



# Inside the Front Door

**A seven-year  
longitudinal study  
of six high volume  
homelessness services  
in Melbourne**

Godwin Kavaarpuo and Guy Johnson  
Unison Housing Research Lab and  
RMIT University, Melbourne Australia

*Project Partners:*



## About the Unison Housing Research Lab

The Unison Housing Research Lab is a unique education and research collaboration between RMIT University and Unison Housing. The Lab is located in the Social and Global Studies Centre, one of two research centres in the School of Global, Urban and Social Studies (GUSS). The Lab was established in 2017 and is funded to develop and implement a collaborative teaching program and undertake innovative policy and practice relevant housing research informed by the experiences of services users and providers. For more information go to: <http://www.unison.org.au/about-us/publications>

### **Disclaimer:**

The views and opinions expressed in this paper are those of the authors and do not necessarily reflect or represent the views and opinions of the agencies that participated in the project.

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# Foreword

Since 2008 successive Victorian Governments have funded the Homelessness sector to provide a coordinated service response through an Opening Doors Framework. Specific agencies are funded as 'Entry Points' covering designated geographic areas.

Over many years these Entry Point or Initial Assessment and Planning (IAP) services have worked hard to meet demand. The response to the Covid pandemic in 2020 required a unique and extremely complex engagement with greater collaboration between existing Agencies and the Department of Families, Fairness and Housing.

As services emerged from the Covid-19 Pandemic late in 2021, changing levels of service demand and complexity, along with the introduction of responsive 'Housing First' initiatives such as H2H and H4F, were all having an impact on the IAP services.

Two years ago, leaders from IAP agencies across Melbourne met to collaborate and discuss concerns about overwhelming levels of service demand.

Following some informal conversations, the Access Point Advocacy Project was established to help agencies understand both changes in demand and complexity, as well as identifying effective responses that meet the current and future needs of clients. Participating agencies included Unison, VincentCare Victoria, The Salvation Army, Launch Housing, Haven Home Safe, and WAYSS.

It was evident that service design and funding models for Entry Point services were not configured to meet current demand. Service providers were keen to review the assumptions used to design the Opening Doors framework as they were considered outdated and no longer relevant to address the current context or demand.

With support from Unison's Housing Research Lab, RMIT agreed to undertake longitudinal study of IAP data (metropolitan Melbourne) collected by the six participating agencies between 2014-2020, with consideration of changing service usage patterns, client cohorts and presenting client needs.

We are grateful to RMIT for leading this research and commend them for the quality of their report. We believe the research findings provide important insights into changing patterns of service use and will assist in guiding improved service design that will effectively support clients and the wider Victorian community.

We are particularly grateful for the leadership of Guy Johnson and Godwin Kavaarpuo in undertaking this study and preparing this important report.

We also want to thank all of the workers in the IAP services, whose passion and professionalism under demanding circumstances is commendable.

On behalf of the project partnership

Paul Turton,  
**VincentCare Victoria**

Peter McGrath,  
**The Salvation Army, Victoria**

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# Executive summary

Over the past two decades, homelessness has become an entrenched feature on Australia's social landscape and pressure on homelessness services has continued to rise. While a great deal is known about who presents to homelessness services, much less is known about service utilisation patterns among households 'at risk' of homelessness and experiencing homelessness.

Service utilisation patterns have been a foci of research studies in several areas, particularly public health and one particularly important strand focuses on 'heavy service users'. Interest in heavy service users is largely motivated by the fact that despite typically accounting for approximately 10-20% of services users, heavy service users consume a disproportionate amount of resources. The identification of heavy service users and what contributes to heavy service use is therefore important information that policy makers and service providers can use to devise less expensive ways to meet their needs, optimise service design and improve service outcomes.

Using a novel dataset that combined administrative records from six Initial Assessment and Planning (IAP) services across Metropolitan Melbourne, this report examines the characteristics and service utilisation patterns of 70,552 unique households over a 7-year period. The aim of the report was to determine if there are distinct patterns of service use, and whether different patterns of service use are associated with distinct household characteristics.



## Key findings

- Households presenting to an IAP service have more complex needs than in the past.
  - In 2014 just under a quarter of households presenting for the first time reported **mental health issues** (23.4%) but this increased to a third (33.0%) by 2020.
  - The proportion of new households reporting **medical issues and substance misuse problems doubled** between 2014 and 2020, although both come off a low base.
  - The proportion of households reporting **domestic or family violence** at their first presentation **nearly doubled**, increasing from 7.5% to 15.8%.
- But IAP services are also working with more households that have traditionally not needed housing assistance.
  - The percentage of **new households in paid employment rose** from 4.5% in 2014 to 7.7% in 2020. Increasing numbers of working households is a disturbing sign suggesting that even engagement in the labour market is no longer guaranteed protection against extreme housing precarity.

With respect to patterns of service use, the report shows that:

- **Service duplication is not an issue.** Over 8 in 10 households only used one IAP service, with fewer than 1 in 20 households presenting at three or more IAPs.
- Most people (**57.5%**) are **light users** – that is they used IAP services once and did not return.
- Just under 1 in 5 (**18%**) are **periodic users** – they sought assistance from an IAP service on multiple occasions, but this happened over a relatively short time frame – within a year.
- Just under 1 in 4 (**24.5%**) are **regular users**, who repeatedly return to IAP services over a longer period.
- While just one quarter of households are regular users, they consumer nearly half of all support periods.

With respect to the characteristics of each service use group, the report shows that:

- There is little difference between the groups in terms of gender, age, or household type but the report shows that the attributes of regular users are markedly different from light users. More specifically
  - Compared to light users, **regular users were twice as likely** to have ever been homeless; to have been in State out-of-home care; to have experienced domestic or family violence or to have a mental health condition.
  - **Regular users were also three times more likely** to have been in a correctional facility (5.0% vs 14.8%) and nearly three times more likely to report they had medical issues (9.2% vs 25.3%).
  - Sexual abuse was also much more common among regular users, as was substance and drug misuse. Indeed, while only 2% of regular users reported substance misuse, this was 10 times higher than the rate reported among people that presented just once.
- The report also examined the characteristics of the top 10% of regular users, or what the report refers to as **heavy users**. Heavy service use is associated with more complex needs and this group were the most disadvantaged across every measure. More specifically:
  - Four out of five had been homeless or had a mental health condition.
  - Just under a third were families.
  - One third reported family or domestic violence.
  - Over a quarter had been in a correctional facility.
  - The rate of reported substance misuse was more than double what was reported among regular users.

## Comments and recommendations

IAP agencies know better than anyone that the problems they face are largely driven by factors outside of their direct control – the combined effects of a lack of affordable housing, rising living costs, and inadequate income support are driving ever more people into housing related problems across Melbourne.

While there are no easy solutions or quick fixes, a focus on service utilisation patterns does highlight the need to increase resourcing for IAP agencies, as the struggle to deal with demand and to secure the outcomes they and their clients want is unrelenting. Agencies could also consider trialling two new ideas. First, they should consider exploring new technologies such as machine learning and AI which can open up new ways to assess risk and prioritise resources that will save clients having to go through different, often unreliable, and at times stigmatising assessment procedures, as well as optimising the use of available resources in a fair, consistent and transparent manner. Prioritising the heaviest service users (with weighted factors based on pre-determined characteristics) offers the promise of freeing up the resources that heavy service users consume, which could then be used to reduce the likelihood of new households ever returning. Second, given international evidence shows that vouchers are one of the most effective ways of preventing homelessness, agencies might consider ring fencing some brokerage funding to experiment with a ‘fixed-term top-up voucher’ for ‘at risk’ households.

This study has only touched on the full potential of administrative data collected by IAPs – there is much more that can be done. There are opportunities to continue to track patterns of service utilisation over a longer time frame, given agencies now have access to the basic analytical infrastructure. The impact of COVID and more recently costs of living pressures on IAP

services need to be examined closely, as any change in the volume and composition of service users will have material consequences not only for IAP services, but the sector as well. Future studies could be extended to include regional and rural services, where patterns of service use may vary from what we have observed in metropolitan Melbourne. They might also look at the question of potential cost savings derived from prioritising heavy service users.

There is also a pressing need to better understand the increasing number of households presenting with a mental health issue, as well as those experiencing domestic or family violence. A focus on these two issues makes sense in light of the significant reforms that have occurred in each sector. A logical starting point would be to drill down into existing data and undertake a more comprehensive analysis of both cohorts. Establishing a stronger evidence base on these two cohorts will be key to designing and delivering more effective joined up responses between the mental health, family violence and homelessness sectors. Further, connecting IAP data to support and housing provider data to obtain a better understanding of the flows between IAPs and other parts of the homelessness service system is another area that deserves greater attention. Indeed, the potential to better understand flows into and out of the homelessness service system would be a significant step forward in terms of understanding how the homelessness systems operates, for whom it works well, and for whom it doesn't. However, to move to that level is only possible if agencies work together. Indeed, this study was only made possible by the willingness of the six agencies to share. Our hope is that homelessness agencies recognise that by collaborating and sharing data, they will be in a much more powerful position to inform the policy and practice narrative and drive reform in ways that secure better outcomes for their clients.



# 1.0 Introduction

Over the past two decades, homelessness has become an entrenched feature on Australia's social landscape. According to the Australian Bureau of Statistics (ABS) 122,494 people were homeless on census night in 2021, a 5% increase from the previous census, and a 36.5% increase from 2006 when the ABS first implemented its quinquennial homelessness enumeration strategy (ABS, 2021). In 2021/2022, just over 1% of the population sought assistance from specialist homelessness services (SHS) across the country<sup>1</sup>, and just over 1 in 10 Australians have experienced homelessness at some point in their lives (Chamberlain & Johnson, 2015).

As is the case in most Western jurisdictions, the homeless population is not only increasing in size it is also becoming more heterogeneous. In the past, homelessness was largely confined to older, single men living in run-down inner-city areas (skid row) who typically had a range of disabling conditions (Jordan, 1994; DeHoog, 1972). The homeless population now includes families, women, children, young and old people, as well as many migrants. The homeless population is more diverse in other ways as well. There is greater spatial variation with homelessness distributed across city, suburban, regional and remote areas (Wood et al., 2011), as well a greater temporal diversity, with some people having a short once off experience of homelessness, while others end up mired in homelessness for many years (Cobb-Clarke et al., 2016). The homeless population is also more diverse in terms of individual characteristics with some people reporting multiple disabling conditions such as substance misuse, mental and physical ill health, adverse childhood experiences and traumatic experiences as adults, through to those for whom the problem is 'simply' a lack of money.

The diverse nature of the homeless population combined with the complex interactions between structural and individual factors that contribute to homelessness has made it difficult to pin down its 'cause'. However, significant changes in Australia's housing market, most notably a decline in affordability over the last two decades and reduced expenditure on social housing (Groenhart & Burke, 2014), combined with the progressive dismantling of Australia's welfare infrastructure are three commonly cited factors (Chamberlain et al., 2014)

The changing nature of housing insecurity and homelessness in Australia presents a host of policy and practice challenges. Delivering timely and appropriate services to households 'at risk' and those experiencing homelessness has been the subject of political and research interest for many years, both in Australia and overseas. In line with these concerns, previous studies have examined 'who' uses homelessness services in Australia (AIHW, 2022), but there is little information on patterns of service use over time. Establishing how much variation there is in service use patterns and why service use patterns vary is important information that policy makers and service providers can use to further enhance service design and improve service outcomes.

Service utilisation patterns have been a foci of research studies in several cognate areas, particularly public health. One particularly important strand focuses on 'heavy service users'. While definitions of heavy use vary the key characteristic of the concept is that the frequency of use or the duration of service use is significantly higher than most people receiving similar treatment (Hadley, Culhane and McGurran, 1992). Interest in heavy service users is largely motivated by the fact despite accounting for approximately 10-20% of services users, heavy service users account for anywhere between 50-75% of inpatient costs.

<sup>1</sup> [Homelessness and homelessness services - Australian Institute of Health and Welfare \(aihw.gov.au\)](https://www.aihw.gov.au/reports/1000/homelessness-and-homelessness-services) Accessed 25/05/2023

The identification of heavy service users and who is likely to become a heavy service user therefore offers the promise of potential large costs savings. Further, a better understanding of what contributes to heavy service use might assist policy makers devise better, less expensive ways to meet their needs.

In the area of homelessness, the importance of service use patterns was recognised in the 1990s by Randall Kuhn and Dennis Culhane (1998) who analysed administrative records maintained by shelter providers in New York and Philadelphia. They identified three distinct groups based on their frequency and duration of shelter use. The first group they called the transitionally homeless, who only briefly entered then exited the shelter system. This group accounted for 80% of shelter users. They were white, younger, and less likely to have mental health or drug problems. The episodically homeless accounted for 10% of shelter users. They were less likely to be white and more likely to have medical, mental health, and substance use problems. The final group, the chronically homeless, also accounted for 10%, and their physical and mental health was the poorest. They were also older and less likely to be white. Although the chronically homeless accounted for only 10% of shelter users they consumed half the shelter days.

Researchers from other countries including Canada (Aubery et al., 2013), Ireland (Waldron et al., 2019) and Denmark (Benjaminsen & Andrade, 2015) have drawn on homelessness shelter data to test Kuhn and Culhane's typology and the research findings confirm similar patterns of shelter use in all three countries, with some variations. Researchers have also used the typology to test a hypothesis that in countries with more extensive welfare systems, homelessness is generally confined to those with more complex needs (Stephens & Fitzpatrick, 2007; Benjaminsen & Andrade, 2015). Researchers have also linked homelessness datasets to other administrative datasets to better understand associations between service outcomes and service use patterns in other jurisdictions, such as the criminal justice and health systems (Metraux et al., 2003, Goering et al., 2014).

While there are limitations in the extant literature, both methodological and theoretical (Burt, 1994; Bairéad & Norris, 2022), the recognition that a small group of homeless individuals not only used a disproportionate share of shelter days but were 'trapped' by a system designed to help them contributed to a major policy shift in the US (and worldwide) towards a Housing First approach (Johnson et al., 2012, Pleace, 2011).

While researchers in the US and other countries regularly use longitudinal administrative data to drive service reform, in Australia the use of administrative data to understand patterns of service use among people at risk of homelessness and those experiencing homelessness is limited. This is largely a result of the client management systems used by homelessness agencies in the past collecting data over 12-month periods, so that each 12-month period could not be linked to previous or subsequent periods. In 2012 the situation changed when new computerised client management systems were implemented across the country. Not only did these systems harmonise data collection procedures at homelessness agencies, but they also generated a unique ID for every household that presented at a homelessness service, meaning that households could be tracked over multiple years.

Drawing on data collected by these new systems, the Australian Institute of Health and Welfare (AIHW<sup>2</sup>) analysed the number of new households presenting to homelessness services each year and found that the number of new clients was decreasing while the number of repeat clients was increasing.

<sup>2</sup> The AIHW are the custodians of all Specialist Homelessness Services data.

However, why this occurred and what the implications might be, were not canvassed (AIHW, 2017). A more detailed analysis by the AIHW (2019) examined service use patterns over a four- year period but only for people in short-term or emergency accommodation. They identified three cohorts. The smallest group were persistent users (14%). These were clients that had at least one support period<sup>3</sup> in each of the four years. Service cyclers (43%) had at least 2 support periods over the four years, while transitory service users (43%) had a single support period only. As with the international studies that examined shelter use, the AIHW found that people with more complex needs used services more frequently.

Taylor and Johnson (2019) examined patterns of service use at a high-volume IAP service in Melbourne, Australia drawing on six years of administrative data. Their study, which included at risk and homeless households with a wide range of characteristics, identified four distinct patterns of service use. A significant majority (67%) of households had a single support period in a single year and did not return. A smaller group, comprising 11% of all households, had multiple support periods but only in one year. A smaller number of households returned over a longer period. There were two such groups. The first group were those who opened single support periods in multiple years. They accounted for 12% of all the households. The final group, who returned in multiple years and had multiple support periods in those years, accounted for 10% of all the households. While these two groups accounted for 22% of service users, they consumed nearly half of all the support periods (41%) and support days (43%). The study found no evidence that a single attribute or set of attributes predicted whether households would return or not.

However, the study drew data from a single service provider only and thus it is unclear if the patterns of service use or the lack of any statistical association between service use patterns and individual characteristics are unique to that site or reflect patterns of service use in the broader homelessness system.

The three Australian studies also differ from the international studies in several important ways. First, international studies generally focus on a single household configuration, primarily singles, but also families (Culhane et al., 2007), whereas the Australian studies include a wide range of household configurations. Second, international studies examine shelter use, but there is no equivalent response in Melbourne, the site of this study. Third, and related to the previous point, the service system that Australian studies examine has many unique features. This distinction is important as patterns of service use are influenced by the design of service systems (Hadley et al., 1990:280). In the next section we first outline the broad features of the Australia's homelessness service system before highlighting distinctive aspects of Victoria's homelessness system.

<sup>3</sup> The AIHW define a support period as "the period of time a client receives assistance from a SHS agency. It relates to the provision of a service and/or supported accommodation. During a support period, a range of services additional to supported accommodation can be provided." [Specialist Homelessness Services Collection \(SHSC\) - Australian Institute of Health and Welfare \(aihw.gov.au\)](https://www.aihw.gov.au/reports/indigenous-homelessness/specialist-homelessness-services-collection) Accessed 07/06/2023

## 1.1 The Homelessness Service System

There has been a national response to homelessness in Australia for nearly 40 years. Originally called Supported Accommodation Assistance program (SAAP) and subsequently rebadged in 2009 as the Specialist Homelessness Service system (or SHS), there are 1,698 agencies spread across the country<sup>4</sup>. Most services provide case management to people experiencing homelessness, but there is also a strong focus on prevention and early intervention, particularly among young people, families and women experiencing domestic violence. Support agencies typically focus on specific cohorts such as young people, people leaving prison, women experiencing domestic violence and so forth, although there are ‘generalist’ support agencies as well. Many support services rely on priority access to short- term crisis accommodation (6 weeks stay) and medium-term transitional accommodation (up to 9 months stay<sup>5</sup>), but there is a great deal of variation nonetheless, and many agencies seek direct access to permanent housing through both the private rental market and the public housing system.

In Victoria, the system is slightly different. There are 643 agencies, with the majority of services funded to provide case management or ‘specialist transitional support’, with access via IAP services. However, there are also a relatively small number providing Intake Assessment and Planning (IAP) services across Victoria. These services are the first point of contact or the ‘front door’ to the homelessness service system and they assist anyone over the age of 15 who is experiencing some form of housing crisis – both ‘at risk’ and also homeless households<sup>6</sup>. Access to specialist support services occurs via IAP services. For households that do not get access to transitional support agencies, IAP services operate as a *triage* system. Along with initial assessment of client housing and support needs, IAP services provide information, advice, referrals, and emergency financial assistance for homeless people or households at risk of homelessness.

Indeed, due to undersupply of accommodation options, IAPs increasingly rely on brokerage funds to assist people into temporary accommodation, such as boarding houses, motels, or caravan parks, or to access and sustain private rental, but brokerage funds are limited. Most IAP services maintain a prioritisation list as a way of matching limited support resources to clients’ needs, although there is no formally defined, consistent approach to assessment and prioritisation.

The number of people assisted by IAP services is very high compared to support agencies, and their characteristics vary considerably. IAP services thus provide a unique opportunity to examine the nature and characteristics of people experiencing housing related problems, including homelessness. Using a novel administrative dataset that combined records from six IAP services providers that cover most of metropolitan Melbourne, this report examines the administrative records of 70,522 unique households collected over 7 years to investigate four questions. They are. First, has demand for IAP services changed over time? Second, is the number of households that return to IAP services increasing over time? Third, are there distinct patterns of service use? Finally, are different patterns of service use associated with distinct household characteristics?

<sup>4</sup> [Specialist homelessness services annual report 2021-22. Policy framework - Australian Institute of Health and Welfare \(aihw.gov.au\)](#) Accessed 29/05/2023.

<sup>5</sup> People 24 years of age or younger can stay in transitional accommodation for 18 months. Both limits, 9 and 18 months, are guidelines only and many households stay longer while they wait for permanent housing.

<sup>6</sup> There are also specialist access points that target specific groups such as young people and women experiencing domestic violence.

# 2.0 Research Approach

## 2.1 Data preparation

Details about every household that presents to an IAP service are recorded in a common computerised data collection system. The data is best understood as a series of transactional records collected at a point in time, with each record independent of others, but able to be linked together by a unique household ID.<sup>7</sup> We obtained 7 years of de-identified administrative data from six agencies<sup>8</sup> that deliver IAP services at approximately 12 different sites, providing us with near full coverage of metropolitan Melbourne.

The datafiles contained 109 matching variables. Some variables relate to the characteristics of presenting households (age, gender, income source, household structure, ethnicity etc), some relate to the households' circumstances when they present (housing/homelessness status, the presence of disabling conditions such as mental health issues, substance misuse, reasons for presenting etc), and some relate to administrative details about the date assistance started and ended, which are referred to as 'support periods'. While each datafile contained reliable and relatively complete data on demographic characteristics and also support period dates, there was some variation with respect to household circumstances, with some information not reported for the full seven-year period at some agencies (see Appendix Table A1). On balance, however the benefit of including multiple agencies covering a broad geographic coverage was greater than the potential loss of accuracy.

There was also variation in the way the six agencies recorded information, with some recording information on every household member (individuals) whereas others recorded information on presenting head of the household only (household)<sup>9</sup>. Agencies that collected individual information reported a much higher number of support periods than those where the base unit was the household.

This is because with a family of five for example there would be a support period for each individual (eg five support periods), whereas there would only be a single support period when agencies recorded information on the presenting head of the household. To address this problem, we used the same base unit (household) across the six databases to structure the analysis, as this was the most common approach. Reported household characteristics such as age, sex, mental illness (etc) are based on the presenting household lead.

We excluded households where the presenting person was aged 14 or younger, aged over 100, as well as those that did not have a date of birth or sex recorded<sup>10</sup>. The latter two were crucial as the unique identifier we created (below) relied on both. This left **145,656** support period records in our database. Every support period record had a start and end date which we used to create a new variable – the duration of each support period. The number and duration of support periods are our two key measures of service activity.

<sup>7</sup> Only a limited amount of information on distinct clients is readily available via SHIP's reporting system. This is because most reporting is based on support periods rather than distinct clients. Further information is available from the Australian Institute of Health and Welfare (AIHW) which produces state and national annual reports that contain data on the gender, household composition, age, labour force status, and place of birth of distinct clients.

<sup>8</sup> The six agencies that contributed data to the project were Launch Housing, VincentCare, Haven Home Safe, the Salvation Army, WAYSS and Unison Housing.

<sup>9</sup> The AIHW identifies that 'The base unit is a person who presents to an SHS agency requesting services. A person becomes a 'client' once they receive a service(s)'. See [Specialist Homelessness Services Collection \(SHSC\) - Australian Institute of Health and Welfare \(aihw.gov.au\)](#) Accessed 07/06/2023.

<sup>10</sup> Dates of Birth were not recorded for 248 households and there were 75 cases where sex was not recorded.

## 2.2 Merging datafiles

Although we had records for 145,656 support periods, some households present to IAP services on multiple occasions and thus have more than one support period. Households can also present to different IAP services. These two issues raise the problem of duplicate records. In each datafile we constructed a unique identifier for each household to control for duplication.<sup>11</sup> When households presented to more than one agency or multiple times within an agency (or both) unique household status was determined by the earliest presentation date. After preparing the data and merging the six datafiles into a single database there were records for **70,522 unique households** who were assisted on **145,656 occasions (support periods)**<sup>12</sup> over the 7-year period (1<sup>st</sup> January 2014 until 31<sup>st</sup> December 2020), except one agency which was missing data for 9<sup>th</sup> October – 31<sup>st</sup> December 2020.

## 2.3 Unique households: Two ways of counting

While the total pool of unique households was 70,522, the first part of our analysis examines patterns of demand on a yearly basis. In this part of the analysis, we count the number of unique households that present in each calendar year separately. That is, we treat each year as a discrete time period. The result is that the number of ‘unique’ households is much larger – **102,585** – but we stress that they are unique only in each year but not over the full seven-year period. The benefit of this approach is that we can more clearly observe changes in the volume of activity over time across metropolitan Melbourne.

## 2.4 Service utilisation patterns

The next part of the analysis examines the frequency of presenting to IAP services and whether there are distinct patterns of service use. It then examines whether different patterns of service use are associated with distinct household characteristics. To do this in a robust manner we have to deal with left censoring – dealing with households that presented before 2014 – and right censoring (ensuring every household had an equal opportunity to present to an IAP service). To deal with left censoring we had to determine a households’ first presentation date. The dataset only goes back to 2014 and does not capture anyone who might have used the service before then. As such, anyone presenting in 2014 or later may be returning to the service rather than presenting for the first time. While this problem cannot be eliminated<sup>13</sup> as it requires more extensive data than is available to us, our solution reduces any potential effects on our results, consistent with existing literature (Kuhn & Culhane, 1998). Any presentations in 2014 were not considered but served as the baseline in checking if a household was new or returning to the service. Additionally, any presentations were checked with the preceding years to determine if they were new or returning.

<sup>11</sup> The unique identifier comprised an alpha-code generated by the client management system for each household, to which we added date of birth (as a value) and gender, with ‘0’ for male and ‘1’ for female. Tests on unique identifiers generated in this way have found them to be a reliable way of identifying duplicate records.

<sup>12</sup> Suppose the three missing months were imputed, then the number of support periods would equal 146,285. However, as they were missing due to organizational data management rather than the characteristics of clients, they not imputed.

<sup>13</sup> It is important to note that it is not practicable to completely remove left censoring and right censoring bias for most real-world populations, short of a) having data on people for their entire lives, or b) having a topic confined to a specific historical context. However, left and right censoring can be exaggerated in some datasets and ignoring it can lead to misleading conclusions. The single-year dataset is the most extreme example. We have opted to follow Kuhn and Culhane’s approach of excluding clients beginning in either or first or last year of the dataset, but the AIHW approach to only exclude clients beginning in the last year of the dataset, has other advantages. The common ground is in recognising that using the entirety of the administrative dataset is undesirable.



New means that the person had not entered the service relative to the previous year(s). The earliest presentation date without any presentations in the preceding year(s) was assumed as their first presentation.

Secondly, given that people presented at different times throughout the 7-year period, we tracked observations from their date of the first presentation over 1,095 days (3 years). In doing so, we ensured that every household had the same opportunity (time) to present to the IAP services. Consequently, people presenting for the first time in 2018 or later were not considered since they have less opportunity to use the IAP services than those who presented in earlier years. As such, only those who presented for the first time in 2015, 2016 and 2017 were included as this ensured that every household had 1,095 days to return to the IAP services, and which then enables us to track how their service use occurred over time. Dealing with these left and right censoring resulted in a final dataset of **30,446** households. The large dataset allowed us to drop observations without significant losses in the sample.

After addressing issues on censoring, striking patterns of service use were apparent. Some used the service only once within the 1,095-day observation period, others multiple times but within a short period, yet others less frequently but over a drawn-out period. These patterns are similar to what has been reported in existing literature (AIHW, 2019; Taylor and Johnson, 2019). Thus, we employed a deductive approach to draw out these patterns more fully, drawing on typologies of service use already identified in Australian literature using similar data.

While other studies use both the number and duration of support episodes (Kuhn & Culhane, 1998; Benjaminsen & Andrade, 2015), we limit our typology to episodes of service use because duration of support periods is less reliable due to variations in practice across agencies. Our approach nonetheless is comparable to other Australian studies (AIHW 2017, 2019; Taylor and Johnson, 2019).

In keeping with existing findings of homelessness service use patterns in Australia (AIHW, 2019; Taylor and Johnson, 2019), we classified observations into three groups of service users. The first category includes households with only a single support period (light users) within 1,095 days. The second category included people with multiple support periods but within 365 days (periodic users). The third category included people with multiple support periods in multiple years (regular users). We provide descriptive statistics of the clusters and compare their characteristics in Section 3.

## 2.5 Definitions

At every presentation, IAP services record a household's housing circumstances. To determine what proportion first present as homeless and what proportion present 'at risk' of losing permanent accommodation, we adopt the AIHW definition of homelessness, which is widely accepted in Australia. The definition is a broad and classifies a person as homeless if they have 1) no shelter or are living in an improvised/inadequate dwelling; 2) are living in short-term temporary accommodation, or 3) are couch surfing or living with no tenure in a house, townhouse or flat<sup>14</sup>. We include people living in caravan parks as homeless, as caravan parks are commonly used as emergency accommodation<sup>15</sup>. The AIHW also provides our definition of 'at risk'. According to the institute, people at risk of losing accommodation are those that present to a homelessness agency and are living in a) public or community housing, either as a renter or rent free; b) private or other housing, as a renter, rent free or owner, or c) living in institutional settings.

<sup>14</sup> [Glossary - Australian Institute of Health and Welfare \(aihw.gov.au\)](#) Accessed 29/05/2023

<sup>15</sup> [Australia's youth: Homelessness and overcrowding - Australian Institute of Health and Welfare \(aihw.gov.au\)](#) Accessed on 29/05/2023

# 3.0 Analysis

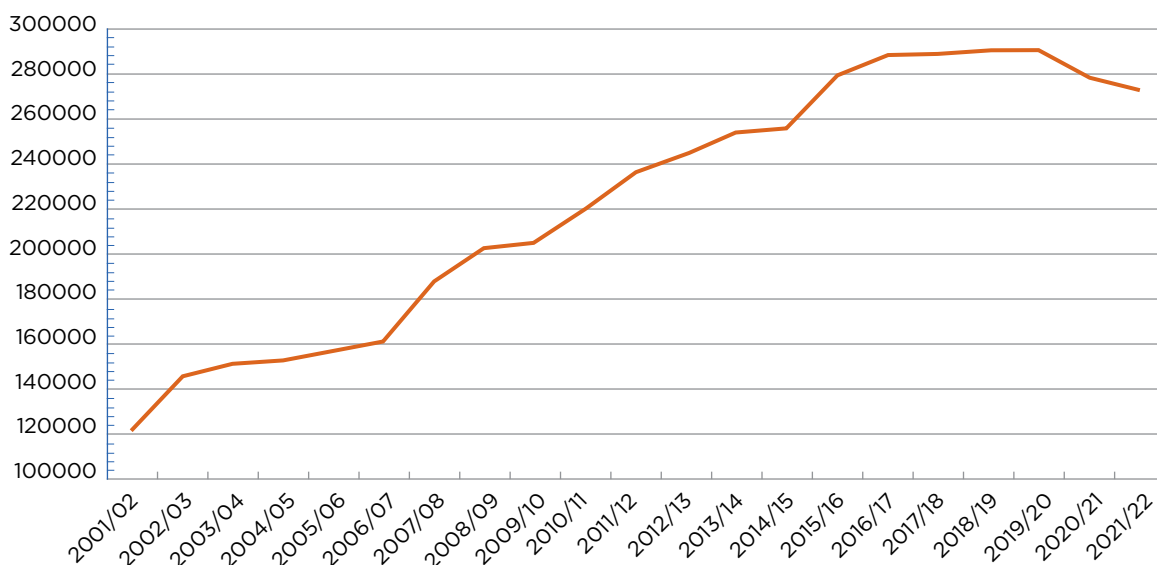
## 3.1 Annual patterns of service use

We start the analysis by comparing trends in the number of ‘clients’ that presented to SHS across the country annually, with the number of unique households and support periods recorded at the six Melbourne IAP services each year. The AIHW produces annual reports on SHS activity at both a national and state level. These reports describe client characteristics, reasons for presenting and trends in demand for homelessness services. For homelessness agencies, how many clients they see and how many support periods they provide each year are key metrics. Figure 1 shows that since the turn of the century until 2016/17, there was a steady increase in the number of clients assisted by homelessness agencies across the country. Then in 2017/2018 it plateaued for three years, before declining in 2020/21.

To enable comparison with our data, we restricted the time period for SHS clients to 2014- 2020<sup>16</sup>, and in addition to SHS data, we included the number of support periods and the number of unique households that presented to the six IAP services each year, *irrespective of whether they had been to an IAP service in previous years*. This means that households that presented in multiple years will be counted more than once. Figure 2 shows that in 2014 and 2015 SHS client numbers increased, whereas there was a slight decline across IAP services in both the number of unique households and also support periods. Over the next three years the number of SHS clients, as well as the number of IAP households and support periods remain relatively stable, before all three measures decline in 2020.

<sup>16</sup> The data collection periods do not match perfectly. SHS data is reported in financial years, whereas our data is reported in calendar years.

**Figure 1:** National client numbers, SHS, by financial year

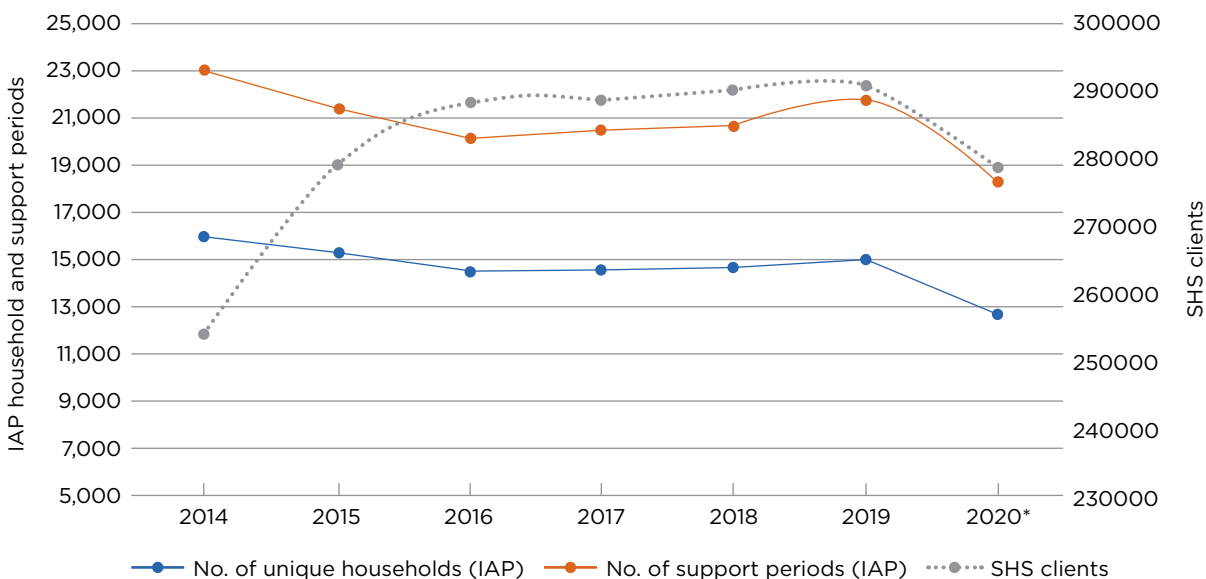


While there are likely to be several factors that contributed to the decline in 2020, COVID and COVID related lockdowns are the most plausible explanations.

However, as housing market conditions in Melbourne worsened between 2014 and 2020, the more critical question is why the number of households and support periods remained relatively constant in the three years preceding COVID. In a resource constrained environment, the most likely explanation is not that demand plateaued as such, but rather the capacity limits of the IAP agencies were reached. Taylor & Johnson (2019, p.22) use the term carrying capacity which can be thought of as ‘how much can be done (or how many people can be seen) given the available resources. IAP services do not have a prescribed limit on household numbers they can assist. However, the carrying capacity of any IAP service is constrained by the number staff it has and the way its service delivery model is configured’. What this means is that there is a physical limit to the number of households any IAP service can realistically support at any given time. Figure 2 suggests IAP services across metropolitan Melbourne have been operating at or near that limit for some time.

The reduction in both households and support periods during the COVID 19 pandemic is worth commenting on. Lockdowns in Melbourne were particularly severe, and agencies were forced to rethink how IAP services were delivered, in particular, reducing face to face contact with service users and doing more business over the telephone. There were also four significant policy shifts which are likely to have impacted. First, IAP services received millions of dollars in extra brokerage to house people in hotels for the duration of lockdowns, so they could comply with the pandemic’s restrictions and be safer from the virus. Second, Jobseeker incomes were increased and, third, an eviction moratorium was implemented. Finally, a new ‘Housing First’ program, *From Homelessness to a Home (H2H)*, was funded. It is highly likely that these and other COVID related factors had an impact on the level of demand for IAP services specifically, and homelessness services more generally (Pawson et al., 2020).

**Figure 2:** IAP unique households and support periods, and SHS clients, by year



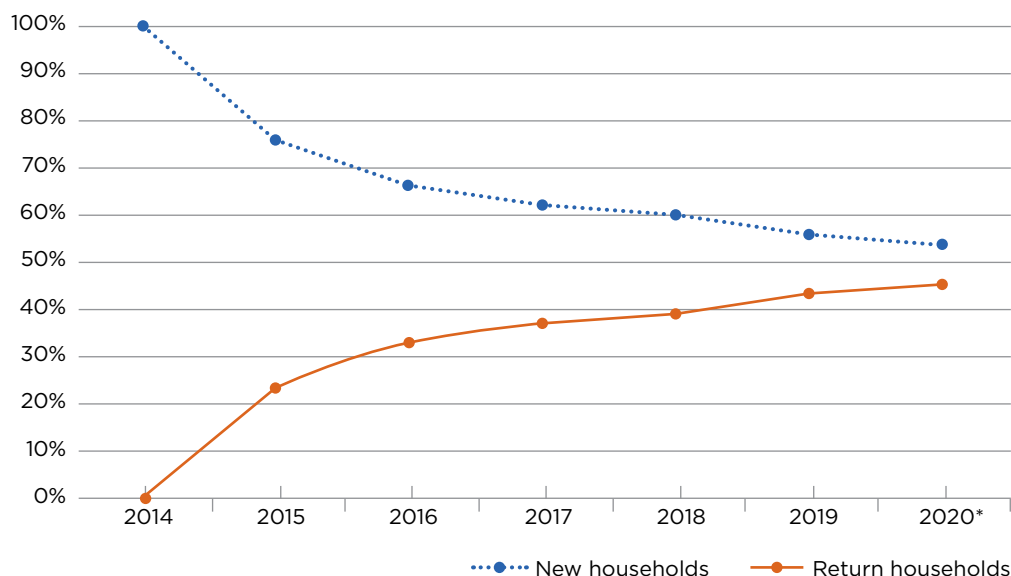
While the number of unique households and support periods remained relatively constant in the three years prior to COVID, in any given year some households that have previously visited an IAP service will return, and some households will present for the very first time. For many years, the prevailing view in Victoria was that return households were a small minority, but that view was based on data collected over a 12-month period only (The Age, 25 May 1999, p.12). From a policy and practice perspective it is important to have accurate information on the number of new and returning households as each groups presents different policy and practice challenges. We exploited the 7-year observation period of our administrative data and identified the earliest support period start date for each household to determine the number of new and return households that presented to the IAP services. Any subsequent presentation to an IAP service was classified as a 'return'. We used 2014 as our baseline year. We classified all households as "new" in 2014, although some of these households may have been to an IAP service previously. Nonetheless, the approach we took with the available data enables us to illustrate trends in new and repeat clients over time. As shown in Figure 3 the percentage of new households declined in each successive year, from 76% 2015 to 54% in 2020<sup>17</sup>.

What the increasing percentage of return households means is open to interpretation, but ideally the best outcome would be for households not to return because their problems are solved. This would free up the resources that returning households consume, and resources that could otherwise be used to reduce the likelihood of new households returning. Nonetheless, in the context of decreasing housing options and increased cost of living pressures, it would seem that return service use is inevitable. And even if the chances of returning were small but constant, the number of households who would return would continue to rise over time as the total pool of IAP service users continues to grow.

Before COVID, the number of households presenting to IAPs had plateaued for several years. This does not relate directly to demand or need for housing assistance *per se*. It does however relate to the capacity of agencies, which in turn relates directly to funding arrangements. Many households might be missing out, but with the data available to us, this cannot be ascertained. What we do know is that across Melbourne, IAP services are at full capacity. While annual data helps to illustrate some of the challenges IAP services face, counting households in each year over-estimates the number of unique households that seek assistance from IAP services. Over the 7-year period, a total of 70,552 unique households presented to IAP services. We turn our attention to this group next.

<sup>17</sup> See Appendix Table A1 for full information.

**Figure 3:** New and return household, by calendar year (%)



### 3.2 Characteristics of the 70,000 households

The six IAP services are ‘generalist’ services which means there are few restrictions on who they work with. IAP services therefore provide important insights into the nature and extent of housing problems experienced by households across metropolitan Melbourne. While not every person with a housing problem will visit an IAP service, every household that presents to an IAP service has a housing problem.

IAP services record the housing circumstances of every household when they present. Drawing on the AIHW definition of homelessness, we classified each household as either homeless<sup>18</sup> or ‘at risk’ depending on their housing circumstances at their first presentation. The distinction is important for several reasons. To start with there has been a ‘preventative turn’ in the SHS, with agencies increasingly working with ‘at risk’, along with homeless households. The reasoning behind the preventative turn is straight forward – policy makers and agencies are aware that once people are homeless it takes more time and is more costly to resolve their situation. Indeed, AIHW data shows that of those that present ‘at risk’, 9 out of 10 are still housed at the end of support, whereas among those households that present as homeless only 3 in 10 are housed at the completion of support<sup>19</sup>.

We found clear evidence that IAP services play a critical preventative role. A significant majority of households (72%) were housed but at risk of losing their accommodation at their first presentation, while just over a quarter (28%) were homeless. With respect to the characteristics of the two groups Table 1 (see next page) shows there are some important differences. Households presenting as homeless more likely to be male and single compared to the ‘at risk’ group.

Similarly, indigenous households were more likely to be homeless than ‘at risk’ when they first presented. There was little difference in terms of age at first presentation.

With respect to reported income source there is some variation with people experiencing homelessness much more likely to be on income support (e.g. Job Seeker, Youth Allowance) than a pension or allowance, whereas the pattern is reversed among those ‘at risk’. The difference is important as income support payments are lower than pensions or allowances, which provide a stronger buffer against economic shocks that can precipitate homelessness (Johnson et al., 2018; O’Flaherty, 2009). The overall percentage of people born overseas is high, at 44.8%, with slightly more first presenting ‘at risk’. The connection between migrant status and homelessness has not received great deal of policy or academic attention in Australia, which is puzzling given our results cohere with the ABS estimate that 46% of the homeless population was born overseas, and that many migrants live in precarious housing circumstances (ABS, 2021).

<sup>18</sup> We are unable to tell if they had recently become homeless or had been homeless for some time.

<sup>19</sup> [AIHW Fact Sheet: Victoria Specialist homelessness services 2020-21: Victoria Fact sheet \(aihw.gov.au\)](#) Accessed 19/09/2023

**Table 1:** Characteristics at first presentation by housing status, unique households (in %)

	At risk N=51,611	Homeless N=17,498	TOTAL 69,109*
<b>Sex</b>			
Female	58.6	34.0	52.3
Male	41.4	65.9	47.6
Other	0.04	0.06	0.05
<b>Age</b>			
15-24	9.4	9.3	9.4
25-34	26.4	27	26.6
35-44	27.8	29.7	28.3
45-54	19.8	21.2	20.2
55-64	10.3	9.4	10.1
65 plus	6.3	3.5	5.6
Mean age (yrs)	41	40	41
<b>Household type</b>			
Single person	44.6	76.8	52.6
Couple (with or without child/ren)	16.1	10.6	14.7
Group	4.2	1.9	3.6
Other Family	7.2	1.6	5.8
Single parent (with child/ren)	27.9	9.0	23.3
<b>Income source</b>			
Income support	41.7	57.4	45.5
Pension or allowance	50.2	37.1	47.0
Wages	6.9	4.6	6.4
Other	1.2	0.9	1.1
First nation	4.7	7.2	5.4
<b>Country of birth</b>			
Australian born	53.2	60.6	55.0
Overseas	46.8	39.4	44.8

\* 1,443 cases of households missing housing information.

**Table 2:** Reported condition at first presentation by housing status, unique households,(%)

	At risk	Homeless	TOTAL
State out-of-home care	0.5	0.4	0.5
Correctional facility	5.1	6.8	5.6
Mental health	28.0	32.6	29.2
Medical issues	12.0	8.9	12.2
Substance and drug misuse	0.6	0.3	0.4
Sexual abuse	0.5	0.7	0.6
Defence force	0.4	0.5	0.4
Domestic or family violence	10.3	11.5	10.6
Problematic gambling	0.2	0.3	0.2



While there are some notable differences in the demographic characteristics of the two groups, we also had information on a range of disabling conditions and biographical experiences commonly associated with homelessness. Across nine measures (Table 2) we assumed that rates would be higher among the homeless than those at risk. This is not the case. What stands out is how similar the two groups are. The proportion of people reporting experiences in the State out-of-home care and correctional facilities are nearly identical, as are the reported rates of mental health and medical issues. Substance and drug misuse was higher among the 'at risk' population, while the proportion reporting domestic or family violence was similar irrespective of whether they were housed or homeless when they first presented.

Although the results are significantly higher than what is observed in the general population, the similarities between the two groups might come as a surprise to some. However, studies that compare the characteristics of very low-income households with the characteristics of people experiencing homelessness report few differences, with poverty being the common denominator (Shinn et al., 1998; Shinn et al 1991; Wright et al., 1998)). This suggests that many of the risk factors commonly associated with homelessness, are less powerful predictors of homelessness than is often assumed. Indeed, one of the few studies capable of identifying the mechanisms that 'cause' homelessness, the Australian longitudinal study *Journeys Homes*, has repeatedly found that most individual risk factors are only weakly significant, if at all (McVicar., et al 2013; Johnson et al., 2018; Moschion et al., 2019). It is also worth noting that the broad definition of homelessness we apply will influence our results – studies that

focus on the smaller pool of chronically homeless report different characteristics compared to the newly homeless. However, with no information on homeless duration we are unable to investigate this.

Earlier on we found that the number of new households was declining but that they still accounted for nearly half of all the households that presented in 2020. In the next section we look at the characteristics of new households at three different time points (2014, 2017 and 2020) to determine if the characteristics of households presenting to IAP services has changed over time. Table 3 shows that the proportion of new households who are homeless on first presentation increased over time, as did the proportion reporting experiences in out-of-home care and correctional facilities. The latter two are a concern given the policy emphasis on reducing exits into homelessness from government services. In 2014 just under a quarter reported mental health issues (23.4%) but this increased to a third (33.0%) by 2020. The proportion reporting medical issues and substance misuse problems doubled between 2014 and 2020, although both come off a low base, while the proportion of households reporting domestic or family violence at their first presentation nearly doubled, increasing from 7.5% to 15.8%. At the same, we also observe an increase in the number of people in paid employment presenting to IAP services for the first time, rising from 4.5% in 2014 to 7.7% in 2020. Increasing numbers of working households is a disturbing sign suggesting that even engagement in the labour market is no longer guaranteed protection against extreme housing precarity.

Increases among households reporting a mental health issue and those that reported domestic or family violence are also of particular interest given that between 2014 and 2020 both were subject to increased public and political scrutiny resulting in Royal Commissions into mental health and also domestic and family violence<sup>20</sup>. These Royal Commissions resulted in significant service reform, along with a substantial increase in funding. Yet, despite this, the proportion of new households presenting to IAP services with either of these issues increased. In Australia, the SHS provides insights into the failures of other systems, both mainstream and welfare. While the benefits of reforms to the mental health and family violence sectors may not yet be fully realised, the data suggest that both the mental health and family violence systems are still not adequately resourced, and/or appropriately configured.

The results presented in Table 3 suggest that the complexity of households presenting to IAP services has increased, a claim that has been made in the past, but which has always lacked strong empirical support. While these changes may reflect changes in agency practice and/or changes in the population seeking assistance, increasing client complexity does have a material impact on workers at IAP services – in the context of a tight housing market and the limited availability of support, IAP workers are increasingly expected to do a near impossible task of finding

or stabilising housing for households experiencing multiple forms of disadvantage and exclusion.

Given the constraints IAP workers face, it is not entirely surprising that the average number of days each household was supported increased by 67%, from 12.2 days in 2014 to 20.7 days in 2020 (Table 3) However, by aggregating the data we lose the opportunity to examine differences between agencies with respect to support periods. Table 4 shows there is little variation between agencies in the average number of support periods per household. However, we found considerable variation between agencies in how long support lasted. Table 4 shows that, on average, Agency C supported each household for 76 days, nearly 13 times longer than agency F, and 3-7 times longer than the other four IAP services. While the three agencies (A, D & E) support households for a similar amount of time, overall, the results suggest that IAP services have different practices regarding opening and closing support periods. What this means in terms of the actual assistance households receive from the different IAP services is not apparent.

<sup>20</sup> For further information go to [Home | Royal Commission into Victoria's Mental Health System and the About the Royal Commission into Family Violence | Victorian Government \(www.vic.gov.au\)](#) Accessed 14/06/2023

**Table 3:** Characteristics of new households at first presentation, at three different time points, (%)

At First Presentation	2014 N=15,928	2017 N=9,111	2020 N=6,885
Homeless	24.7	25.4	30.7
Female	50.7	56	47.7
Mean age (years)	40.9	41.2	38.3
Families	43.5	46.1	34.9
State out-of-home care	0.3	0.5	0.7
Correctional facility	5.0	4.8	7.7
Mental health	23.4	32.4	33.0
Medical issues	7.2	11.7	13.3
Substance and drug misuse	0.3	0.3	0.6
Sexual abuse	0.3	0.7	0.7
Defence force	NA	0.3	0.4
Domestic or family violence % yes at first presentation)	7.5	11.5	15.8
Problematic gambling	0.2	0.2	0.2
PAID employment	4.5	6.5	7.7
Ave support duration (days)*	12.2	13.5	20.7

\*Durations exceeding 365 days removed.

Returning to our aggregated data, as the six agencies are located across Melbourne, we can also answer questions about whether households use multiple IAP services or not. While IAPs serve specific catchments (or geographic areas), they also operate under a ‘no wrong door’ policy (Department of Human Services (VIC) 2008). This means people can present at any IAP service irrespective of where they might ‘live’. This is important as people experiencing homelessness are mobile and ‘at risk’ households often move to look for cheaper housing and/or work.

As the use of multiple IAPs would seem to be an inevitable part of the homelessness system, the salient question here is the magnitude of multiple IAP service use. Table 5 shows that most – over 8 in 10 – households accessed support from only one IAP service provider over the 7-year period. Table 5 also shows that just under 1 in 20 households presented at three or more IAPs. What drives people to use multiple IAPs is requires further examination, but we can say with some certainty that most households did not.

The results presented so far provide insights into nature of service use and characteristics of IAP users over time and across metropolitan Melbourne. However, to develop an understanding of service utilisation patterns over time requires a more sophisticated treatment of the IAP dataset. In the next section we investigate if there are different characteristics associated with different patterns of service use.

**Table 4:** Average number support period and average duration of support period, by de-identified agency

IAP Agency	Support periods per household	Average duration support period (days)
Agency A	1.8	12
Agency B	1.8	21
Agency C	1.6	76
Agency D	1.6	16
Agency E	1.6	10
Agency F	1.8	6

**Table 5:** Number of IAP services visited by unique households over the 7-year period.

	N	%
One IAP	59,537	84
Two IAPs	8,738	12
Three IAPs	1,794	3
Four IAPs	401	1
Five IAPs	78	0
All 6 IAPS	4	0
<b>TOTAL</b>	<b>70,552</b>	<b>100</b>

### 3.3 Patterns of service use over time

This section examines service use patterns and to do this we draw on information from the 30,466 households that had the opportunity to present to any IAP service across three consecutive years (See Section 2.4). Across the three-year observation period, most people (57.5%) use IAP services once and do not return<sup>21</sup>, what we term light use (Table 6). Tracking returns or repeat use is a commonly used metric overseas (Kube et al., 2019), and while light use could be a sign that most households need only a small amount of assistance to overcome a housing crisis and then move on with their lives, it could also be that they do not return because IAP services cannot offer much by the way of access to long-term affordable housing. Just under 1 in 5 (18%) seek assistance from an IAP service on multiple occasions but this happens over a relatively short time frame – within a calendar year from first presentation. We refer to this as periodic use. Another 1 in 4 households (24.5%) repeatedly return to IAP services but over a longer period – a group we refer to as regular users.

Table 6 shows that light users, despite being the largest group, consumed a comparatively smaller share of total support periods (30.5%). In contrast, regular users who account for just over a quarter of service users, consumed nearly half of all the support periods (46.4%). When we look at the top 10% of regular users, what we call ‘heavy users’ (see Table 8) we found that the pattern is even sharper – while heavy users account for just 3.4% of households, they consume 13.6% of support periods.

Further, heavy users consume on average eight support periods per household, substantially higher than all other users of IAP support services. Based on the disproportionate consumption of support periods, targeting regular (or heavy) users and assisting them to get out of the homelessness service system is one-way agencies could free up scarce IAP resources.

The obvious follow-up question is whether there are distinct characteristics associated with the three different patterns of service use. The result presented in Table 7 tell a clear story – while there is little difference between the groups in terms of gender, age, or household type, there are marked differences across several other measures. For instance, compared to light users, households in the regular use group were twice as likely to be homeless at first presentation; to have been in State out-of-home care; to have experienced domestic or family violence or to have a mental health condition. Regular users were also three times more likely to have been in a correctional facility (5.0% vs 14.8%) and nearly three times more likely to report they had medical issues (9.2% vs 25.3%). Sexual abuse was also much more common among regular users, as was substance and drug misuse. Indeed, while only 2% of regular users reported substance misuse, this was 10 times higher than the rate reported among people that presented just once.

<sup>21</sup> In their study examining re-entries to homelessness services in a major city in the US, Kube et al (2019) found that 57% did not return over a 2-year observation period.

**Table 6:** Service use patterns

	N	%	No support periods	%	Ave No of support periods per household
Light use	17,515	57.5	17,515	30.5	1
Periodic use	5,479	18.0	13,296	23.1	2
Regular use	7,452	24.5	26,702	46.4	4
<b>TOTAL</b>	<b>30,446</b>	<b>100</b>	<b>57,513</b>	<b>100</b>	

The findings presented in Table 7 clearly show that the attributes of households who regularly use IAP services are different from light users. Periodic users fall somewhere in between – reported rates of disabling conditions are always higher than light users but always lower than regular users.

Given the relatively straight forward relationship between service utilisation and the presence of disabling conditions that we observe in Table 7, we decided to look more closely at regular users to see if the pattern continued among the top 10% of regular users. We refer to this group as heavy users.

Table 8 shows that just over 1,000 households were heavy users and they were the most disadvantaged – four out of five had been homeless or had a mental health condition; one third reported family or domestic violence; and over one quarter had been in a correctional facility. The rate of reported substance misuse was more than double what was reported among regular users. Indeed, across every measure heavy users recorded the highest rates, often by a substantial amount. It is also worth pointing out that the proportion of heavy users that were families was about half what was reported in the other service use groups, and they were also slightly less likely to be female.

**Table 7:** Household characteristics by service use patterns, (%)

	Light use N=17,515	Periodic use N=5,479	Regular use N=7,452
Reported homeless at first presentation	24.4	27.1	28.3
Ever reported homeless	24.4	48.2	56.7
Female	53.0	52.8	53.6
Mean age	42	42	40
Families (at first presentation)	45.2	41.9	42.5
Ever out-of-home care	0.5	0.7	1.4
Ever in correctional facility	5.0	7.3	14.8
Ever reported mental illness	28.2	46.9	59.3
Ever reported medical issues	9.2	17.4	25.3
Ever reported substance and drug misuse	0.2	0.8	2.0
Ever Sexual abused	0.5	1.6	2.0
Ever in defence force	0.0	0.1	0.3
Ever reported domestic or family violence	10.3	17.7	21.8
Ever reported problematic gambling	0.2	0.4	0.7
Indigenous/FIRST NATION	4.8	6.2	6.7
PAID income/wages (at first presentation)	6.8	4.0	3.7

Tables 7 and 8 show that service use patterns are associated with distinct characteristics. In the context of high-volume service work and more specifically in the context of prioritising resources, raw numbers matter as much as rates do. We can illustrate this with mental illness. From Table 7, we can determine that nearly 12,000 households reported a mental health condition, but just over 60% (7,475) either presented once and did not return or presented in just a single year. Thus, while the higher rate of mental illness reported among regular and heavy users suggests that mental illness is associated with an increased likelihood of returning to an IAP service, and prioritising this group would appear to be a logical way of reducing repeat

service use, given the large number of light and periodic users who also reported a mental health condition, focusing on a single measure such as mental illness could lead to offering additional services to households that would otherwise not seek them. Consequently, it is simplistic to assume that single specific personal characteristics drive service use patterns. Indeed, prioritising services based on household or individual characteristics alone will not be an optimal approach to allocating scarce resources. This is a dilemma for IAP agencies who are a gateway to support and emergency accommodation resources. We take up this issue in the following section.

**Table 8:** Household characteristics by service use patterns, (%)

	Heavy users N=1,033
Reported homeless at first presentation	36.0
Ever reported homeless	87.0
Female	46.8
Mean age	40
Families (at first presentation)	32.0
Ever out-of-home care	2.7
Ever in a correctional facility	28.3
Ever reported mental illness	84.5
Ever reported medical issues	38.0
Ever reported substance and drug misuse	5.0
Ever Sexual abused	5.3
Ever in defence force	0.7
Ever reported domestic or family violence	33.4
Ever reported problematic gambling	1.2
Indigenous/First nation	9.2
PAID income/wages (at first presentation)	2.5



## 4.0 Discussion & concluding remarks

**IAP agencies know that some factors outside their direct control largely drive the problems they face – the combined effects of a lack of affordable housing, rising living costs, and inadequate income support are pushing more people into housing-related problems across Melbourne.**

For the agencies, the struggle to deal with demand and to secure the outcomes they and their clients want is unrelenting. While Australian evidence shows that affordable housing is the most effective way of preventing homelessness (Johnson et al., 2018), the reality for front line services is that there are no easy solutions or quick fixes. That said, there are some actions IAP services can consider that will contribute to a more cohesive and transparent system. In the following discussion we focus on three areas. First, we discuss key findings and the implications for IAP services. Next, we highlight three technical issues that need to be addressed to ensure IAP services share a common vocabulary. Then we explore how variations in service use might be explored by IAP services to create a consistent, systems wide approach to risk assessment and resource allocation.

### 4.1 Key findings

IAP services are at the front end of Victoria's homelessness service system. The information they collect can provide valuable insights into the experiences of a wide range of households with some form of housing crisis, including homelessness. The data show that IAPs are at, or near, full capacity and have been for some time. Further, the complexity of household needs has increased over time, adding to the already considerable challenges these services face. Given the current cost of living pressures and issues with housing affordability will likely remain for the foreseeable future, unless there is a substantial injection of new funding for IAP services, more people will miss out on assistance, with homelessness a likely outcome for many.

A key aim of this project was to establish if there are different service use patterns and if specific characteristics were associated with them. The evidence confirms that households use IAP services differently, and different service use patterns are associated with different attributes and characteristics. Many families use IAP services just once, but a significant minority use IAP services regularly, and a small percentage use them very heavily.

Repeat and heavy service use have important implications for policymakers and service providers. There has long been a view that homelessness or a housing crisis is typically a 'once-off experience over a relatively short period of time, after which they successfully live in the community' (The Age Newspaper, 25 May 1999). This remains true for many people, but it is untrue for an increasing number of households for whom housing insecurity appears to be a persistent issue. This raises the question of how 'fit for purpose' triage programs like IAPs are and whether they should be re-designed to account for the fact that for many people their housing problems are more enduring.

While once-off and repeat users have various characteristics, the heavy service use cohort is more homogeneous. Heavy service use is strongly associated with more complex needs – among heavy service users, we find very high rates of mental health concerns, substance misuse, experiences in the custodial and State out-of-home care systems, and a very high rate of family and domestic violence. Heavy service use is not a principal consideration in current assessment and prioritisation approaches, yet it is reliable, easy to access information that IAP services can use to develop a data driven prioritisation framework.

While our findings show that some households have a range of vulnerabilities, most do not other than being on a low income and are struggling to meet their housing costs or find affordable housing. With access to seven years of administrative data, we have clear evidence that high housing costs could be increasing pressures on many Melbourne households - nothing indicates this more clearly than the increasing presence of working households. In 2014, we found that working householders accounted for 1 in 20 householders that presented to IAP services, but by 2020, working householders accounted for nearly 1 in 10. Within that period, the median house price to annual household income ratio increased from 8.4 to 9.5 in Melbourne (Demographia, 2014, 2020). Not only was housing severely unaffordable<sup>22</sup>, but this worsened over time. Working households are, to coin a phrase, a 'canary in the coal mine' - they provide a clear warning that problems in the housing market are more profound and more far-reaching than ever before.

The challenge here is how to respond. It is unlikely that this cohort and others for whom housing unaffordability is the primary issue will benefit greatly from additional support resources. What is required is direct housing assistance - while PRAP<sup>23</sup> can fill part of that role, and so could HEF<sup>24</sup> - agencies delivering IAP services might consider increasing advocacy efforts to reform the Commonwealth Rental Assistance (CRA). CRA is a blunt and expensive tool and one from which households with low wages are excluded. There are better ways to deliver housing assistance. Research shows that vouchers are the most effective way of preventing homelessness for families and individuals (Shinn and Khadduri, 2020).

Vouchers, which offer an ongoing (or time-limited) subsidy to access safe and decent private rental accommodation, can be carefully calibrated to account for household size, income and, importantly, the condition of local housing markets. Thus, vouchers can provide households with greater security, as well as improved housing choices. Reforming the CRA is not a 'quick fix' as successive Federal Governments have been reluctant to implement any changes. In the interim, agencies might consider seeking State government support to set aside a percentage of brokerage funding to trial a 'fixed-term top-up voucher' for 'at risk' households.

In summary, the results show that IAPs have two primary challenges - households presenting to the IAPs with more complex needs than in the past and working with more households that have traditionally not needed housing assistance. When you put together Melbourne's housing problems with the large number of households that present to IAP services and their wide range of characteristics and experiences, IAP services can offer limited assistance to many households that seek their help.

<sup>22</sup> A ratio of 3.0 or less is considered affordable, 5.1 and over is severely unaffordable. To illustrate, Detroit (3.1) and Miami, Florida (5.4) in the US and Calgary, Canada (3.9) are significantly more affordable than Melbourne (Demographia, 2020).

<sup>23</sup> Private Rental Assistance Program

<sup>24</sup> Housing Establishment Fund - brokerage funds IAP agencies can use to assist eligible households into temporary accommodation, or secure/maintain private rental accommodation.

## 4.2 Technical matters

Different IAP agencies recorded clients' data using different base units – in some cases, individuals. Other agencies used households. The AIHW definition of a client is sufficiently ambiguous that both approaches – individuals and households – can satisfy the definition. However, there should be consistency regarding the base unit IAP services use. This is not an abstract data problem but an issue with material consequences. IAP agencies are set 'support period' targets each year. Putting aside the appropriateness of setting targets for high-volume agencies given the influence of exogenous factors outside an agency's control – agencies that use 'households' as their base unit will always report fewer support periods than agencies that use individuals. There is, however, no right or wrong approach to the base unit issue, as both methods have benefits. But, a lack of consistency creates comparability problems. For instance, different base units create spatial distortions regarding who and how many people are using IAP services in different catchment areas.

In high volume services there is a trade-off between data collection and practical assistance. We contend that the base unit for designated high volume or access point services should be households. Not only would this reduce pressure on workers, but allocating support periods to family members that a worker may never see, talk to, or directly assist, is a questionable practice. Unlike support agencies that often engage with all family members, IAPs typically engage with families and couples as a unit. Nonetheless, it is vital to know something about the composition of households, and this could be done with some simple enhancements that enable existing client management systems to easily and quickly capture the number of individuals in the household unit, and their age.

The second technical issue relates to variation between agencies regarding the duration of support, which compromises a potentially important measure of service activity. There will always be some variation – for instance, geographic differences and organisational practice such as the procedures for opening and closing support periods among agencies.

Such organisational differences could have contributed to the variation in the duration of support periods reported in this study. Some agencies are clear outliers compared to their peers. The problem appears to exist partly because of an assumption that there is little difference between the roles of high-volume and support agencies. Thus, they should apply similar approaches to client data collection. At the same time, it is reasonable that agencies have different efficiencies and turnaround times in supporting clients, with some able to address clients' needs quicker than others. It is recommended that existing practices be documented and differences between approaches examined. Then, a systems-wide guide should be developed for agencies, leading to a standard and consistent approach that ensures researchers, agencies and policymakers can better understand the underlying reasons for any variation.

The third technical issue relates to the matter of disclosure – what people are asked by IAP services, why and when they are asked. It is challenging for workers to obtain complete information, especially when there is no guarantee that providing such information will secure the resources a household needs. Asking people in-depth, sensitive questions outside the scope of their immediate needs presents many ethical and practical challenges. Indeed, Vaithianathan and Kithulgoda (2020) report that people are uncomfortable with self-disclosing information about past experiences, such as time in a correctional facility. There is an inherent concern about how much information should be collected during the first presentation. Striking a balance here is important. Not only is there work to do in redefining the balance of information required to triage households, but also the likely consequences of any change to data collection practices regarding assessment and prioritisation approaches.

### 4.3 Opportunities for systems reform

Our findings suggest that IAPs are operating at or near full capacity. Additional resources would increase their ability to assist more households. But even with additional resources, without fundamental reform to the housing and income support systems, IAP services will have to continue to make challenging decisions about who gets access to the limited available support and accommodation resources. Increased funding could also result in a larger number of repeat/heavy users as service providers' carrying capacity increases. Thus, the mechanisms for assessing risk and prioritising access to resources remains a crucial issue for IAP services individually, but also collectively. Optimising service allocation is paramount to breaking the cycle of repeat users locked into the system and consuming scarce IAP resources. Currently, IAP services use a variety of approaches to assessing risk and prioritising access to resources. Most are underpinned in one way or another by the idea of greatest need. As our data show, this can be problematic. The study shows that heavy service users are more likely to have several disabling conditions. At the same time, we also found a substantial number of households who use IAP services once with similar conditions. Current prioritisation approaches create situations where some clients could be over-supported and others under-supported. How might agencies deal with this conundrum?

Over the last decade, a number of structured assessment and prioritisation tools have been developed but the take-up of these tools by front-end services in Victoria has been uneven.

Further, the reliability of these tools has been questioned. Research shows that traditional methods of assessment and prioritisation are inaccurate and inefficient (Shinn & Richards 2022) and struggle to reliably classify high-risk and low-risk households (Kube et al., 2019: p. 624). For instance, one of the more popular tools, the VI-SPDAT performed poorly at predicting a range of outcomes including repeat shelter use, death, incarceration, emergency hospital use and chronic homelessness (Kithulgoda, Vaithianathan & Culhane, 2022), and its scores 'were uncorrelated with any of the observed harms from which homelessness services are designed to protect' (Vaithianathan & Kithulgoda, 2020: p.38). Concerns about the tool's reliability led its vendors to stop supporting its use (Shinn & Richards, 2002).

New technologies that harness existing administrative data address some of the aforementioned problems and provide an opportunity to develop a more cohesive front end of the homelessness service system. New technologies such as machine learning and AI open new ways to assess risk and prioritise resources that can save clients from having to go through different, often unreliable, and at times stigmatising assessment procedures, as well as optimising the use of available resources in a fair, consistent and transparent manner. Implementing an effective, efficient and standard assessment approach will be a challenging and complex task, requiring time and resources. However, the payoff to clients and agencies would be considerable. In this context, we suggest a two-stage approach.

First, IAP services can embed an algorithmic tool in their data management systems to identify and prioritise heavy service users by specifying a service use threshold (e.g. five or more support periods; a support period in each of the last five years, etc<sup>25</sup>). To this can be added weighted factors based on pre-determined client characteristics (e.g., age, household structure or psycho-social needs) or that target policy priority cohorts (e.g., DV, youth mental illness, chronic homelessness). However, further research is necessary to ascertain the combination of household/personal characteristics and their respective weight that better predicts service use patterns. Such a model enables IAP services to leverage their data systems to produce a reliable and transparent assessment and resource allocation approach. Prioritising the heaviest service users (with weighted factors) would not require new IT infrastructure.

The second stage could utilise routinely collected data to develop a predictive model driven by machine learning. There is strong evidence that machine learning methods can more accurately identify individuals at high risk of shelter readmission, repeat homeless service use, long-term homelessness and re-incarceration than existing prioritisation approaches (Kithulgoda, Vaithianathan & Culhane, 2022; VanBerlo et al., 2021; Kube & Fowler, 2019). Recent evidence from the US demonstrates that machine learning methods can be equitably, ethically and effectively applied to routinely collected data held by homelessness agencies (Vaithianathan & Kithulgoda, 2020).

The evidence also suggests that the accuracy of prioritisation models can be enhanced by combining electronic records with self-report answers to a small selection of questions. Notably, both steps in developing a consistent and data-driven approach to risk assessment and prioritisation are well suited to high-volume agencies where staff have high caseloads and where saving time is a priority. New technologies also require that the value choices made by agencies and/or programs (e.g., which groups are prioritised, and which are not) are made more explicit. There are challenges to implementing a data-driven assessment and prioritisation model, and questions of fairness, accountability and transparency must be carefully considered (Kube et al., 2019: p.622). Allowing workers to override certain allocation decisions has been recommended in several studies as a practical solution (Kube et al, 2019; Shin et al., 2013). While the application of data-driven assessment requires careful consideration of governance issues, machine learning approaches offer IAP services a new and efficient way of optimising the allocation of scarce resources.

<sup>25</sup> The criteria can easily be changed or modified.

## 4.4 Final remarks

This study has only touched on the full potential of administrative data collected by IAPs. There is much more that can be done. As an extension of our research, more robust econometric techniques could be used to explore the data and confirm our results. Also, there are emerging technologies that can open new possibilities for more impactful and tailored interventions. There are opportunities to continue to track service utilisation patterns over a longer time frame, given that agencies now have access to the basic analytical infrastructure. The impact of COVID, and more recently, cost of living pressures on IAP services need to be examined closely, as any change in the volume and composition of service users will have material consequences for IAP services and the entire sector. Future studies could include regional and rural services, where service use patterns may vary from what we have observed in metropolitan Melbourne. They could also examine the potential cost savings realisable from prioritising heavy service users.

There is also a pressing need to understand better the increasing number of households presenting with mental health issues and those experiencing domestic or family violence. Focusing on these two issues makes sense, considering the significant reforms in each sector within the past five years. A logical starting point is to drill down into existing data and comprehensively analyse both cohorts. Establishing a more robust evidence base on these two cohorts will be vital in designing and delivering more effective joined-up responses between the mental health, family violence and homelessness sectors. Taking this one step further, future studies should examine service use patterns in target group-specific services that provide

an equivalent role to IAPs. This should include Front Yard (Youth), the Orange Door (Family Violence), Pride of Place (LGBTIQ+) and the Aboriginal Access Point. Comparing service use patterns between general and target group specific IAPs and the flow of households between them would provide critical intelligence that agencies could use to develop more effective collaborative responses that address gaps in the 'Front Door' of Victoria's homelessness service system. Another area that deserves greater attention is connecting IAP data to support and housing provider data to better understand the flows between IAPs and other parts of the homelessness service system. Indeed, the potential to better understand flows into and out of the homelessness service system and re-entries into it, would be a significant step forward in unpacking for whom it works well and for whom it does not. However, to move to that level is only possible if agencies work together. Indeed, this study was only made possible by the willingness of the six agencies to collaborate and share data. Our hope is that homelessness agencies will continue collaborating and sharing data for research purposes to drive systems reform in ways that secure better outcomes for their clients.



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## Appendix

**Table A1:** Unique households by year

Support Period Start	Total Unique Households By year	New Households	Return Households	% New Households	% Return Households
2014	15,928	15,928	0	100	0%
2015	15,293	11,681	3,612	76	24%
2016	14,466	9,654	4,812	67	33%
2017	14,582	9,112	5,471	62	38%
2018	14,641	8,878	5,764	61	39%
2019	14,960	8,416	6,545	56	44%
2020*	12,715	6,887	5,829	54	46%
<b>TOTAL</b>	<b>102,585</b>	<b>70,556</b>	<b>32,033</b>	-	-





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