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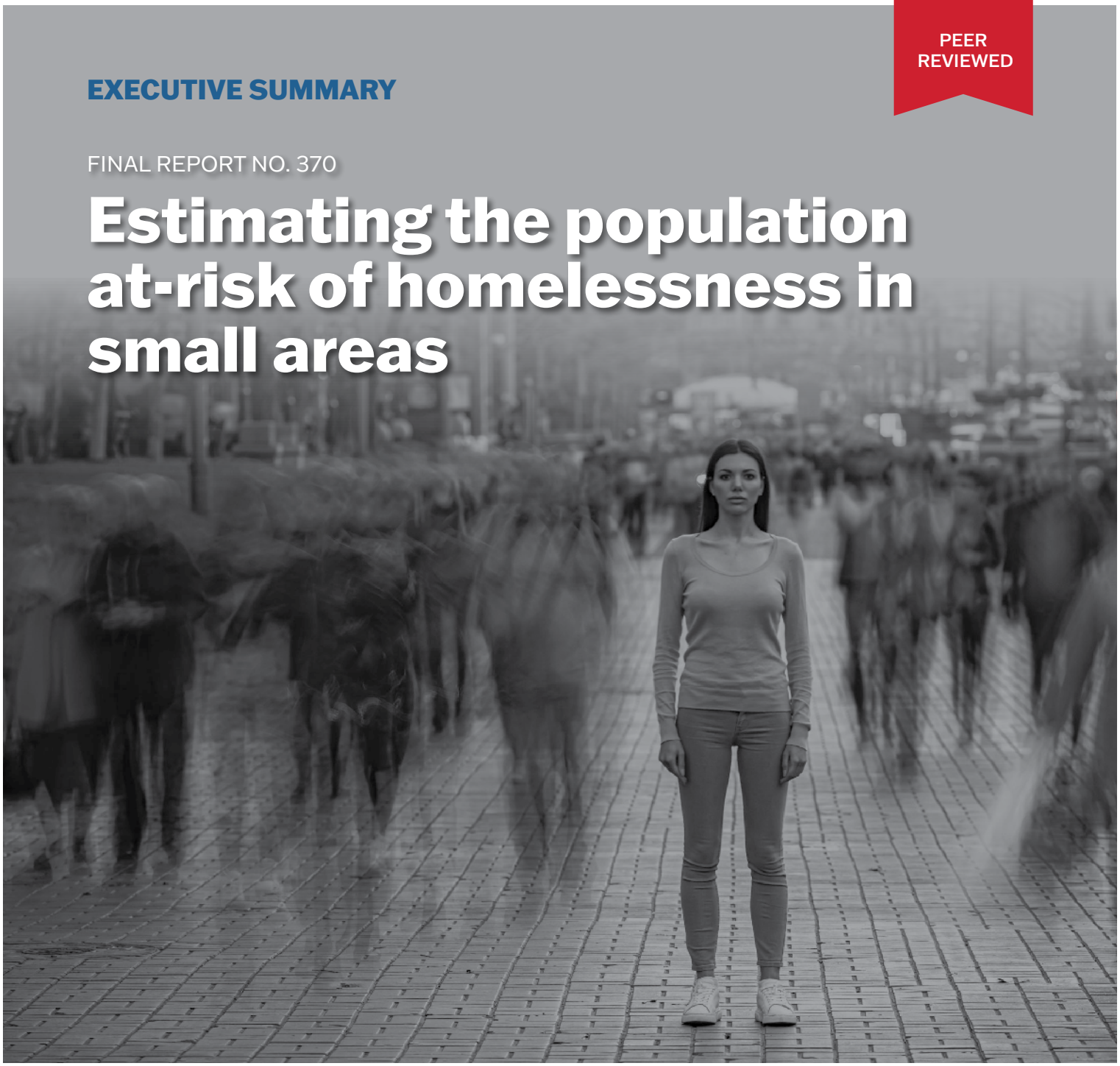
EXECUTIVE SUMMARY

FINAL REPORT NO. 370

Estimating the population at-risk of homelessness in small areas



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Publication Date November 2021

DOI 10.18408/ahuri5123501

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Title

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ISBN

978-1-922498-37-3

Key words

Homelessness, risk, small area estimation, geography, prevention.

Series

AHURI Final Report

Number

370

ISSN

1834-7223

Publisher

Australian Housing and Urban Research Institute Limited
Melbourne, Australia

DOI

10.18408/ahuri51235 01

Format

PDF, online only

URL

https://www.ahuri.edu.au/research/final-reports/370
(full report)

Recommended citation

Batterham, D., Nygaard, C., Reynolds, M. and de Vries, J. (2021) *Estimating the population at-risk of homelessness in small areas,* AHURI Final Report No. 370, Australian Housing and Urban Research Institute Limited, Melbourne, https://www.ahuri.edu.au/research/final-reports/370, doi: 10.18408/ahuri5123501.

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Acknowledgements

This material was produced with funding from the Australian Government and state and territory governments. AHURI Limited gratefully acknowledges the financial and other support it has received from these governments, without which this work would not have been possible.

AHURI Limited also gratefully acknowledges the contributions, both financial and in-kind, of its university research partners who have helped make the completion of this material possible.

This paper uses unit record data from the Household, Income and Labour Dynamics in Australia (HILDA) survey, which is funded by the Australian Government Department of Social Services (DSS) and managed by the Melbourne Institute of Applied Economic and Social Research. The findings and views reported in this paper, however, are those of the authors and should not be attributed to either DSS or the Melbourne Institute.

The authors would like to thank Professor Timo Schmid (University of Bamberg) and Sylvia Harmening (Freie Universitaet Berlin) for methodological advice on the production of Small Area Estimates. Any errors in execution or interpretation are solely those of the authors.

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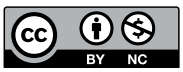

Executive summary

Key points

- Successful primary prevention of homelessness requires a detailed understanding of the incidence and profile of the at-risk population, at the national, local and regional (or small area) levels.
- This research produces Small Area Estimates (SAE) of the population at-risk of homelessness in Australia. The incidence of homelessness risk is measured as a rate per 10,000 residents at Statistical Area level 2 (SA2) and Statistical Area level 3 (SA3) level.
- A person is considered at-risk of homelessness if residing in rental housing and experiencing at least two of the following: low-income; vulnerability to discrimination; low social resources and supports; needing support to access or maintain a living situation; and a tight housing market context. By definition, a person residing in owner-occupied housing is not considered at-risk.
- This research combines data from the Household, Income and Labour Dynamics in Australia (HILDA) survey, waves 16 and 17, and the 2016 Census of Population and Housing. In an attempt to deal with significant data limitations, two model-based SAE methods are employed: a unit-level and an area-level approach.
- The unit-level approach utilises HILDA responding person characteristics and Census data. The area-level approach combines direct SA3-level homelessness risk and variance estimates from HILDA and SA3-level Census data. Both approaches utilise regression models to generate SAE of homelessness risk.

- Findings suggest that at a national level, the estimated rate of risk per 10,000 persons (across all tenures combined) ranges between 846.9 per 10,000 (8.5% of the total population aged 15 years and over) and 1,165 per 10,000 (11.7%). This range equates to between 1.5 and 2 million Australians at-risk of homelessness—all of whom reside in rental housing.

- The highest rates of risk (per 10,000 persons) are found in remote areas and in selected areas of capital cities. The greatest *number* of people at-risk are living in greater capital cities on the eastern coast of Australia, in both central and suburban locations.

- The two different methods used to produce the small-area estimates do not generate a consistent picture of homelessness risk in Australia in all areas, with greater variability in remote parts of the country.

- The profile of those at-risk suggests primary prevention policies require policy and service responses at national and state and territory levels that are beyond the usual scope of homelessness policy.

- Homelessness risk SAEs provide policy makers, not-for-profit (NFP) service providers and funders with quantified estimates of demand (need) for different types of services. They also provide locational information to maximise and monitor the benefits of investment in spatial and aspatial homelessness prevention initiatives.

- Aspatial primary prevention policies include: increasing income support payments; improving the incomes of the lowest paid; and enhancing coordination on homelessness prevention across all levels of government.

- Spatial primary prevention policies include: increasing the supply of rental housing affordable to those on the lowest incomes; ensuring access to health and disability supports for those on low incomes; increasing school engagement and retention; and enhancing support to Indigenous Australians in remote communities.

The overall incidence of homelessness cannot be reduced by responding to those experiencing homelessness alone. Upstream interventions are required to prevent homelessness from occurring in the first place. Such interventions must target those at-risk of homelessness, and so an understanding of the population at-risk of homelessness is required. Yet, little is known about the population at-risk of homelessness in Australia (apart from Batterham 2021), including the geographical distribution of this population.

The overarching policy issue guiding this project is therefore: how can homelessness be prevented more effectively based on a detailed understanding of the distribution of the population at-risk of homelessness across small areas in Australia?

Existing research demonstrates that area-level disadvantage (Vinson, Rawsthorne et al. 2017), homelessness (Parkinson, Batterham et al. 2019) and rental stress (Hulse, Reynolds et al. 2019; Hulse, Reynolds et al. 2014; Rahman and Harding 2014), all vary significantly across space. The incidence of homelessness risk and the characteristics of those affected are also likely to vary spatially. Without a nuanced understanding of spatial differences and characteristics associated with these differences, identification of service need (demand) and location of different services may be undermined.

Two research questions address the policy issue:

- **RQ1:** What is the incidence of homelessness risk in small areas across Australia, including within states, territories and capital cities?
- **RQ2:** What is the profile of those at-risk and what are the geographical differences in the profile of this population in small areas across Australia and within states, territories and capital cities?

Both the number and profile of the population at-risk of homelessness can be used to guide the focus of preventative policies and assess their effectiveness (Batterham 2021). The quantification of social and economic phenomena is key to the development of many social policies and strategies. SAEs of homelessness risk provide policy makers, not-for-profit service providers and funders with quantified estimates of demand/need for different types of services by area to maximise the efficiency of preventative policy initiatives.

Key findings

Producing an estimate of homelessness risk in Australia

No official source of homelessness risk data exists in Australia. This research, therefore, employed Small Area Estimation (SAE) techniques to generate homelessness risk indicators at two (small scale) Census geographies, SA2 and SA3. The estimates of homelessness risk are produced utilising data from the Household, Income and Labour Dynamics in Australia (HILDA) survey, and the 2016 Census of Population and Household. SAE methods combine survey data (i.e. HILDA) and additional data (i.e. Census) with better sampling or geographic coverage to produce model-based predictions of homelessness risk. Both unit-level and area-level models were used in estimation. The variation in the predicted rates of homelessness risk, in part, reflect underlying data availability considerations.

Our results show that 'behind' the number of people experiencing homelessness, is a much larger number of Australians who are at-risk. The results in this research estimate the population at-risk of homelessness at the national level and are expressed as a rate of risk per 10,000 persons (total population, all tenures combined) to range between 846.9 and 1,165 per 10,000 people, or some 8.5 to 11.7 per cent of the total population aged 15 years and over.

Spatial distribution and characteristics of the at-risk of homelessness population

The rate of homelessness risk at SA2 and SA3 level varies considerably. At the SA2 level the rate of homelessness risk ranges from 87.3 (Gelorup-Stratham, WA) to 5,040 (Aurukun, QLD) per 10,000; and 206.9 (Nillumbik-Kinglake, VIC) to 3,366.4 (East Arnhem, NT) per 10,000 at the SA3 level. More generally, the highest rates of risk are in the Northern Territory (NT), followed by Queensland (QLD) and South Australia (SA). The lowest rates of risk are in the Australian Capital Territory (ACT) followed by Victoria (VIC).

At finer spatial levels the highest rates of risk are typically found in remote areas and select areas in capital cities. However, the greatest *numbers* of people at-risk are located in capital cities on the eastern coast of Australia. These high numbers extend well beyond inner city areas and into the suburbs.

Areas with moderate/average rates of risk in capital cities, such as the outer west in Melbourne, or substantial segments of the eastern 10 kilometre ring of Perth, can still have high numbers of people at-risk, due to their larger population size.

Analyses at finer spatial scales reveal distinct nuances within and between states and territories. In several states, including QLD, New South Wales (NSW), Western Australia (WA), and SA, high rates of homelessness risk are spread across greater capital cities and regional areas. In the NT, however, risk is highly concentrated in remote areas, whereas in VIC, risk is concentrated in inner Melbourne.

Importantly, SAEs are estimates and as such, a product of the availability and quality (detail and sampling coverage) of the data. Data considerations affect both the point estimates and the variability of those point estimates, per SAE method. Testing for consistency across the different SAEs suggests the precision of estimates and consistency across the two approaches is greatest in capital cities, although there are exceptions. The precision of estimates (the confidence intervals around the estimates) is poorer in remote and sparsely populated areas. Many of the areas with the highest predicted homelessness rates also have large confidence intervals.

Compared to the national population, those at-risk are more likely to be female, Indigenous, and be living in a lone person or lone parent household. They are more likely to identify as lesbian, gay or bisexual, and report fair or poor health. They are more likely to be low-income, unemployed or outside the labour force, and in receipt of income support payments. Those at-risk have lower levels of educational attainment, are more likely to report difficulty paying bills and rent on time, and are more likely to experience rental stress and a range of indicators of material deprivation such as skipping meals and being unable to heat their home.

Policy development options

The sheer number of people at-risk of homelessness—between 1.5 million and 2 million people aged 15 years and over—demands a stronger focus on primary prevention of homelessness in Australia. While we do not know how many people transition from risk into actual homelessness, results from the General Social Survey (Australian Bureau of Statistics 2020) suggest that transition rates could be high, with some 11 per cent of the population aged 15 years and over having experienced homelessness in their lifetime.

Successful prevention requires a detailed understanding of the incidence of homelessness risk in the population, and the profile of those at-risk, at the national as well as local levels. The findings in this report suggest that primary prevention initiatives require both spatial and aspatial approaches, some of which sit beyond the usual scope of *homelessness* policy and sit across all levels of government.

Both spatial and aspatial policy delivery and monitoring can be enhanced by SAE of homelessness risk that provide quantified estimates of need for different types of services and areas to maximising the benefit of investment in homelessness primary prevention initiatives.

Increasing income support and earnings for the low paid

The majority of those at-risk of homelessness are in low-income households. The significance of low-income is highlighted by the higher rates of rental stress as well as material deprivation experienced by those at-risk in terms of skipping meals and being unable to heat their homes.

Given that many are in receipt of income support payments (both for those who are unemployed and those outside the labour force), an increase in the rate of these payments could make substantial impact in reducing the risk of homelessness. Around a quarter of the at-risk population are in paid employment suggesting a need to increase the rates of pay or income stability among this group: A substantial increase in income would help to boost purchasing power in the private rental market for this group, with the COVID-19 and Job Keeper supplements effectively bolstering incomes during the pandemic to address some of these issues (Pawson, Martin et al. 2021; Verdouw, Yanotti et al. 2020). This is important given the well documented shortage of rental housing affordable to those in the lowest income quintile (Hulse, Reynolds et al. 2019) and particularly those on income support payments (Anglicare Australia 2021; Department of Health and Human Services (VIC) 2021).

Increasing the supply of rental housing affordable to those on low-incomes

By definition, those at-risk of homelessness in this study are residing in the rental sector (private rental and social housing). The lack of affordable rental housing for low-income households—be it private rental (Hulse, Reynolds et al. 2019) or social housing (Lawson, Pawson et al. 2018)—intersects with the low-incomes of those at-risk amplifying the multiple and intersecting forms of disadvantage they experience. These shortages are cumulative and have evolved over the last two decades (Burke, Nygaard et al. 2020). There is a need for greater provision of rental housing that is specifically targeted to those on low-incomes and/or those at-risk of homelessness. Scaling up the provision of social and affordable housing options (with income tied requirements) provides one possibility for achieving this. SAEs of the population at-risk of homelessness can provide valuable estimates of local demand, which are critical for planning for affordable housing at the local level.

Our results highlighted much higher rates of rental stress and many forms of material deprivation among those at-risk, suggesting opportunities for enhancing existing secondary prevention initiatives. Specifically private rental access programs that provide ongoing rent subsidies for people at imminent risk of homelessness, as well as the payment of rent arrears and advocacy with landlords. Such services could be targeted to areas with larger numbers of people at-risk of homelessness.

Ensuring access to health and disability supports for those on low-incomes

Those at-risk are likely to report living with a disability and fair or poor health. This is consistent with existing research, which documents the role of poor physical and mental health in precipitating homelessness as well as the substantial health impacts of homelessness (Johnson and Chamberlain 2011; Min Park, Fertig et al. 2011). There is a clear role for state and territory governments to ensure access to health and disability supports across areas, especially for those on low-incomes. These findings also highlight the importance of national safety net schemes such as Medicare, the Pharmaceutical Benefit Scheme (PBS) and the National Disability Insurance Scheme (NDIS).

Focus on education, school engagement and retention

Those at-risk have lower levels of educational attainment and many of those at-risk have children living with them. Given what is known about intergenerational transmission of poverty, homelessness, and low educational attainment (Cobb-Clark 2019; Cobb-Clark and Zhu 2015), state and territory government investments supporting educational engagement for disadvantaged students could pay off in-terms of reducing future risk of homelessness. Additional supports for further education and training for adults with low educational attainment may also be required. SAEs can be used to enhance and expand preventative services based at educational facilities.

Targeted support for remote Indigenous communities

Indigenous Australians are overrepresented in the at-risk population, especially in remote areas, and are also overrepresented in the homelessness population. Targeted support for this group, developed in consultation with the communities themselves, is warranted. Given known issues with the standard and quantum of housing in remote Indigenous communities, our SAEs of homelessness risk could inform a revamped National Partnership on Remote Housing and/or state level strategies on remote Indigenous housing.

Improving data access and coverage

Combining survey data with Census, and other administrative data with detailed population coverage provides an important (and lower cost) way of producing a range of policy-relevant statistics at finer spatial scales. However, the quality of SAE production is dependent on the sampling frame and sampling uncertainties, and the quality and accessibility of auxiliary data from other data sources. For the purposes of this project, it is clear that the low-sampling (or no sampling) in remote and sparsely populated areas generates systematic variability in the quality of the estimates that can be produced. However, the production of SAEs is also restricted by the availability of Census data. Firstly, through restrictions on the cross-tabulations that can be conducted when using the Australian Bureau of Statistics' (ABS) TableBuilder product. Secondly, through restrictions (exacerbated by the COVID-19 pandemic) of accessing the 5 per cent unit record file from the Census. Altering the sampling properties of large-scale surveys may not always be feasible. However, improving access to Census products will also assist in the production of SAEs. Similarly, altering rules around perturbation and confidentiality measures can assist in improving precision of SAE techniques.

The study

The data developed for this research provides policy makers and service providers with a base-level understanding of the at-risk population's spatial distribution and preliminary information about the varying profile of those at-risk. This information can be used to aid in the development of primary prevention initiatives, aid in tailoring them to local environments, and provide metrics that may be used to assess the effectiveness of primary prevention initiatives.

We employ Batterham's (2019a) definition of homelessness risk and operationalise it using a nationally representative household panel survey (HILDA) for 2016. To provide estimates of homelessness risk in small areas (SA2 and SA3) across Australia, we employ Small Area Estimation (SAE) techniques. SAE is a method for generating area-based statistics or indicators where direct measurement is not feasible or where the precision of direct estimates is limited because of small sample sizes. SAE utilises auxiliary data to improve the precision of the estimates that can be derived directly from the survey itself (Pfeffermann 2013).

Two methods for producing SAEs are applied: a unit-level and an area-level approach. Using two SAE methods enables us to compare results and provide some assessment of the relative strengths and weaknesses of the two approaches. The unit-level approach uses HILDA Survey data matched to the data and category availability in the Census to predict risk indicators. We then estimate risk of homelessness at the small-area level using the results of this modelling in combination with customised cross tabulations from the Census. In the area-level approach, we generate SA3-level direct estimates of homelessness risk, and variance of risk, in HILDA and then develop a model to predict these direct estimates using area-level data from the Census based on the Fay-Herriot (FH) method. We report both a rate of homelessness risk per 10,000 persons and the estimated number of persons at-risk across small areas. Confidence intervals for these estimates are provided at the national, state and territory, and small area level.

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