantly contributes to the poor state of Indigenous housing, the evidence shows that only 10 per cent of non-functioning household infrastructure is due to vandalism (Lea and Pholeros 2010; Torzillo et al. 2008).

### **6.2.2 Housing design**

Housing design and appropriateness to climate and usage patterns are important as they affect social stresses and thus mental health. Problems arise where the size and layout of dwellings does not meet the cultural and living needs of residents including usage patterns (Biddle 2011a; Memmot et al. 2012). The dominant nuclear design of houses in urban spaces in Australia is not suited to complex multi-generational or multi-family household structures and does not translate well to the requirements of remote-area living. Remote Indigenous housing, in particular, tends to be too small and confined and not sympathetic either to climatic conditions or outdoor living.

The design of housing for Indigenous households produces better outcomes if it takes into account social, cultural, health and environmental considerations and appropriately reflects household cultural norms and needs. This includes providing more bathrooms and larger kitchen facilities and outdoor living and sleeping spaces. It has been suggested that flexible internal spatial arrangements designed to accommodate fluctuations in household composition would produce a better fit (Memmot et al. 2012) and go some way towards reducing household stress and the wear and tear associated with inflexible living spaces modelled on non-Indigenous constructs of the family unit.

### **6.3 Crowding**

Less cramped living conditions has been linked to positive health, education and family outcomes for Indigenous people (SCRGSP 2016: 10.3).



Indigenous households tend to be larger than non-Indigenous households and, when measured using the CNOS, Indigenous households exhibit high levels of overcrowding (see section 5.5).

The 2014–15 NATSISS (ABS 2016) shows that:

- 18 per cent of Indigenous people aged 15 years and over were living in a dwelling that was overcrowded, that is, a dwelling in which one or more additional bedrooms was required—a significant decrease from 25 per cent in 2008 and 26 per cent in 2002.
- More than one-third (38%) of Aboriginal and Torres Strait Islander people aged 15 years and over in remote areas were living in overcrowded conditions, almost three times the rate in non-remote areas (13%).

However, it is important to note that in Indigenous housing crowding is not the same as density; it is a culturally defined concept that refers to loss of control over privacy and the ability to maintain avoidance relationships (Memmot et al. 2012; Ware 2013).

The evidence lends support for both positive and negative effects of living at high density on Indigenous health and wellbeing.

Crowding can reinforce solidarity amongst kin (Zubrick et al 2004: 102 cited in Memmot et al 2012). Conversely, psychological stress can be produced by a range of factors, such as having kin in avoidance relationships in inappropriate proximity; disruptive kin, who disturb others with fighting and drinking; and the strain of having to feed additional visiting kin (Memmot et al. 2012).

An excessive number of people in a house can put undue stress on household facilities, thereby contributing to the poor state of infrastructure in many dwellings and thereby constraining healthy living practices (Pholeros 2003).

Where the size and layout of a house does not meet the living needs of householders, problems can arise (Biddle 2011a); especially in remote areas Indigenous housing tends to be too small for the households that use them which puts people in close physical proximity, with negative impacts for infectious diseases and social stress, and can lead to increased domestic violence (Baillie 2007; Booth and Carroll 2005; SCRGSP 2014). This is also linked to preventable diseases from infectious diseases such as rheumatic fever and rheumatic heart disease (AIHW 2011).

For example, Fien et al. (2008), in their three case study communities of housing in Mimili, Maningrida and Palm Island, identified significant liveability problems related to a lack of concern for core cultural issues, inappropriate settlement planning, the lack of liveability of internal and external spaces, and the ineffective management of the housing process. They found that this was associated with poor health and that in the Northern Territory's Maningrida community and outstations overcrowding was associated with poor health and that the community reported to have the highest level of rheumatic heart disease in Australia and the highest level in the world (Fien et al. 2008: 24).

The impacts of crowding on children's health are discussed in section 6.4 below.

## **6.4 Housing and Indigenous children's health**

Housing can affect children's health, often with lasting effects for adulthood. A number of housing factors affect child health, including housing affordability, housing location, the ability of the dwelling to support healthy living practices and overcrowding.

Housing affordability stress affects the amount of money available to spend on 'basic necessities including food, clothing, healthcare, and heating' (AIHW 2010: 11), which, in turn, affects spending on basic health including dental treatment. The financial strain placed on parents by housing stress associated with the lack of affordable housing and cost of living pressures can also affect children 'via parental wellbeing' (AIHW 2010).

Biddle (2014) analysed data from the Longitudinal Study of Indigenous Children (LSIC) and found that health was a key determinant of school attendance. He suggests that the ongoing poor health profile of Indigenous children is part of the explanation for poor school attendance and that a focus on school retention for young Indigenous children, in particular, should be on health outcomes.

Indigenous children in remote communities have a high incidence of infection induced by deficient essential housing infrastructure, overcrowding and poor hygiene practices (Bailie et al. 2005; McDonald et al. 2009). In remote communities inadequate water supplies, sanitation and overcrowding have the greatest impact on Indigenous children, leading to diseases such as skin infections and parasitic infestations, respiratory, eye and ear infections, diarrhoeal diseases and rheumatic fever (Dockery et al. 2010) (Bailie et al. 2010; Bailie 2007).

Bailie et al. studied the impact of housing improvements on Indigenous children's health (Bailie et al. 2011; Bailie et al. 2010) and found that while this improved their hygienic conditions within the dwelling, it had little effect on the prevalence of common childhood illnesses. Simply building new houses is not enough as it does not significantly alter the number of people living in a house, improve hygiene, and does not on its own improve child health. They concluded that high levels of household crowding and poor social, economic and environmental conditions in many Australian Indigenous communities appear to place major constraints on the potential for building programs to impact on the occurrence of common childhood illness. These findings reinforce the need for building programs to be supported by a range of social, behavioural and community-wide environmental interventions in order for the potential health gains of improved housing to be more fully realised.

In well-designed housing and neighbourhoods safe outdoor play areas contribute to greater social participation and connection, allow children to engage in creative play and improve a range of facets of physical health such as increased immunity and the reduction of mental stress (Bagot 2005).

Living at high density can have positive and negative health and wellbeing effects for Indigenous people (Memmot et al. 2012). High numbers of people living in one house can be protective against child abuse and 'clinically significant emotional or behavioural difficulties' in children, where there is greater availability of adult supervision and care (Memmot et al. 2012). Conversely, the Northern Territory Government's Board of Inquiry into the Protection of Aboriginal Children from Sexual Abuse found that 'overcrowding in houses in Aboriginal communities ... has a direct impact on family and sexual violence' (Anderson and Wild 2007) and creates the conditions in which child abuse can occur.

The social stress associated with cramped living conditions has been associated also with increased family or other violence (Anderson and Wild 2007; Bailie 2007), inappropriate exposure of children to adult sexual acts (Anderson and Wild 2007; Bagot 2005) and increased sexual violence towards both adults and children (Bagot 2005). All of these factors have impacts for children's wellbeing and the ability of children to participate successfully in education. Lack of sleep and the ability to

complete homework due to overcrowding are key factors in educational disengagement and low educational attainment for Indigenous children (Biddle 2007).

In Indigenous communities, gambling (card games) and use of houses as meeting places for gambling can lead to overcrowding and negatively affect healthy living practices and the hygienic conditions of houses. This has been shown to be associated with adverse child health outcomes (Stevens and Bailie 2012).

## **6.5 Housing and mental health and wellbeing**

Tenure primarily affects mental health and wellbeing. Insecure tenure indirectly affects mental health and wellbeing by way of the mental and family/household stress it creates.

Indigenous people have higher levels of precarious housing compared to non-Indigenous people (Flatau et al. 2009). Precarious housing is defined as housing that is unaffordable (high housing costs relative to income); and/or unsuitable (overcrowded and/or poor dwelling condition and/or unsafe and/or poorly located); and/or insecure (insecure tenure type and subject to forced moves) (Mallet et al. 2011: 5).

A study by Mallet et al. (2011) found that people in precarious housing have, on average, worse health than people who are not precariously housed. This relationship exists regardless of their income, employment, education, occupation and other demographic factors. The poorer people's housing, the poorer their mental health. As health (mental or physical) worsens, the likelihood of living in precarious housing increases. Poor health can lead to precarious housing—people with mental or physical health issues are more likely to live in unaffordable housing and to have experienced a forced move, and to live in dwellings in poor condition.

Secure tenure can create benefits through stability, which lessens mental stress and allows for consistent access to health care. Secure tenure also bestows ontological security, meaning a sense of security and control (Shaw 2004), which in turn has positive flow-on effects for mental health and wellbeing (Bailie and Wayte 2006b).

Living in urban or homelands areas is associated with higher levels of mental health and wellbeing for Indigenous people, as compared with townships (Amnesty International Australia 2011; Biddle 2011a; Rowley et al. 2008). Connection to country is a key to positive health outcomes for Indigenous Australians (Garnett et al. 2009) and the greatest benefits seem to occur in homeland settlements (Biddle 2011a).

Culturally appropriate management of Indigenous social housing (Milligan et al. 2011) is crucial for ensuring that Indigenous social housing tenants are provided with housing that meets the accommodation needs of individual households and can provide tenants with a sense of control over their housing, which contributes to mental health outcomes. Culturally appropriate management includes self-management through Aboriginal housing associations where possible and improving the cultural awareness of non-Indigenous staff (Milligan et al. 2011).

## **6.6 Homelessness and risk of homelessness**

Homelessness is by definition a lack of tenure and is an extreme expression of housing disadvantage. Rates of homelessness are markedly higher among Indigenous people (see section 5.4). Homelessness does not necessarily refer to a lack of tenure, but can also refer to a loss of control over one's living environment or spiritual homelessness (see section 4.1).

In the general literature there is a significant body of research on the links between homelessness, housing interventions and physical and mental health and wellbeing outcomes. However, there is only a limited evidence base specific to Indigenous homelessness. Homelessness is strongly associated with poor health, mental health and wellbeing outcomes, and homeless people are heavy users of government services, including justice, health and welfare services (Zaretsky and Flatau 2013; Zaretsky et al. 2013).

Health problems may predate homelessness or contribute to it. Many of the health problems described above are worse for homeless people (Phibbs and Young 2005). Lack of a permanent place of residence can also act as a barrier to accessing health and social services. For example, sustaining tenancy programs have been shown to be effective in sustaining tenure for Indigenous people at risk of homelessness and in improving links and access to health and other services including counselling services, referrals to mental health, drug and alcohol services and financial counsellors. The programs have also demonstrated their effectiveness in reducing evictions (Costello et al. 2013; Flatau et al. 2008). The provision of permanent supportive housing to homeless people has been shown to improve their mental health (Costello et al. 2013).

Homelessness affects stability and social connectedness which, in turn, impacts health and wellbeing outcomes. The absence of housing also affects personal safety and people's sense of control and mastery of their lives, impacting physical and mental health and wellbeing outcomes (Foster et al. 2011: 14).

Housing interventions that support stable tenure can have beneficial mental health outcomes. There is a considerable literature on the links between homelessness and health and mental health. Mental health is a key risk factor for homelessness and homelessness exacerbates existing mental health issues (Costello et al. 2013; Phillips and Parsell 2012). People with mental health issues are at particular risk of homelessness due to: uncoordinated service systems; poor support networks; social isolation; and high levels of stigmatisation within the service system and society more generally (Costello et al. 2013).

## **6.7 Health related housing interventions**

Overall, the evidence shows that programs to improve the condition of Indigenous housing can be an effective and cost-efficient means of improving Indigenous health outcomes (Rowley et al. 2008; Watson 2007), but that this must be coupled with social and community interventions for greatest effect (Bailie 2006). Benefits flow on to other areas of society and the economy in the form of reduced health system costs, increased productivity and higher participation in employment (Ware 2013). Up-front investment in quality materials and construction results in long-term savings on maintenance of Indigenous housing, particularly in remote settlements (Garnett et al. 2009).

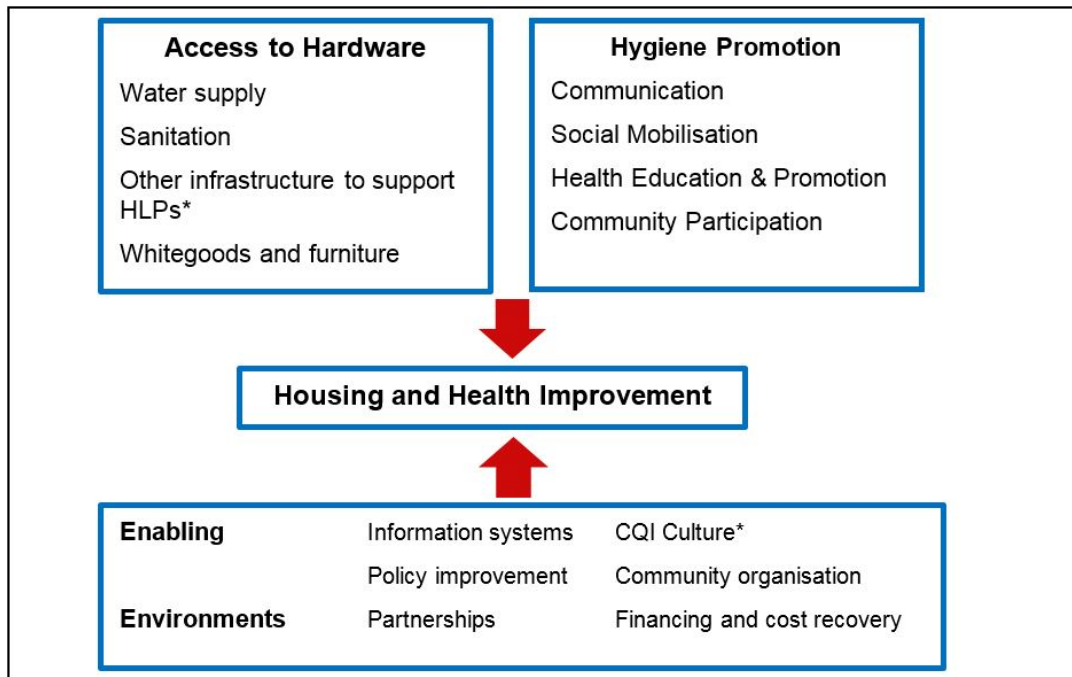
Three key areas of housing interventions affect health outcomes for Indigenous people:

- 1** improving infrastructure
- 2** housing related health promotion programs
- 3** adjustments to the housing policy environment.

It is important that any program aiming to improve Indigenous health through housing interventions is designed and implemented in close consultation with the affected community. As illustrated in figure 2, effective efforts require that all three types of

intervention operate simultaneously (Bailey et al. 2010; Bailie et al. 2011; Bailie et al. 2010; Bailie 2007; Ware 2013).

**Figure 2: Housing and health improvement framework**



\*HLP = healthy living practices; CQI = continuous quality improvement

Source: (Bailie and Wayte 2006a)

Figure 2 shows the relationships between housing and health improvement with enabling factors such as policy improvement, access to hardware and hygiene promotion.

## **7 The link between housing and Indigenous education attainment**

The link between Indigenous housing and Indigenous education outcomes has not yet been studied in depth. However, there is a large body of circumstantial evidence that points to the impacts of housing on Indigenous children's wellbeing and associated education outcomes.

This section of the report first reviews the evidence on Indigenous children's education outcomes and then presents the evidence on the impacts of housing on children's education performance from the general literature. This is followed by a discussion of the limited evidence on the links between Indigenous housing and Indigenous children's education outcomes.

The review was unable to identify evidence linking housing and Indigenous further education.

### **7.1 Indigenous children's education outcomes**

The 2016 Closing the Gap report notes that a 'safe and healthy place to live is a prerequisite for children and adults to thrive and actively participate in society' (DPMC 2016: 56). Yet, Indigenous Australians continue to have poorer education outcomes and experience worse housing circumstances than their non-Indigenous peers (Biddle 2014a; Dockery et al. 2013; Purdie and Buckley 2010).

Poor education participation, attainment and completion are associated with a number of negative outcomes for Indigenous people, including low life expectancy, high morbidity across a number of highly treatable conditions, low labour force participation, lower incomes and high rates of poverty and deprivation (AHMAC 2015; Biddle 2010).

In 2008, the Council of Australian Governments (COAG) agreed to six ambitious targets to address the disadvantage faced by Indigenous Australians:

- close the gap in life expectancy between Indigenous and non-Indigenous persons by 2031
- halve the gap in mortality rates for Indigenous children under five by 2018
- ensure access to early childhood education for all Indigenous four year olds in remote communities by 2013
- halve the gap in reading, writing and numeracy achievements for children by 2018
- halve the gap in Year 12 (or equivalent) attainment rates for Indigenous students by 2020
- halve the gap in employment outcomes between Indigenous and other Australians by 2018.

However, progress towards these goals has been varied and improvement in reaching education targets for Indigenous children has been slow.

The employment outcomes for Indigenous Australians with higher levels of education and other Australians with the same level of education are comparable (Biddle 2010; Karmel et al. 2014). If Indigenous and non-Indigenous students reach the same level of academic achievement by age 15, there is no significant difference in subsequent

educational outcomes, such as completing Year 12 and participating in university or vocational education and training (Mahuteau et al. 2015).

However, Indigenous students overall are less likely to remain at school and complete Year 12 than the general population.

- In 2012–13 nationally, the proportion of Aboriginal and Torres Strait Islander people aged 20–24 years who had achieved a Year 12 or equivalent level of education was 58.5 per cent, compared to 86.5 per cent of non-Indigenous people (DPMC 2016).
- The retention rate from years 7/8 to Year 12 in 2009 was 45 per cent for Indigenous students compared with 77 per cent for non-Indigenous students (Purdie and Buckley 2010).
- In 2009, school completion rates for Indigenous students were more than 30 percentage points below those of the general population (Long 2009 c.f. Helme and Lamb 2011:4).
- The gap in completion rates is most pronounced for students in very remote areas (50 percentage points) (Helme and Lamb 2011).

Indigenous educational attainment as measured by literacy and numeracy using NAPLAN is below that of their non-Indigenous peers. In 2015, 78.7 per cent of Indigenous children in Year 3 met national minimum standards in reading and 78.2 per cent in numeracy, compared to 95.6 per cent and 95.5 per cent respectively of non-Indigenous children (ACARA 2015).

Educational attainment varied between geographical areas. Students in remote and very remote areas fared worse than those in metropolitan areas. In 2015, 82 per cent of Indigenous students in Year 5 in metropolitan areas reached National Minimum Standards, compared to 61 per cent in remote areas and just 38 per cent in very remote areas (DPMC 2016).

Absenteeism is a key driver of differences in education outcomes for Indigenous students. Students who do not attend school regularly are likely to fall behind their peers and have lower academic performance. They are less likely to complete school, with negative flow-on effects for employment (Purdie and Buckley 2010).

Poor health is a key factor in children missing school. There are clear links between the quality and location of housing and health outcomes (Ware 2013). Indigenous people have higher rates of illness due to poor housing conditions and overcrowding than non-Indigenous Australians (Dockery et al. 2010). This leads to lower attendance rates at school (Biddle 2014b).<sup>1</sup>

Approximately 20 per cent of the gap in performance between Indigenous and non-Indigenous 15 year olds is due to poor school attendance among Indigenous students (Biddle 2014a).

- In 2015 the overall school attendance rate for Indigenous students was 83.7 per cent, compared to 93.1 per cent for non-Indigenous students (DPMC 2016).
- Indigenous school attendance varies according to remoteness. In 2015 attendance in very remote areas was 67.4 per cent, compared to 86.5 per cent per cent in metropolitan areas (DPMC 2016).

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<sup>1</sup> See section 5 for a detailed discussion on the links between housing and health outcomes.

Reasons for Indigenous non-attendance relate to a lack of recognition by schools of Indigenous culture and history; failure to fully engage parents, carers and the community; and ongoing disadvantage in many areas of the daily lives of Indigenous Australians (Purdie and Buckley 2010; Reid 2008). Overcrowded housing negatively affects school attendance, as does a lack of access to economic resources, whether measured as home ownership or income (Biddle 2010; Silburn et al. 2014).

While remoteness has a significant negative impact on school attendance, achievement, retention and completion for Indigenous students (Silburn et al. 2014), national figures need to be treated with caution as many Indigenous young people are successfully engaged with education and much of the variation in school attainment figures between Indigenous and non-Indigenous students can be explained by the fact that Indigenous Australians are more likely to live in remote areas of Australia. In remote areas:

- schools are more difficult to access and often lack basic services, infrastructure and adequately trained teachers or student amenities (Biddle 2010)
- school attendance attracts higher economic costs (e.g. due to longer travel distances)
- there is a higher prevalence of socio-economic disadvantage
- Indigenous Australians experience poorer housing circumstances (poorly maintained housing, lower levels of home ownership, high levels of overcrowding).

Other factors that have been linked to lower Indigenous educational attainment are the percentage of adults in the community with a Year 12 or equivalent education, the percentage of adults who speak English as a first language, and the mother's childbearing age and level of education (Silburn et al. 2014).

## **7.2 Impacts of housing on children's education and wellbeing**

There is a dearth of studies examining the relationship between housing and education outcomes in Australia and barely any research on housing and Indigenous education. The international literature, however, demonstrates that the housing in which children are raised has significant impacts on their development and wellbeing, including education outcomes, and may be an important mediating factor in the transmission of intergenerational and neighbourhood disadvantage (Dockery et al. 2013).

While this evidence may not be wholly transferrable to the Australian context, it does provide crucial foundational information for the identification of key links between housing, childhood development and education.

Recent research demonstrates that home ownership is associated with better education outcomes, while social housing and/or precarious housing is associated with poorer education outcomes and reductions in school attendance (AIHW 2010; Dockery et al. 2010; Dockery et al. 2013; Foster et al. 2011; Mallett et al. 2011; Ware 2013).

An extensive review of the Australian and international literature on the effects of housing on children's wellbeing by Dockery et al. (2010) concluded that the connection between housing circumstance and child development and wellbeing was well-recognised in the international literature.

The Dockery review found that housing factors impact on children differently depending on their developmental age. The factors shaping child development and wellbeing are



complex, often interrelated and multiplied by coincident factors (Dockery et al. 2010). This means that housing can impact on children's wellbeing and development through both direct and indirect factors. Housing factors impact on children differently depending on their developmental age.

The review found that home ownership positively affects academic performance and lifetime prospects, emotional and social wellbeing, behaviour and health; negative impacts for children's wellbeing and development were associated with the following factors (Dockery et al. 2010):

- **Toxins** contribute to lower birth weights and lengths among infants, behavioural and social problems, impaired neurological development and growth, IQ reductions, poorer academic outcomes and juvenile delinquency among adolescents. Toxicants affect all stages of child development and the effects tend to be irreversible and continue on into adulthood.
- **Environmental allergens** can lead to asthma and other respiratory illnesses, which in turn trigger future development of respiratory illnesses. They have the greatest impact in infancy and early childhood.
- **Unclean, unsafe and low-quality housing** can result in reduced cognitive development, falls or injuries and internalising behaviours due to parental restrictions on physical behaviour. This type of housing is most likely to affect young children who spend most of their time indoors.
- **Building height and limited opportunities for outdoor play** were found to contribute to behavioural and social problems, reduced independence, reduced motor skill competencies and ability to perform routine tasks and poorer education outcomes. This primarily affects young children due to parental restrictions.
- **Overcrowding** can contribute to a reduced sense of autonomy, social withdrawal, health and developmental problems, poorer school performance and behavioural adjustment at school, psychological distress, and psychological distress in adults, which led to increased conflict between children and parents. Overcrowding affects children at all stages of their development. Negative effects on mental development were noted at 18–24 months of age; reduced verbal and perceptual development at 30, 36 and 43 months; and poorer language development at 39 months. Overcrowding was correlated with reduced IQ scores at age 30 months; impaired semantic memory among toddlers; less persistence and vigour in solving complex and challenging puzzles in young children; and lower task-performing motivation in children aged 6–12 years. Overcrowding was found to be associated with poor cognitive development and poorer reading test performance among elementary school children and had a negative impact on learning in elementary and middle school.
- **High mobility and frequent residential moves** have a negative impact on education outcomes, behaviour and reduce social connectedness.
- **Homelessness** causes psychological distress including depression and anxiety, personal, social and language developmental difficulties, emotional developmental delays, health and hunger problems and poor academic performance.
- **Neighbourhood effects** associated with poor neighbourhoods have been linked to greater exposure to health risks, higher rates of crime, poverty and drug use, reduced access to quality education and health services, reduced opportunities for outdoor play and poorer education outcomes. Neighbourhood effects on infants and preschool children operate indirectly through impacts on parents and were

associated with behavioural problems among 4–5 year olds. They were found to be strongest in adolescents due to the influence of peers.

- **Poor housing affordability** contributes to poor health outcomes (due to lower-quality housing or reduced consumption of basic necessities) and increases stress among children (due to a higher likelihood of inconsistent or punitive parenting practices by caregivers bearing the burden of financial hardship). Detrimental effects were strongest in early childhood; health impacts strongest among 6–17 year olds; and behavioural impacts strongest among 12–17 year olds.

These factors tend to be clustered in remote area housing, with negative outcomes for Indigenous children's education outcomes.

A study by Phibbs and Young (2005) examined the links between housing assistance and non-shelter outcomes. They found that improved housing circumstances resulting from the receipt of housing assistance in the form of public housing had positive effects on education. Study participants reported that better housing circumstances allowed their children to access better schools, contributed to increased happiness of children, reduced parental stress and provided children with more space and fewer interruptions to do their homework.

### 7.3 Indigenous children—housing and education outcomes

The housing experiences of Indigenous children are significantly worse than those for other Australian children. Dockery et al. (2013: 52) note:

*On average, Indigenous children live in starkly inferior housing circumstances than non-Indigenous children. This is apparent in terms of a low level of home ownership among Indigenous Australians, a high proportion living in public housing and in receipt of CRA, more frequent moves, more crowded homes and generally inferior neighbourhoods. Indigenous children are also much more likely to live in a sole-parent family, and are significantly worse on all outcomes measures.*

In Australia there is very limited research on the link between housing and Indigenous education outcomes. The study by Dockery et al. (2013) referenced above drew on data from two key longitudinal studies to provide empirical evidence for the association between housing and early childhood wellbeing and development: Growing Up in Australia: The Longitudinal Study of Australian Children (LSAC)<sup>2</sup>; and Footprints in Time: The Longitudinal Study of Indigenous Children (LSIC)<sup>3</sup>.

While Dockery et al.'s study found highly statistically significant relationships between a range of housing variables and children's outcomes, in terms of magnitude, the authors noted that the effect of housing variables was quite modest and explained little of what could already be accounted for by family socio-demographic characteristics.

Associations between housing and child outcomes do not necessarily imply causal effects, but they seem to impact on various areas of child development.

- **Physical health.** Housing has a small impact on physical health.

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<sup>2</sup> LSAC followed 5107 infants for four years (from 0–1 to 4–5 years) and 4983 pre-schoolers for four years (from 4–5 to 8–9 years).

<sup>3</sup> LSIC is a longitudinal study of two groups of Aboriginal and/or Torres Strait Islander children who were aged 6 to 18 months and 3½ to 5 years when the study began in 2008.

- **Social and emotional outcomes.** Parenting styles and family dynamics are of greater importance than the physical aspects of the building.
- **Learning outcomes.** Overcrowding has the largest negative impact on learning outcomes.
- **Neighbourhood effects.** Neighbourhood effects are more important than characteristics of individual dwellings in promoting the wellbeing of children, particularly once they pass toddlerhood.

The study also investigated the impacts of housing-related factors on Indigenous children. It found that Indigenous families scored similarly to the general population on indicators of parental warmth, but less well for other indicators (Dockery et al. 2013).

- They scored far lower than their non-Indigenous counterparts on social and emotional wellbeing indexes. This was driven primarily by the higher incidence of Indigenous families living in public housing and the inferior condition of their dwellings.
- They had poorer physical outcomes than the general population due, in part, to the lower liveability of their neighbourhoods and poorer condition of their dwellings.
- They scored much lower than the general population on the learning outcomes index. This was driven by the degree of overcrowding and the high proportion of households living in public housing. The gap between Indigenous and non-Indigenous children seemed to widen with age.
- They were particularly disadvantaged in terms of the socio-economic position of their family, low rates of home ownership and high levels of receipt of housing assistance (particularly public housing).
- Disproportionately high numbers of children were living in sole-parent families.

Memcott et al. (2006a) identified a general link between availability of housing and the achievement of successful secondary educational outcomes for Indigenous young people from discrete settlements. They note the role of appropriate housing, transition and cultural support for children attending secondary school away from their homes (Memcott et al. (2006a: 101-2).

### 7.3.1 Homelessness

Homelessness exerts a negative influence on Indigenous children's education outcomes. We know that Indigenous children and young people under the age of 18 make up around a quarter of the Indigenous homeless population (AIHW 2015).

Homeless children are likely to have reduced reading achievement (Zima et al. 1996, cited in Dockery et al. 2010) and their achievement in spelling, mathematics and reading is poorer than their housed peers (Rubin et al. 1996, cited in Dockery 2010 et al.). Children without stable housing have been shown to have lower rates of school attendance, which contributes to poorer academic performance (Molnar et al. 1990, cited in Dockery 2010 et al.), have comparatively higher absentee rates and be likely to change schools more frequently (Dockery et al. 2010).

Homelessness can be a severe source of stress for children and can cause significant psychological distress. Homeless children are at greater risk of experiencing hunger and ill health (Dockery et al. 2010), with the circumstance of homelessness and associated wellbeing concerns leading to interventions by child welfare agencies (Dockery et al. 2010). Each and all of these factors negatively affect children's educational performance.

Conversely, increasing housing security and affordability can positively influence Indigenous education outcomes. A study examining the effects of housing assistance on non-shelter outcomes (Phibbs and Young 2005) found that, based on parental perceptions, children's educational performance improved following relocation into public housing. Parents attributed the positive effect to: access to better schooling, including quality teaching and more motivated peers; changes at home due to decreased parental stress and increased happiness of the child now living in a good quality dwelling; and the ability of children to do their homework without disturbance from, or fighting with, their siblings due to the availability of private separate living spaces.

### **7.3.2 Overcrowding**

The 2011 Census indicated that 12.9 per cent of Indigenous households required at least one additional bedroom, compared to 3.4 per cent of other households (AIHW 2014b).

Overcrowding negatively affects education outcomes for children generally. However, it is possible that overcrowding may not have the same impacts on outcomes for Indigenous children as it does for non-Indigenous children because of different cultural norms and expectations in respect to housing extended family and household size (Dockery et al. 2013). Biddle (2010) found that the number of people in the household did not have a significant effect on school attendance but the number of people per bedroom did, concluding that this implies that it is overcrowding that reduces educational participation rather than household size.

*to be successful at late secondary school, it is likely to be beneficial to have a quiet area within the home where the student can prepare for exams and assignments. The number of other people in the household interacted with, and the size and quality of the house the student lives in are therefore likely to impact on a youth's desire to continue on at school. (Biddle 2010: 10)*

The Western Australian Aboriginal Child Health Survey (WAACHS), found that children in larger households were half as likely to be at risk of clinically significant behavioural and emotional difficulties as children in low-occupancy households' (Zubrick et al. 2006).

### **7.3.3 Mobility**

International research demonstrates that high mobility and frequent residential moves negatively affect education outcomes and behaviour and reduce social connectedness.

School-age children who move frequently are significantly more likely to fail a grade, have behavioural problems (Wood et al. 1992) and fall behind in their learning than their more stably housed peers (Kerbow 1996). When children change schools with a residential move they have to contend with new peers, teachers, curricula and other challenges, including the circumstance of their relocation, which may disrupt their educational progress and achievement (Dockery et al. 2010).

Repeated residential mobility has been associated in the literature with reduced social connectedness both for children and their families (Pribesh and Downey 1999; South and Haynie 2004). However, there is a dearth of research specifically examining the impact of high residential mobility on child development and educational performance for Indigenous children in Australia. Differences in kinship and social structures mean that such findings may not be transferrable to Indigenous households and should therefore be treated with caution.

The Australian Indigenous population is, however, highly mobile. Geographical mobility is fundamental to Indigenous self-identity (Habibis et al. 2010; Memmott et al. 2004; Peterson 2004) and associated with kinship patterns, cultural practices and autonomy. However, it is also associated with housing stress, overcrowding, homelessness and family violence (Birdsall-Jones and Corunna 2008; Habibis et al. 2010; Memmott et al. 2006b).

Mobility can take the form of permanent relocation, but much Indigenous mobility is temporary and consists of short-term geographical movement. Temporary mobility is known to negatively impact housing access and tenancy sustainability for Indigenous people (Habibis et al. 2010).

Research on the motivations for Indigenous temporary mobility and migration reveal a complex interaction of factors derived internally from Indigenous culture and externally from non-Indigenous social forces (Birdsall-Jones and Corunna 2008). AHURI research by Habibis et al. (2011) has identified seven key mobility groups among the Indigenous population: visitors; migrants; boarders; between place dwellers; transients; involuntary travellers; and the chronically homeless. As noted in the previous section, this also has implications also for overcrowding. Children and women are particularly affected by forced mobility resulting from family violence and family breakdown (Birdsall-Jones and Corunna 2008; Walker et al. 2003).

Although high mobility among Indigenous households is a well-established phenomenon, temporary mobility is an important area which influences housing demand and housing provision. It is often overlooked because it falls between the provision of permanent affordable housing and SHS provision (Habibis et al. 2011).

#### **7.3.4 Neighbourhood effects**

The characteristics of the area in which children live, and the characteristics of the people who live in the area, are likely to have an association with school attendance, attainment and completion.

Neighbourhood effects (or 'area effects') refer to the effect on an individual's life chances attributable to living in a particular neighbourhood (e.g. in relation to health, education, employment, crime, welfare dependency, self-esteem). It describes a situation whereby disadvantaged individuals are significantly harmed by the presence of high concentrations of disadvantaged groups, but are helped by the presence of advantaged groups in the area (Andersson 2004; Andersson et al. 2007; Atkinson 2008; Galster and Friedrichs 2015; Galster et al. 2004; Galster 2012; Kearns and Mason 2007).

There are only few studies on neighbourhood effects on children in Australia. Ben Edwards' examination of the role of neighbourhoods on children's conduct and development is a rare exception. Consistent with the international evidence, the study found that Australian children living in neighbourhoods with greater socio-economic disadvantage were more likely to experience adverse outcomes than children living in more advantaged areas (Edwards 2005). A later study by Edwards and Bromfield (2010) found that neighbourhood social processes (e.g. neighbourhood belonging) play a role in explaining the influence of neighbourhood disadvantage on children's behavioural and emotional problems. For example, perceptions of the neighbourhood and neighbourhood belonging can mediate the effect of neighbourhood socio-economic disadvantage on children's behavioural and emotional outcomes.

The causal linkage between areas of concentrated poverty and these outcomes is complex. Area effects include the quality and availability of local essential public

services (such as health and education), the role-model effects generated by living in extensively poor areas and the spatial disadvantage of excluded neighbourhoods and stigmatisation (Atkinson 2008). The school attendance and completion rates of one's peers and role models are likely to include the relative social acceptance of attending or not attending high school (Biddle 2010).

There is, however, some more recent dissent in regard to the claim that living in deprived neighbourhoods makes people poorer, with others suggesting that 'it is more likely that unemployed people moved to the deprived neighbourhoods because they could not afford to live elsewhere' (Manley et al. 2012: 157) (see also Arthurson 2002; Arthurson 2012).

As Indigenous households tend to have poorer socio-economic indicators and live in areas of greater disadvantage than other Australians (AIHW 2011), the impact of area effects on Indigenous children's education outcomes, especially in remote areas, cannot be underestimated.

### **7.3.5 Remoteness**

Remoteness cuts across all housing factors identified in this paper as affecting Indigenous children's education outcomes and the factors outlined are often clustered. The high proportion of Indigenous households in social housing in remote settings, and associated issues of overcrowding, amenity and household function, have implications for children's wellbeing, active participation in schooling (including their ability to be supported at home and to complete homework) and educational attainment (Habibis et al. 2016).

Schools in remote areas may be more difficult and costly to access due to their geographic proximity and the quality of education may be lower (Biddle 2010). Children in remote Indigenous communities may experience more difficulty in accessing basic services and resources due to their isolation from large population centres (Dockery et al. 2010) and cost of living pressures associated with low parental or household income.

## 8 The contribution of housing to economic development outcomes

There is limited evidence on the links between housing and Indigenous employment or economic development outcomes. Existing research focuses primarily on outcomes arising from housing investment processes for local employment and community outcomes, mainly in remote areas. Home ownership has been linked to increased employment outcomes for Indigenous households. The synthesis was unable to identify any research on the links between housing and Indigenous labour market participation.

The spatial relationship between housing and employment is also a focus of the literature. The impacts of housing on Indigenous employment and vice versa are mediated by remoteness and cultural factors (Shaver 2008). Structural factors, such as the availability of employment and training opportunities and the skills and capacity of the local workforce also affect economic development outcomes.

### 8.1 Indigenous labour force participation

Indigenous people have low rates of labour force participation and high rates of unemployment compared to non-Indigenous people; these trends are more pronounced in remote areas.

NATSISS data from 2014–15 shows that (ABS 2016):<sup>4</sup>

- Less than half (46%) of Indigenous people aged 15 years and over were employed; 27.7 per cent were working full-time and 18.3 per cent were working part-time.
- Almost half of Indigenous people living in non-remote areas (49%) were employed, compared to those in remote (36%) areas.
- The unemployment rate (the number of unemployed people expressed as a proportion of people in the labour force) for Indigenous people aged 15 years and over was 20.6 per cent.
- The unemployment rate was higher in remote areas (27.4%) than in non-remote areas (19.3%). This was largely due to differences in the unemployment rates for males (29.8% in remote areas compared with 19.1% in non-remote areas), and the relatively low unemployment rate in major cities (14.0%).
- The unemployment rates for Indigenous people were higher than those for non-Indigenous people, in all age groups. The difference was largest for young people aged 15–24 years (31.8% for Indigenous people, compared with 16.7% for non-Indigenous people). The smallest difference was for those aged 55 years and over (6.2% compared with 3.0%).

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<sup>4</sup> A note on comparability. The ABS's monthly labour force statistics are Australia's official measure of employment, but are not broken down by indigeneity. Indigenous labour force statistics from the National Aboriginal and Torres Strait Islander Social Survey (NATSISS) were collected at a point in time from a sample of the Aboriginal and Torres Strait Islander population aged 15 years and over; the most recent data available is from the 2014–15 NATSISS (ABS 2016).

## 8.2 Housing and local employment and community outcomes

The impact of housing provision on employment and economic development outcomes is mainly through involvement of Indigenous people in the construction and ongoing maintenance of housing (Gronda 2008).

A number of publications have highlighted the potential for the Indigenous housing industry, particularly in remote and very remote Australia, to provide significant employment and capacity-building opportunities for Indigenous people (AIHW 2005; Davidson et al. 2011; Jardine-Orr et al. 2004; Planning 2004).

*Housing and infrastructure procurement, as one of the largest capital investments by governments in remote communities, has a clear potential to generate employment and training capitals and thereby provide improved wealth creation and economic sustainability for Aboriginal people.*  
(Davidson et al. 2011: 22)

However, while numerous best practice housing procurement examples exist in the Australian Indigenous housing context, the evidence shows that housing procurement, particularly in remote and very remote Australia, can often fail to provide significant long term employment and capacity building outcomes for Indigenous people (Davidson et al. 2011; Fien et al. 2008; Seeman et al. 2008).

Davidson et al. (2011) sought to understand how housing procurement strategies impact on outcomes for Indigenous people in remote settlements and how they generate socio-economic capitals. They undertook four case studies of housing procurement processes in remote Indigenous communities; two of these were large projects, two were smaller.

Key findings from the project were that:

- The way contracts for procurement are designed can play an important role in enhancing or creating positive social and economic outcomes as part of the construction process.
- Mainstream housing procurement contracts that are driven by economic imperatives, such as minimising financial risk and maximising financial gain in set timeframes, contribute little towards achieving economic development outcomes in remote Indigenous communities that are characterised by a largely unskilled, highly mobile labour force.
- Factors that contribute to positive and sustainable socio-economic outcomes include:
  - Appropriate timeframes for staging of projects so that apprentices can finish their training over the course of one project rather than have to pick up work elsewhere to complete training.
  - Taking account of the specific social and environmental context within which housing is constructed.
  - Allowing for flexibility in contracting through 'alliancing' or 'partnering' so that risks are appropriately shared.
  - Ensuring meaningful community engagement early in the project so that the community has a high sense of ownership over the end product, people are involved in capacity building and the design is appropriate to their needs.



- Establishing supportive organisational cultures, which involve good communication between tiers of government departments and those undertaking grass-roots activities, and resourcing local organisations not adequately skilled or equipped to take on larger projects.

Schemes that require a lesser skill-set, maintenance of social housing in particular, could provide an avenue for ongoing employment generation through local service delivery and sustained maintenance programs and potentially provide a far more reliable source of long-term local employment than new housing projects (Torzillo et al. 2008).

The Northern Territory handyman system provides one such example. It employs local people with sufficient skills to undertake small, low skill repairs and maintenance, thereby generating substantial savings in travel costs, reducing wasted journeys for poorly identified problems and creating local employment opportunities (Habibis et al. 2016). However, this approach requires flexibility and commitment because there are many barriers to it, and there may be locations where it is especially difficult (Habibis et al. 2016).

### **8.3 Housing and labour force participation**

Non-Indigenous specific research provides some support for the links between housing and labour market participation.

- Commonwealth Rent Assistance (CRA) has small but negative impacts on employment outcomes. Public housing tenants frequently have lower levels of geographic mobility, which can affect their ability to access paid employment. Rent setting policies, the stacking of taxation schedules and the tapered withdrawal of income support payments may create work disincentives for public housing tenants and people on the waiting list for public housing (Bridge et al. 2003; Dockery et al. 2008; Productivity Commission 2014; Productivity Commission 2015; Wood et al. 2009). These financial disincentives may impact on Indigenous people receiving housing assistance in urban and regional areas (Gronda 2008).
- Public housing can support some tenants engaging or seeking to engage with education or the labour force by providing stable housing—particularly if tenants are located close to training and employment opportunities, are safe and have childcare options (Phibbs and Young 2005; Whelan and Ong 2008).
- Mobility due to overcrowding and economic necessity negatively impacts on employment outcomes (Shaver 2008).
- Public housing that is well-located and close to employment, education and childcare can assist public housing tenants who wish to participate in the labour market (Saugeres and Hulse 2010). However, it can also reduce employment levels if it is located in areas with few jobs or supports, or in areas considered unsafe (Saugeres and Hulse 2010).

### **8.4 Employment and home ownership**

Indigenous rates of home ownership and employment status are linked (Sanders 2005; SCRGSP 2016).

- Access to employment is the most significant factor enabling Indigenous home-ownership.

- Overcrowded housing is correlated with lower household and personal incomes, higher unemployment and higher not-in-the labour-force levels, and lower education levels (AIHW 2014; Birdsall-Jones and Corunna 2008; Shaver 2008).
- Home ownership is an important indicator of wealth and saving, as owning a home provides a secure asset base against which people can borrow, contributes to financial stability and provides opportunity for wealth creation (SCRGSP 2016).
- Home ownership also provides security of tenure and allows control over living arrangements. Research highlights the perceived intergenerational benefits of home ownership for Indigenous people (rather than economic benefits such as selling a house for profit) (Memmott et al. 2009; SCRGSP 2016: 9.23).

Barriers to home ownership for Indigenous people include higher unemployment rates; intergenerational welfare dependency; lower incomes and savings; limited access to loans; and lack of information about financial planning. These factors are particularly prevalent amongst those living in remote and very remote areas (ANAO 2013; SCRGSP 2016: 9.23). Additional barriers include access to initial capital, complexities of the lending process, and a shortage of affordable housing (FaHCSIA 2013).

## **9 The importance of housing to Indigenous safety and wellbeing**

Housing that is secure and safe, not only in terms of secure tenure but also stability, privacy and feelings of safety and belonging, has been linked with broader social wellbeing outcomes (Hulse and Saugeres 2008).

Safety refers to both the absence of criminal activity and householders' and community members' feelings and perceptions of safety. Crime can refer to criminal activity, which occurs in the home or the neighbourhood, and includes property crime (e.g. vandalism or theft) and violent crime and DFV. A household's perceived lack of safety could be imagined or real.

Limited literature exists on the relationship between housing and Indigenous safety and wellbeing. The current body of evidence is largely qualitative, sometimes conflicting, and predominantly focuses on the relationship between housing occupant safety and overcrowding, housing quality, housing tenure and neighbourhood factors.

Causality in these relationships can be unclear. However, the evidence shows that overcrowding, insecure tenure and poor quality housing were factors often present in Indigenous households experiencing domestic violence, sexual abuse and intimidating behaviour (Birdsall-Jones and Corunna 2008; Cooper and Morris 2005).

### **9.1 Indigenous people's safety and wellbeing**

Indigenous people experience high rates of crime and violence compared to non-Indigenous people; these trends are more pronounced in remote areas.

NATSISS data from 2014–15 shows that (ABS 2016):

- Physical or threatened violence among Aboriginal and Torres Strait Islander adults has remained constant between the years 2002, 2008 and 2014–15. In 2014–15, approximately 22 per cent of Aboriginal and Torres Strait Islander adults reported being a victim of physical or threatened violence. This level of violence is 2.5 times the rate for non-Indigenous adults in 2014-15 (PC 2016).
- Approximately 68 per cent of Aboriginal and Torres Strait Islander people aged 15 years and over who had experienced physical violence in the year 2014–15, reported that alcohol or other substances contributed to the most recent incident. This was significantly higher in remote areas (76 per cent) than in non-remote areas (65 per cent) (ABS 2016).
- In 2014–15, 90 per cent of Aboriginal and Torres Strait Islander people aged 15 years and over who had experienced physical violence in the last 12 months knew the perpetrator of the most recent incident (96 per cent of females compared with 83 per cent of males). A family member (including a current or previous partner) was the perpetrator in half of these cases (ABS 2016).

### **9.2 Domestic and family violence**

Domestic and family violence is a significant problem in Indigenous communities and is the most commonly reported primary reason for Indigenous (22%) clients who seek assistance from SHS (AIHW 2014a).

The preferred term for domestic violence among Indigenous persons is 'family violence'. This is a reflection of the fact that immediate and extended family often live in the same household, and that acts of violence may be committed between extended family members.

Interviews with housing service providers, key stakeholders, and Indigenous female tenants reveal that sexual abuse and domestic violence are tightly linked with overcrowding and is especially common when associated with drug and alcohol abuse (Cooper and Morris 2005). Indigenous women and children seeking to escape family violence are frequently disconnected from the life of their local community, moving house frequently. This high mobility means they are often hidden from the services which could assist them and have poor access both to mainstream and Indigenous-specific homelessness services. Indigenous women also can be prevented from seeking help and accessing services and skills-based training which might lead to employment and financial independence by cultural perceptions of 'shame' and poor literacy (including information literacy) (Cooper and Morris 2005).

A study of Homeswest social housing tenants in the Western Australian towns of Broome and Carnarvon demonstrated that domestic violence in overcrowded Indigenous homes is mobile. During a series of interviews, Homeswest tenants stated that tenants committing alcohol abuse and violence are often evicted, which can begin a cycle of violence induced eviction and moving between overcrowded homes occupied by kin (Birdsall-Jones and Corunna 2008).

Indigenous women living in overcrowded homes are less likely to report that they were a victim of physical or threatened violence than those in houses not deemed crowded (Biddle 2011b). While this appears counterintuitive, it is more likely that interviewees in crowded homes were interviewed in the presence of other family members, potentially impacting on reporting (Biddle 2011b). Sexual abuse also remains a taboo topic in Indigenous communities, and so the reported abuses in overcrowded homes are likely only a fraction of the total number of abuses perpetrated (Cooper and Morris 2005).

While literature specific to Indigenous housing occupant safety and housing quality is limited, Pocock (2003) notes that there exist safety implications for Indigenous tenants relating to inadequate security in derelict and poor quality housing. Tenants in homes that cannot be adequately locked are more vulnerable to external intruders and the possibility of assault. Female heads of household who may care for large numbers of children often occupy poor quality houses in desperation, having already fled domestic violence (Pocock 2003).

Women require support for themselves and their children through mechanisms that provide financial and housing stability where such supports are desired. Support to sustain tenancies might include assistance with housing transitions, tenancy skills in areas like budgeting, cooking and basic property maintenance, parenting and urban living skills for women from remote areas, material aid in establishing a household, strategies to deal with crowding, financial abuse or substance issues, and ongoing personal and social supports to overcome isolation and integrate into the local community (Cooper and Morris 2005). Support for women in the face of domestic violence and financial distress would assist in this regard. Similarly, support for those who have substance abuse, alcohol and violence problems can reduce stress and overcrowding (Memmot et al. 2012).

The National Plan to Reduce Violence against Women (2010) and their children includes three strategies targeted for Indigenous family violence: foster the leadership of Indigenous women within communities and broader Australian society; building

community capacity at the local level; improve access to appropriate services. Actions associated with the strategies include trauma healing programs, local and life-skills education, supporting community led alcohol and substance abuse solutions, the provision of additional safe houses, and domestic violence training for Indigenous health service delivery workers (COAG 2010).

A significant recent change relating to intervention in domestic violence is the 'staying home, leaving violence' policy initiative, which provides greater choice to the victim of domestic violence (Edwards 2011). The efficacy of this policy in improving safety in Indigenous households is unclear due to an absence of research in this area. Clarity in this policy area may provide significant insight into the effect of housing on Indigenous occupant safety.

### **9.3 Crime and safety**

Crime and safety are significant issues in Indigenous communities. NATSISS reported that awareness of neighbourhood crimes among remote community residents is highest for theft (51 per cent) and youth perpetrated crimes (50 per cent), with alcohol abuse (64 per cent) and drug use (56 per cent) likely to be significant contributing factors (ABS 2016).

Overcrowding can be a cause crime when combined with unemployment and poor quality housing (Alison Vivian 2010). Interviews with Indigenous community workers in Bourke, NSW, highlighted the discontent, boredom and alcohol abuse present in many overcrowded Indigenous homes in the town (Alison Vivian 2010). The excessive amount of time spent in close proximity to one another in hot, overcrowded conditions is a driver of crime in Bourke and other remote towns. The alcohol abuse that is stated to proliferate under these conditions is often the catalyst for crime (Alison Vivian 2010; Birdsall-Jones and Shaw 2008).

A cycle of poor quality housing is alleged to be a common occurrence in some towns with high Indigenous populations. Birdsall-Jones and Corunna (2008) interviewed Homeswest social housing tenants. The study found that Indigenous tenants felt they were discriminated against by the administration, which led to their homes not being maintained properly. 'Bad tenants', where the administration perceived their aggressive or untidy behaviour led to homes in disrepair, spent longer on the waiting list and in some cases received no maintenance repairs (Birdsall-Jones and Corunna 2008). In some cases this may perpetuated tenant vulnerability to aggressive behaviour and violence.

The effect of housing quality on occupant safety can be extended to include the provision of infrastructure external to homes, such as fences. Many Indigenous tenants living in high-crime neighbourhoods have expressed an ongoing fear for their household's safety due to the absence of fences between properties in the neighbourhood (Birdsall-Jones and Corunna 2008). Some tenants fear leaving their house while other members of the community are taking shortcuts through their backyard (Birdsall-Jones and Corunna 2008).

Housing tenure can influence feelings of safety among Indigenous occupants. Indigenous Australians living in housing that is rented from a community organisation are more likely to feel significantly safer than those who are in an owner-occupied dwelling or renting from a private landlord or government body (Biddle 2011b). While community ownership of housing appears to influence on occupant feelings of safety, possible locational differences between tenure types mean that socio-spatial and neighbourhood effects may be other contributing factors.

## 10 Policy implications

The problems with Indigenous housing are well documented. Yet, there is surprisingly little rigorous evidence of the effectiveness of housing interventions to address the housing circumstances and attendant non-shelter outcomes of Indigenous people.

### 10.1 Evidence on the impact of improved housing on social, economic and wellbeing outcomes

There is limited evidence on the links between Indigenous housing and non-shelter outcomes such as health, education, economic development outcomes and safety. There are only few rigorous studies evaluating the effectiveness of housing interventions on non-shelter outcomes for Indigenous people. Consequently, any findings presented in this report need to be treated with caution and should be tested with further rigorous research and evaluation.

Key findings from the literature are:

- Improvements in housing can improve Indigenous health outcomes. However, housing improvements on their own are unlikely to be effective and they should be pursued simultaneously with housing related health improvement programs and adjustments to the housing policy environment.
- Reductions in crowding can lead to improvements in physical and mental health, however, simply building more housing is not a sufficient strategy to overcome overcrowding.
- There is a significant evidence gap in the current knowledge base on the relationship between housing and education outcomes for Indigenous children. Housing is a foundational factor for facilitating education outcomes, but is only one of many variables. Factors influencing education outcomes are geophysical (e.g. remoteness, access to schools and employment opportunities for families), cultural (e.g. ways of learning, discrimination) and economic (i.e. poverty, access to resources).
- Absenteeism is a key factor in the lower educational attainment of Indigenous students, and is due to factors including overcrowding, poor health, disability, discrimination and family or household attitudes to education.
- Housing procurement processes in remote Indigenous communities have the potential to provide significant employment and capacity-building opportunities for Indigenous people. However, while numerous best practice housing procurement examples exist, the existing research indicates that achieving this potential has proven difficult to realise.
- There is a very limited evidence base on the links between Indigenous housing and safety—existing research addresses the issue primarily in terms of family violence and poverty, overcrowding, substance abuse and lack of security features on housing. What evidence exists shows that housing related interventions need to be coupled with community level interventions such as fostering community leadership and providing access to relevant services.

## 10.2 Policy development opportunities and further research

The research synthesis finds that the evidence on Indigenous housing and non-shelter outcomes is uneven. It is overwhelmingly concerned with detailing the causes of problems rather than:

- empirically establishing the links between housing and non-shelter outcomes
- offering viable practical and policy solutions
- undertaking rigorous evaluations of housing interventions.

This poses considerable constraints for evidence informed policy development due to a lack of robust evidence and policy development frameworks. Addressing the issues requires policy and practice based solutions founded on solid evidence.

Practical steps towards evolving a policy solutions agenda will need to comprise development of a strong evidence base to inform policy development, outreach to affected communities and a whole of government approach to tackling the issues.

Key principles that should underpin the proposed policy development approach to research are:

- Indigenous housing and living environments must be understood holistically, whereby economic, socio-cultural and environmental concerns are considered in an integrated manner.
- A holistic view of policy development should be adopted that encompasses interventions to housing hardware, housing provision and housing management, in conjunction socio-cultural and community capacity building approaches, as well as policy adjustment programs and processes.
- A programme of rigorous independent research evaluating the effectiveness of housing interventions against measurable outcomes in relation to project aims.
- A programme of rigorous research aiming to establish the links between housing and non-shelter outcomes for Indigenous people.

## 10.3 The possible impact of a stall in investment

A comment on the likely impact of a stall in investment on Indigenous housing and the associated non-shelter outcomes is beyond the scope of this report.

This report shows that good housing can contribute to positive non-shelter outcomes in the fields of health, education, economic development, and to a lesser extent, pending further research, safety. The report also documents that housing is interconnected with socio-cultural, economic and environmental aspects of Indigenous communities.

Consequently, it may be inferred that any reduction in the support for Indigenous housing is likely to have flow on effects for non-shelter outcomes and therefore a cessation of funding is likely to have adverse consequences.

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