

EXECUTIVE SUMMARY

FINAL REPORT NO. 393

Predicting risk to inform housing policy and practice



Authored by

Milad Ghasri, UNSW Canberra

Wendy Stone, Swinburne University of Technology

Hazel Easthope, UNSW Sydney

Piret Veeroja, Swinburne University of Technology

Publication Date December 2022

DOI 10.18408/ahuri7126601

Title

Predicting risk to inform housing policy and practice
—Executive Summary

Authors

Milad Ghasri, UNSW Canberra
Wendy Stone, Swinburne University of Technology
Hazel Easthope, UNSW Sydney
Piret Veeroja, Swinburne University of Technology

ISBN

978-1-922498-60-1

Key words

Housing pathways, critical life events, policy,
housing assistance.

Series

AHURI Final Report

Number

393

ISSN

1834-7223

Publisher

Australian Housing and Urban Research Institute Limited
Melbourne, Australia

DOI

10.18408/ahuri7126601

Format

PDF, online only

URL (full report)

<https://www.ahuri.edu.au/research/final-reports/393>

Recommended citation

Ghasri, M., Stone, W., Easthope, H. and Veeroja, P. (2022)
Predicting risk to inform housing policy and practice,
AHURI Final Report No. 393, Australian Housing
and Urban Research Institute Limited, Melbourne,
<https://www.ahuri.edu.au/research/final-reports/393>,
doi: 10.18408/ahuri7126601.

AHURI

AHURI is a national independent research network with an expert not-for-profit research management company, AHURI Limited, at its centre.

AHURI's mission is to deliver high quality research that influences policy development and practice change to improve the housing and urban environments of all Australians.

Using high quality, independent evidence and through active, managed engagement, AHURI works to inform the policies and practices of governments and the housing and urban development industries, and stimulate debate in the broader Australian community.

AHURI undertakes evidence-based policy development on a range of priority policy topics that are of interest to our audience groups, including housing and labour markets, urban growth and renewal, planning and infrastructure development, housing supply and affordability, homelessness, economic productivity, and social cohesion and wellbeing.

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.

Disclaimer

The opinions in this report reflect the views of the authors and do not necessarily reflect those of AHURI Limited, its Board, its funding organisations or Inquiry Panel members. No responsibility is accepted by AHURI Limited, its Board or funders for the accuracy or omission of any statement, opinion, advice or information in this publication.

AHURI journal

AHURI Final Report journal series is a refereed series presenting the results of original research to a diverse readership of policy-makers, researchers and practitioners.

Peer review statement

An objective assessment of reports published in the AHURI journal series by carefully selected experts in the field ensures that material published is of the highest quality. The AHURI journal series employs a double-blind peer review of the full report, where anonymity is strictly observed between authors and referees.

Copyright

© Australian Housing and Urban Research Institute Limited 2022

This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License, see <https://creativecommons.org/licenses/by-nc/4.0/>.



Executive summary

Key points

- Increasing national housing-assistance expenditure and a growing proportion of the Australian population requiring support indicates the need for optimally targeted, effective forms of housing-assistance interventions.
- Existing evidence about intersectional drivers for housing assistance, coupled with administrative data about housing-assistance reciprocity, allow us to examine how early prediction of housing-assistance need could support more effective delivery of this housing assistance.
- The study developed a national predictive model for entering housing stress, based on complexity of critical life events in interaction with household resources. This tool can be used to support timely policy intervention in response to housing shocks.
- Housing stress in this study is calculated using the 30/40 rule to identify low-income households: the bottom 40 per cent (regarding equivalised income) who spend more than 30 per cent of their gross income on housing (Gabriel, Jacobs et al. 2005).
- The study interrogates the Household Income and Labour Dynamics in Australia (HILDA) survey using the survival-analysis method. It examines the impact of critical life events on housing stress to identify characteristics that boost resilience to housing stress, and also to predict the impact of critical life events on the increased risk of entering housing stress. A set of predictive models of ‘risk pathways’ is developed and extended to the national level using ABS census data.
- Critical life events positively correlated with risk of entering housing stress span across housing, health, finance, family change and justice. The incidence of many critical life events is correlated with age.

- **The following characteristics are most closely associated with vulnerability to entering housing stress: young to early middle-aged adults (18-44 years), looking for work, and living in rental housing (including both private and social rental). The Northern Territory outside of Darwin has the highest proportion of people with all three characteristics, at 5.8 per cent of the population. In all other areas, that proportion is below 4 per cent.**
- **The methodology developed for the project provides a proof of concept to facilitate early intervention and prevention.**
- **Understanding more about upstream critical life events as contributors to housing stress can support policy development options that go beyond the usual administrative boundaries, and support intersectional approaches to reducing housing stress.**
- **A policy workshop with key stakeholders indicated strong and urgent support for the development of this methodology, and rapid policy application across policy realms, tenures, population cohorts and housing-assistance models.**

Key findings

The socio-demographic attributes of household members most vulnerable to entering into housing stress are:

- young to early middle-aged adults (18–44 years)
- looking for work
- living in rental housing (including both private and social rental).

Housing stress in this study is calculated based on the 30/40 rule to identify low-income households: the bottom 40 per cent (regarding equivalised income) who spend more than 30 per cent of their gross income on housing (Gabriel, Jacobs et al. 2005).

Approximately 70 per cent of people who were unemployed and living in rental housing were in the age group of 18–44 years in all capital cities and the balance of the state areas. The Northern Territory outside of Darwin has the highest proportion of people with all three characteristics: 5.8 per cent of the population. In all other areas, that proportion is below 4 per cent.

The resilient cohort—those least likely to enter housing stress—are owner-occupier older adults (65 years+) who have a postgraduate degree and are engaged in full-time work. Approximately 70 per cent of people aged 65+ were owner-occupiers, with the exception of the Northern Territory (NT): in Greater Darwin, 56.4 per cent of older adults were owner-occupiers and 42.1 per cent in the balance of NT. The proportion of homeowners aged 65+ among all homeowners was lower in capital cities, and especially in Greater Darwin (12.4%) and higher in rest of the state/territory areas, being highest in SA (23.7%) and NSW (23.2%).

Figure 1 summarises the risk ratio of key socio-demographic attributes and critical life events compared to the most resilient cohort, which we have named the 'base person'.

The biggest predictor of risk of entering housing stress is age, with 18–24-year-olds being 214 per cent more likely to enter housing stress than the most resilient cohort (those aged 65+). This risk reduces only slightly to 154 per cent and 156 per cent for those aged 25–34 and 35–44 respectively.

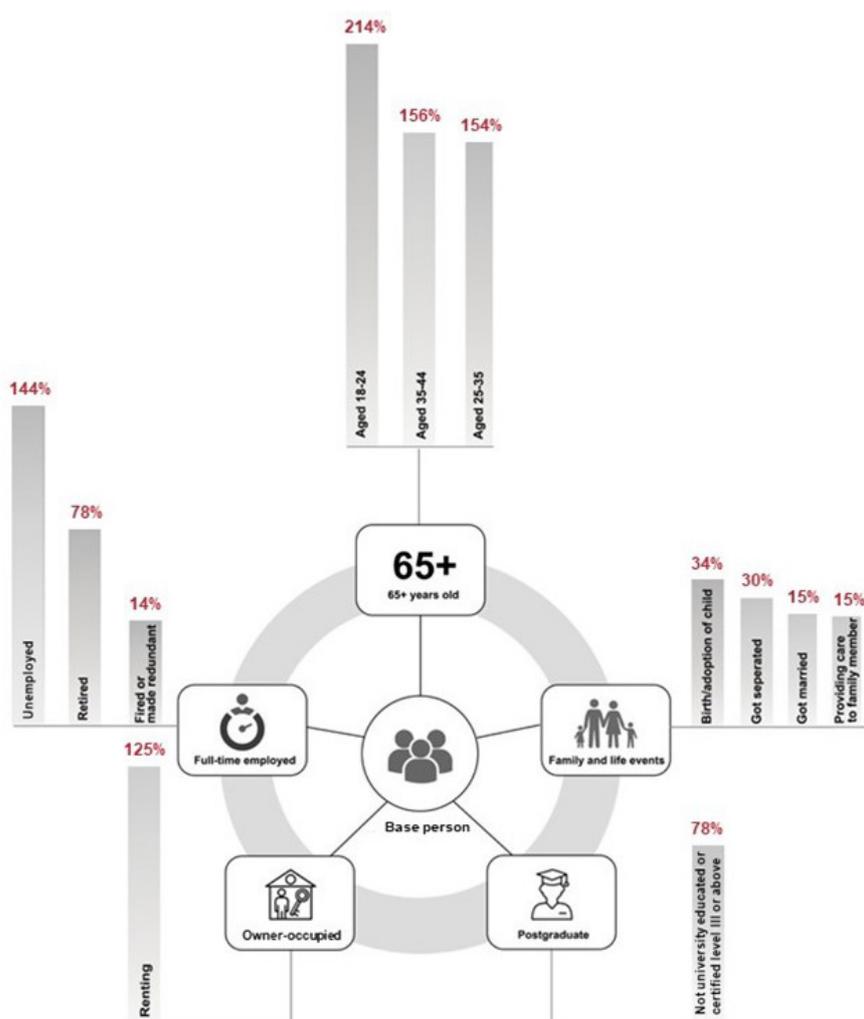
Employment status is the next largest predictor, with unemployed people being 144 per cent more likely to enter housing stress than fully employed people, and retired people being 78 per cent more likely.

Not having a college or university education is associated with a 78 per cent higher chance of entering housing stress. Renters (in private and social housing) are 125 per cent more likely to enter housing stress than owners (outright and with a mortgage).

The critical life events that increase the likelihood of entering housing stress the most compared to the base person are:

- birth/adoption of a child (34%)
- providing care to a family member (15%)
- getting separated (30%) or married (15%)
- being fired or made redundant (14%).

Figure 1: Risk ratio of key socio-demographic attributes and critical life events

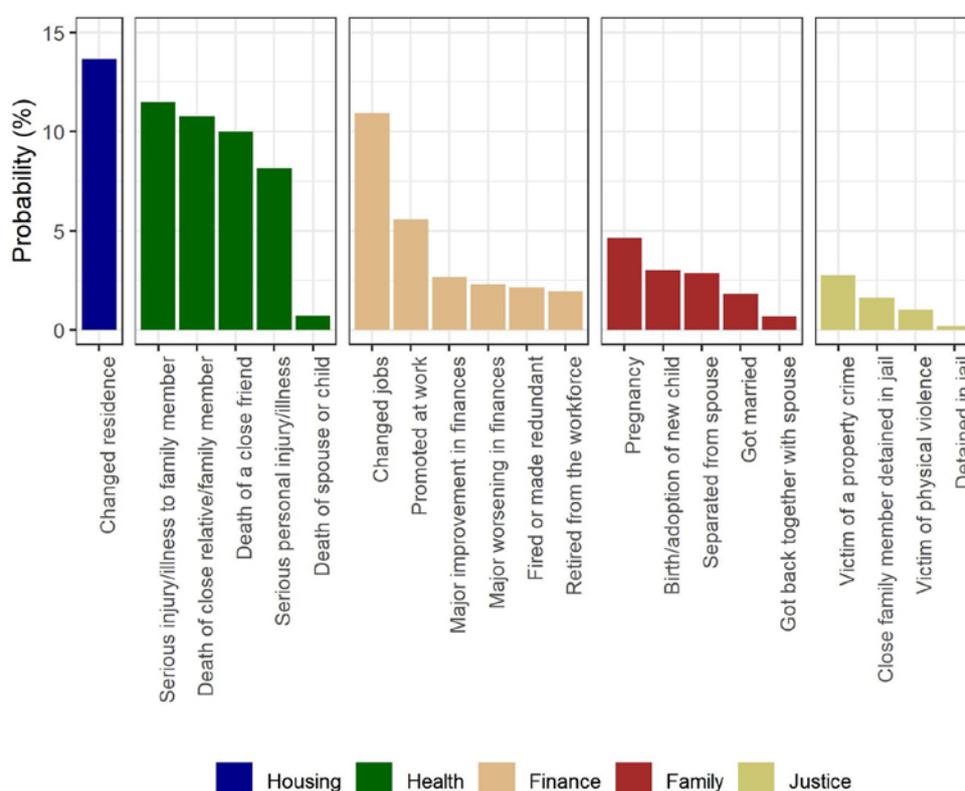


Notes: Definition of housing stress - households in the bottom 40% of household income are spending more than 30% of their income on housing. See Appendix 4 for the complete list of risk ratios.

Source: Authors (image: Jiahang Li).

The incidence likelihood of critical life events varies over individuals' lifetime and the type of critical life event. Figure 2 summarises the probability of critical life event occurrence for the entire 2018 HILDA sample.

Figure 2: Frequency of critical life event occurrence in 2018 HILDA sample



Source: Data from HILDA survey; authors' original analysis.

The housing critical life event has the highest incidence probability (13.7%); the health critical life event with the highest incidence probability is serious injury or illness to family member (11.5%); and the finance critical life event with the highest probability is changing jobs (10.9%). Family-related critical life events have a lower incidence probability, the most likely being pregnancy (4.6%). Among justice-related critical life events, being a victim of property crime has the highest incidence probability (2.8%).

The incidence of many critical life events is associated with age. Marriage, pregnancy and birth or adoption of a new child are more probable between 25 and 35 years of age. The likelihood of separation before age 25 is between 5 per cent to 6 per cent, which is followed by a decreasing trend after age 25. The likelihood of changing job shows a monotonically decreasing trend from nearly 25 per cent for ages below age 25, to zero after age 70 years. Promotion at work has its peak (at around 12%) between ages 25 and 28. The likelihood of justice-related critical life events remains below 5 per cent at all age groups.

Policy development options

To a large degree, housing-assistance and specialist homelessness service interventions are developed and delivered in relative isolation from wider and interrelated social realms. These include, for example, policies geared toward employment and training, supporting individuals and families through family changes, and policies associated with disability, health or caring. Yet critical life events associated with these wide policy fields can directly affect the ability of households to access and afford adequate housing—or to sustain existing tenancies.

Existing forecasts of housing assistance are based on expressed demand, coupled with population forecasting that does not take account of complex interactions of upstream, contributing factors that result in the need for households to seek housing assistance. As such, they provide limited evidence about how housing policy development can be geared toward a proactive, early interventionist role. Understanding the impact of critical life events that lead to the need for housing assistance is critical to:

- support innovative policy interventions that seek to intervene early and reduce long-term cost to governments, individuals and society
- enable the most effective targeting of housing assistance to households in need
- assess the ways in which household resources interact with housing assistance in short-term and long-term models of housing-assistance provision.

Through the development of a risk-pathways model, we make a case for a targeted systems approach to housing support, which has the potential to increase the resilience of households to weather shocks at the same time as allowing for more efficient targeting of government resources. This research has developed a proof of concept. This comprises a conceptual and methodological approach toward a wider interrogation of how a prevention and early intervention approach can form a central component of future housing-assistance models in the Australian context.

A policy workshop with key stakeholders confirmed the relevance of the approach developed in this research. The discussion indicated strong and urgent support for the development of our methodology in the form of a 'how to' prototype, for ongoing development and rapid policy application across policy realms, tenures, population cohorts and housing-assistance models.

Further development of a systems approach to housing intervention will require the following.

- A wide-ranging review of international and national best-practice prevention and early intervention housing-assistance approaches to inform policy thinking in the local context.
- Scaling up of the methodology developed in this report to large-scale administrative linked data sources to further refine the method and enable investigation of housing responses to a wider range of critical life events including those associated with justice policy and practice.
- Ongoing dialogue with key policy, practice communities and recipients of supports, to inform development of prevention and early intervention approaches as a mainstream and core component of the housing-assistance ecology nationally.



Australian Housing and Urban Research Institute

Level 12, 460 Bourke Street

Melbourne VIC 3000

Australia

+61 3 9660 2300

information@ahuri.edu.au

ahuri.edu.au

 twitter.com/AHURI_Research

 facebook.com/AHURI.AUS

 Australian Housing and Urban Research Institute