Received: 24 October 2022 | Accepted: 14 May 2023

DOI: 10.1002/cbm.2298

ORIGINAL ARTICLE

WILEY

Homelessness and predictors of criminal reoffending: A retrospective cohort study

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Funding information

Janssen Pharmaceuticals

Abstract

Background: There are not many longitudinal studies examining people experiencing homelessness and interacting with the criminal justice system over time.

Aims: To describe the type of criminal offences committed, court outcomes, identify probable predictors of reoffending, and estimate the criminal justice costs in a cohort of homeless hostel clinic attendees.

Method: A retrospective cohort study of 1646 people attending a homeless clinic who had had contact with the criminal justice system (CJS) in New South Wales (NSW), Australia, using linked clinic, criminal offence, health and mortality data from 1 July 2008 to 30 June 2021. Initial comparisons were made with the 852 clinic attendees without CJS contact in the period. Multivariable logistic regression was used to identify predictors of recidivism.

Results: There were 16,840 offending episodes, giving an offence rate of 87.8 per 100 person-years (95%CI: 86.5–89.1). The most common index offences were acts intended to cause injury (22%), illicit drug (17%) and theft-related (12%) offences. Most people (83%) were found guilty of the index offence and received a fine (37%) or community-based sentence (29%). Total court finalisation costs were AUD $11.3 million. Three-quarters of those convicted reoffended within 24 months. Offenders were more likely to be younger, have a diagnosis of personality disorder (AOR: 1.31; 95% CI: 1.04–1.67), a substance use disorder (AOR: 1.60; 95% CI 1.14–2.23) and/or to have a previous charge dismissed on mental health grounds (AOR: 1.79; 95% CI: 1.31–2.46). Within the offending cohort, reoffenders had almost twice the odds of having theft-related offences as their principal index offence (AOR: 1.85; 95% CI: 1.29–2.66).

Conclusions: This longitudinal study finding of not only a high rate of criminal justice contact, but also a high rate of recidivism among people who have been homeless, lends support to a need for strategies both to address the root causes of homelessness and to provide a comprehensive systems-based response to reduce recidivism, that includes secure housing as well as mental health and substance use treatment programmes for homeless offenders.

KEYWORDS
cost, crime, homelessness, mental health, reoffending, sentencing

1 | INTRODUCTION

Homelessness is the result of both societal and individual factors that affect an individual's ability to find and retain adequate housing. Societal factors include the limited supply of low-cost housing and the level of welfare support for people with limited means. Individual factors include unemployment, impaired social skills, family conflict, mental illness, and substance use (Bracketz, Fotheringham et al., 2016; Fazel, Geddes et al., 2014; Mallett, Rosenthal et al., 2005; Shelton, Taylor et al., 2009; Sullivan, Burnam et al., 2000). Criminal justice contact is common amongst homeless people. Estimates vary from about half to two-thirds of the homeless population having been incarcerated at some stage according to studies in high income countries (Roy, Crocker et al., 2014; Saddichha, Fliers et al., 2014), while in a systematic review and meta-analysis of 17 studies of incarcerated persons, the pooled prevalence estimate was that 23% had been homeless prior to incarceration (Bashir, Moloney et al., 2021).

Individuals who have a mental illness and those involved in substance abuse have been shown to have an increased likelihood of contact with the criminal justice system (Culhane, 2008; Fazel, Geddes et al., 2014; Nielssen, Stone et al., 2018; Roy, Crocker et al., 2014; Saddichha, Fliers et al., 2014; Spicer, Smith et al., 2015; Subedi, Acharya et al., 2022; Vitelli, 1993; Zapf, Roesch et al., 1996) and particularly so for homeless people who have a mental illness and substance use disorder (Fischer, Shinn et al., 2008; McGuire & Rosenheck, 2004; Roy, Crocker et al., 2014), adding burden on the justice system to all the other adverse correlates of homelessness (Culhane, 2008; Latimer, Rabouin et al., 2017).

There are few longitudinal studies of interaction with the criminal justice system by people who have been homeless (Albalawi, Chowdhury et al., 2019; Caton, Dominguez et al., 2005) and few have examined predictors of criminal recidivism among the homeless over time (Albalawi, Chowdhury et al., 2019; Fischer, Shinn et al., 2008; Roy, Crocker et al., 2014). From the studies that have been conducted, recidivism has been attributed to a combination of poverty, mental illness and substance use, as well as the limited availability of services to address the lack of housing and the mental ill health of people who are homeless (Vitelli, 1993). The higher visibility of homeless people may also increase the likelihood of contact with police (Ti, Wood et al., 2013).

A greater understanding of the type of offences, nature of reoffending and how interaction with the health system influences reoffending may help in the development of strategies to prevent criminal recidivism and promote engagement with mental health services and substance use treatment among the homeless, where needed. Our aim was to describe the type of criminal offences committed, court outcomes, identify predictors of reoffending and estimate the criminal justice costs generated by a cohort of homeless hostel clinic attendees.

2 | METHOD

2.1 | Ethics

Ethical approval and a waiver of consent was obtained from the New South Wales Population Health Services Research Ethics Committee (2018HRE0301).

2.2 | Study population and design

A retrospective cohort study of all 1646 people who attended mental health clinics conducted in homeless hostels and entered the criminal justice system in New South Wales (NSW), Australia, between 17 February 2008 and 19 May 2020, using linked clinic, criminal offence, health and mortality data.

2.3 | Data sources and record linkage

Homeless people attended clinics at the three main homeless hostels in inner city Sydney: the Matthew Talbot Hostel run by St Vincent De Paul, the Edward Eager Lodge run by the Wesley Mission and Foster House run by the Salvation Army. Reasons for attending the clinics included the need for treatment for mental disorders, including substance use disorder, for other medical care, and also for a range of administrative support, including for social security, housing and for court. A total of 2498 individuals attended one of the clinics, of whom 1646 (65.9%) had an index court appearance with the hearings completed during the study period.

Information on criminal offences was obtained from the Re-offending Database (ROD) for the period 1 July 2008 to 31 December 2020. The ROD contains information on completed criminal justice system (CJS) episodes within the NSW court system (i.e. Children's, Local, District and Supreme Courts), including any CJS contact, the dates of (alleged) offences and hearings, offence type, number of proven and unproven offences and penalties received. The first principal offence during the study period was identified as the index offence, with the term principal indicating that, where there were multiple offences, it was the proven index offence with the most serious penalty that was used in analyses. Offences were classified using the 16 offence categories of the Australian and New Zealand Standard Offence Classification (ANZSOC) (Australian Bureau of Statistics, 2011). The NSW Children's Court hears matters concerning young people aged 10–17 years. Around 96% of matters are dealt with in the Local Courts (where there is a maximum penalty of 2 years for a single offence and 5 years for multiple offences), whereas indictable offences are dealt with in the District courts, and the Supreme Courts mainly hear homicide offences and serious drug charges (Productivity Commission, 2022). Youth interventions included police cautions and youth justice conferences.

New court appearances with the process completed in the 24 months since the index court appearance were classified as reoffending, irrespective of the outcome. A 24-month follow-up period from the index court appearance was adopted to examine reoffending, to be consistent with other studies doing so (Somers, Rezansoff et al., 2013).

Breaches of court orders (ANZSOC: 151–152) were excluded from reoffences, as these relate to policing activity, the penalty for the original offence and do not reflect a new offence. Reoffences that involved violence, such as murder, manslaughter, assault, sexual assault, robbery, (ANZSOC: 011, 012, 013, 021, 029, 0611, 0612, 0311, 0312), serious property, including unlawful entry, theft, fraud and deception, (071, 081, 082, 091, 092) and illicit drug, such as possessing, dealing or manufacturing, (101 102 103 104) offences were identified.

Information on health service use was obtained from the emergency department (ED) presentation and admissions to both public and private hospitals from 1 July 2008 to 30 June 2021. A 12-month period was adopted to examine health service use after the index offence, as this was the most recent health data available at the time of the study. ED visits to public hospitals contain information on arrival and departure times and visit types. Hospital admission data included diagnoses, clinical procedures and separation type (e.g. discharge, hospital transfer, death). Psychiatric diagnoses were classified using the International Classification of Diseases, 10th Revision Australian-modification (ICD-10-AM). Information on the number of public hospital ambulatory specialist mental health services was obtained from the ambulatory mental health client contact database that records client presence at mental health day programmes and public psychiatric outpatient and outreach services. Deaths were identified using the NSW Registry of Births, Deaths and Marriages to 30 June 2021.

Record linkage of the data collections was conducted by the Centre for Health Record Linkage (CHeReL) using probabilistic record linkage. Upper and lower probability cut-offs for a link were 0.75 and 0.25, and record groups with probabilities between the cut-offs were clerically reviewed.

2.4 | Additional health-related data

Homeless client clinic records were used to identify alcohol and drug use and conditions that might not have been noted in administrative records, such as problem gambling. The clinic records also noted whether the person had been homeless for more than a year, slept in the open, reported trauma as a child or adult and was under a financial management order. Total counts of the number of ED visits, hospital admissions and ambulatory mental health client contacts in the 12 months after the index offence during the study period were identified. Comorbid conditions related to mental and behaviour disorders (ICD-10-AM: F00-F99) (Supplementary Table S1) were identified using hospital and clinic records.

2.5 | Court costs

Information on average Local, District and Supreme Court finalisation costs were sourced from the Report on Government Services 2022 (Productivity Commission, 2022). Youth conferencing costs were identified using a prior cost-effective study (Webber, 2012), and police caution costs were estimated at AUD$119 per hour using police user charges records (NSW Police, 2021) with a caution estimated to take two hours. All costs are in 2020–21 Australian dollars.

2.6 | Data management and analysis

Data analysis was conducted using SAS 9.4 (SAS Institute, Cary NC). All hospital episodes of care related to the same event were linked to form a period of care. Person time at-risk of offence during the study timeframe was calculated as the sum of the total days in the study period for each adult post-index offence court completion date, excluded the sum of days spent in hospital and was censored at date of death or 30 June 2021, the study end-date. Dates of imprisonment and release were not obtained, therefore time at-risk was calculated for: (i) total days at-risk whether incarcerated or not (7,005,163); (ii) total days at-risk minus maximum prison sentence(s) during the study period (6,354,076); and (iii) total days at-risk minus non-parole prison sentence(s) during the study period (6,699,549). The total days at-risk for each of the three at-risk time periods was converted into years. The incidence rate of proven offences (excluding breaches of court orders: ANZSOC: 151–152) was estimated per 100 person-years and 95% confidence intervals (CIs), were calculated in Excel™ (Woodward, 2005) for each denominator.

Multivariable logistic regression was used to examine predictors of reoffending within 24 months. Variables included in the model were those previously identified as associated with offending (Phillips, Gray et al., 2005; Smith & Trimboli, 2010; O'Driscoll, Larney et al., 2012; Albalawi, Chowdhury et al., 2019), available in the linked data and significant in univariate analysis: age group at index offence, mental illness diagnosis, use of alcohol or other drugs, mental health outcome for any offence, principal index offence and index offence plea. A backwards stepwise regression was used to eliminate factors from the model sequentially if they did not significantly contribute to the odds of reoffending at a significance level of ≤0.25 (Hosmer & Lemeshow, 2000). Two-way interactions were considered for each mental illness *x* use of alcohol or other drugs. Odds ratios (OR), adjusted odds ratios (AOR) and 95% CIs were calculated. Model fit was assessed as good using the Hosmer-Lemeshow test for logistic regression ($p = 0.71$) (Hosmer & Lemeshow, 2000). A Kaplan–Meier survival plot was used to calculate time to reoffence within 24 months of the index offence court finalisation date (Hosmer & Lemeshow, 1999). The model was right censored at 730 days or days from the offence until the date of death, if death occurred before 730 days.

3 | RESULTS

There were 1646 (62%) clinic attendees who had been charged with an index offence and completed the court process during the study period and 852 who had not (Supplementary Table S2). Table 1 shows the characteristics of the study cohort with at least one index hearing; 1062 (65%) had been homeless for over 1 year. Almost all of the 1646 (94%) were male. The mean age was 38.1 years (SD 10.3); almost two-thirds (1021, 62.0%) were aged 35 years or older. Almost all (1,608, 98%) had at least one diagnosed mental disorder other than a substance use disorder, although most (1,446, 88%) did have a substance use disorder. The most common mental disorders were schizophrenia (625, 38%) and anxiety or depression (436, 26.5%). Around half (854, 52%) were reported to have been non-adherent to prescribed psychotropic medication; 740 (45%) had a history of childhood or adult trauma.

3.1 | Health service use

Among those who were charged with offences, 207 (13%) died during the study period. Table 2 shows health service use in the 12 months after the index court completion. There were 2192 hospital admissions (mean 1.3 per person), 5466 emergency department presentations (mean 3.3) and 22,658 non-admitted ambulatory mental health clinician-patient contacts (mean 13.8). One quarter of the sample had four or more emergency department visits, and 11% ≥ 4 completed hospital inpatient admissions.

3.2 | Incidence of offending

There were 16,840 offences finalised during just over 12 years of the study (mean: 10.2 per offender, median: 6, SD: 13.2), yielding an offence rate of 87.8 per 100 person-years (95% CI: 86.5–89.1). Taking time in prison or hospital into account, the figure was 91.8–96.8 per 100 person-years, respectively. The principal index offences were acts intended to cause injury (23%), illicit drug (18%) or theft-related (12%) offences. Most (86%) were found guilty of their principal offence and were penalised with a fine (37%) or community-based sentence (31%), with or without

TABLE 1 Characteristics of homeless hostel clinic attendees at index offence.

Characteristic	n (*n* = 1646)	%
Age at index offence mean (SD)	38.1	(10.3)
Age group		
14–17	16	1.0
18–24	142	8.6
25–34	467	28.4
35–44	596	36.2
45–54	325	19.7
≥55	100	6.1
Sex		
Male	1553	94.4
Female	93	5.7
Mental disorder diagnoses identified using hospital admission or clinic records	1608	97.7
Schizophrenia	625	38.0
Anxiety or depression	436	26.5
Personality disorder	305	18.5
Intellectual disability	63	3.8
Alcohol or other drugs identified at clinic	1446	87.9
Other conditions identified at clinic		
Acquired brain injury	250	15.2
Problem gambling	196	11.9
Non-adherent to psychotropic medication	854	51.9
History of experiencing trauma as a child/adult	740	45.0
Ever employed for more than 1 year (Yes)	950	57.7
Public trustee financial management order	125	7.8
Greater than 1 year homeless	1062	64.5
Sleeps in the open	657	39.9
Discharge from psychiatric hospital	364	22.1

supervision. Under 10% were diverted on mental disorder grounds for their index offence but nearly a third were diverted for any offence during the study period. Total costs on completion of the court process during the study period were estimated to be AUD $11.3 million (median AUD $3905 per person) (Table 3).

3.3 | Recidivism

Among the 1211 (75%) of clinic attendees who reoffended within 24 months of court completion for their original court appearance, a quarter were convicted of a new violent offence (*n* = 297, 25%), nearly a fifth of illicit drug offences (*n* = 225, 19%), 14 percent (*n* = 166) for theft and related offences and less than 10% in each other category (traffic and vehicle regulatory offences *n* = 110, 9%; offences against justice procedures, government security and government operations [excluding breaches of court orders] *n* = 108, 9%; public order offences *n* = 96, 8%; serious property offences *n* = 53, 4%; all other offences *n* = 156, 13%). Just 156 (13%) of these further offences resulted in a sentence of imprisonment; more common penalties were fines (*n* = 460, 38%) or a supervised or unsupervised

TABLE 2 Type of health service use in the 12 months since the index offence finalisation date and mortality for homeless hostel clinic attendees, 1 July 2008 to 31 Dec 2020.

Characteristic	*n* (*n* = 1646)	%
Hospital admissions		
Number of hospital admissions in the 12 months since index offence court finalisation date (mean and SD)	2192	(mean 1.3; SD 2.3)
High admissions (i.e. ≥4 separations within 12 months of index offence court finalisation date)	185	11.2
ED presentations		
Number of ED presentations in the 12 months since index offence court finalisation date (mean and SD)	5466	(mean 3.3; SD 6.8)
High health service users (i.e. ≥4 ED presentations within 12 months of index offence court finalisation date)	416	25.3
Ambulatory mental health client contact visit		
Number of client contacts in the 12 months since index offence court finalisation date (mean and SD)	22,658	(mean 13.8; SD 46.2)
Mortality		
Mortality during study period	207	12.6

community sentence (n = 363, 30%); n = 230 (19%) received other penalties (see Table 3). The median time to reoffending was 206 days (SD 586.9) and to court completion for this new offence a median time of 310 days (SD 590.3). A Kaplan–Meier curve of the probability of reoffending within the first 24 months post index principal offence court finalisation data is shown in Figure 1.

Table 4 shows that age, diagnosis, treatment adherence and perceived relevance of mental disorders to offending were all independently related to reoffending as well as to an index offence of acquisitive offending. Specifically, compared to clinic attendees who did not reoffend within 24 months, those aged under 55 years had between two to six times higher odds of reoffending than those aged ≥55. Reoffenders had over 1.3 times higher odds of having a diagnosis of personality disorder (AOR: 1.31; 95% CI: 1.04–1.67) and slightly higher odds of alcohol or other drug use disorders (AOR: 1.60; 95% CI: 1.14–2.23). A new offence was also independently associated with ever had a case dismissed in court on mental health grounds (AOR: 1.79; 95% CI: 1.31–2.46).

4 | DISCUSSION

This study confirmed the very high rate of criminal justice contact among people attending psychiatric clinics in the homeless sector. Nearly two-thirds of homeless clinic attendees had an index court appearance for an offence during the 12.5 years of the study. The proportion of clinic attendees who had a court appearance (65%) is within the range of conviction rates for homeless people according to a systematic review (28%–80% (Roy, Crocker et al., 2014). Seventy-five percent of the 1646 clinic attendees who had at least one index court appearance committed an average of 10 further offences within the 24 months of follow-up in the study period. The total cost to the court system was AUD $11.3 million, with further costs in policing, legal services and incarceration. The most likely principal offences were assault, illicit drug offences or theft. Reoffenders were, on average, younger, more likely to have a diagnosis of personality disorder, of substance use disorder and to have had a previous mental health dismissal recorded in court records than those who did not reoffend.

Worldwide, it is recognised that a disproportionate number of people in prison have a mental disorder (Fazel & Seewald, 2012). This is true specifically in NSW (Nielssen & Misrachi, 2005). Together these studies also suggest the presence of a 'revolving door' between prisons and the homeless sectors of many advanced countries, with the

TABLE 3 Type of index offence and occurrences of reoffending for homeless hostel clinic attendees, 1 July 2008 to 31 Dec 2020.

Characteristic	*n* (*n* = 1646)	%
Number of proven offences during study period using total days as denominator (rate per 100 person-years and 95% CI)	16,840	(87.8; 95% CI 86.5–89.1)
Number of proven offences during study period using denominator excluding minimum time spent in prison (rate per 100 person-years and 95% CI)	16,840	(91.8; 95% CI 90.4–93.2)
Number of proven offences during study period using denominator excluding maximum time spent in prison (rate per 100 person-years and 95% CI)	16,840	(96.8; 95% CI 95.3–98.3)
Principal offence (index offence)		
Homicide and related offences	1	0.1
Acts intended to cause injury	379	23.0
Sexual assault and related offences	40	2.4
Dangerous or negligent acts endangering persons	24	1.5
Abduction, harassment and other offences against the person	18	1.1
Robbery, extortion and related offences	13	0.8
Unlawful entry with intent/burglary, break and enter	30	1.8
Theft and related offences	195	11.9
Fraud, deception and related offences	29	1.8
Illicit drug offences	291	17.7
Prohibited and regulated weapons and explosives offences	35	2.1
Property damage and environmental pollution	92	5.6
Public order offences	126	7.7
Traffic and vehicle regulatory offences	169	10.3
Offences against justice procedures, government security and government operations	157	9.5
Miscellaneous offences	47	2.9
Principal offence outcome (index offence)		
Guilty	1418	86.2
Mental health dismissal	117	7.1
Not guilty	32	1.9
Withdrawn	67	4.1
Otherwise disposed of/not known	12	0.7
Principal offence penalty (index offence)		
Prison	188	11.4
Supervised community sentence	205	12.5
Unsupervised community sentence	304	18.5
Fine	601	36.5
Other[a]	348	21.1
Mental health dismissal for principal offence		
S32—Diverted away from legal system into treatment	87	5.3
S33—Detained in a mental health facility for assessment and/or discharge into care of responsible person	32	1.9
Other (i.e. either S32 or S33)	4	0.2

TABLE 3 (Continued)

Characteristic	n (n = 1646)	%
Mental health outcome for any offence during study period (yes)	514	31.2
Total court finalisation AUD costs during study period (median)	$11,330,761	($3905)

[a]Other includes: Conviction only, no conviction recorded, no penalty, non-court, other and not known penalties.
Abbreviations: AUD, Australian Dollar; CI, confidence interval.

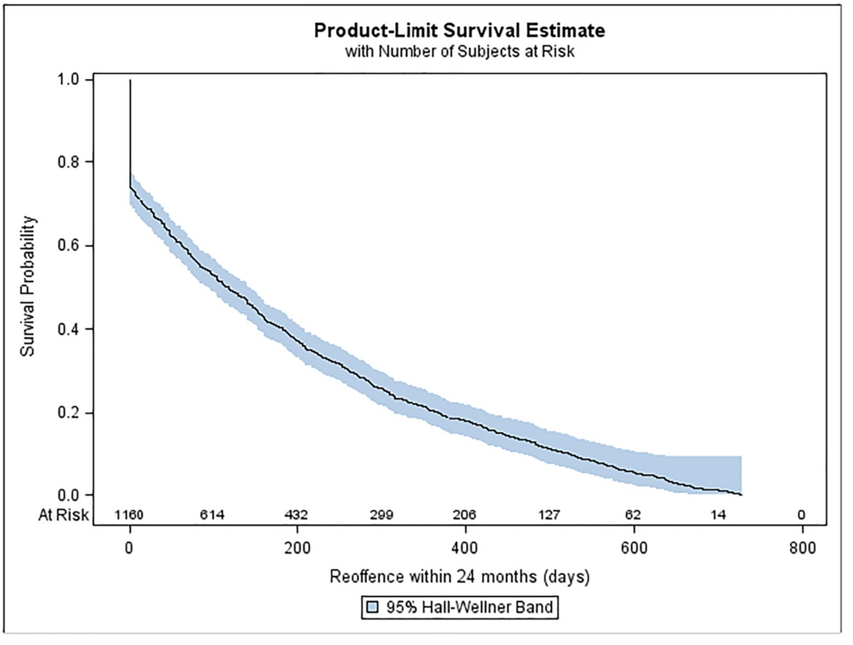

FIGURE 1 Time to reoffence within the first 24 months for people experiencing homelessness, 1 July 2008 to 31 Dec 2018. [Colour figure can be viewed at wileyonlinelibrary.com]

moderating factors being the levels of welfare support and subsidised housing, the effectiveness of mental health services, and the threshold for imprisonment (Jones, Manetsch et al., 2021; Large & Nielssen, 2009).

In the current study, the most common principal offences are related to violence (22%), illicit drugs (17%) and theft (12%) offences. Offences related to substance use and theft were also common in a study of homeless people in Canada, as these types of offences often relate to efforts to meet basic needs of food, shelter and survival (Saddichha, Fliers et al., 2014) and also to obtain money for drugs. Reoffenders within 24 months also had a higher likelihood of having theft and related offences as their principal index offence, which could reflect property offences to pay for addiction (Fischer, Shinn et al., 2008).

Most of these homeless offenders found guilty of an offence and received either a fine (37%) or a community-based sentence (29%) that typically involved the risk of imprisonment if a further offence were to be committed within the term of the order. Worldwide, the courts typically seek to protect the community through punishment and deterrence, rather than seeking to divert offenders into treatment (Saddichha, Fliers et al., 2014), although there is increasing recognition that diversion to treatment may reduce reoffending. Then, too, ability of homeless offenders to pay even small fines is limited (Midgley, 2005), but, in NSW, disadvantaged and mentally ill offenders now have the option of enrolling in work development orders (WDOs) by which they can reduce the amount of fines by attending treatment. Within Australia, problem-solving courts (e.g. Drug Court) have been established in an attempt to reduce recidivism (Midgley, 2005), by encouraging mental health and treatment for substance use disorders (Albalawi, Chowdhury et al., 2019; Anestis & Carbonell, 2014; Davidson, Heffernan et al., 2016; Weatherburn, Jones et al., 2008). Similarly,

TABLE 4 Multivariable logistic regression of characteristics associated with homeless hostel clinic attendees who reoffended within 24 months, 1 July 2008 to 31 Dec 2018.

Characteristics	Univariate (*n* = 1608) OR	95%CI	Multivariable (*n* = 1608) AOR	95%CI
Age group				
14–24	7.84*	4.27–14.41	6.52*	3.49–12.18
25–34	4.55*	2.86–7.24	3.59*	2.21–5.82
35–44	3.25*	2.07–5.08	2.60*	1.64–4.14
45–54	2.35**	1.47–3.77	2.08**	1.28–3.38
≥55	1		1	
Sex				
Male	1			
Female	1.05	0.66–1.69	-	-
Mental disorder diagnosis identified using hospital admission or clinic records				
Schizophrenia[a]	1.59*	1.28–1.98	1.26	0.98–1.62
Anxiety or depression[a]	0.92	0.72–1.18	-	-
Personality disorder[a]	1.47**	1.18–1.83	1.31***	1.04–1.67
Intellectual disability[a]	1.57***	1.01–2.42	-	-
Non-adherent to medications	1.41**	1.13–1.76	-	-
Acquired brain injury[a]	1.24	0.90–1.69	-	-
Alcohol or other drugs[a]	1.86*	1.36–2.54	1.60***	1.14–2.23
Greater than 1 year homeless[a]	1.02	0.81–1.28	-	-
Greater than 4 ED presentations in 12 months since index offence	1.26	0.98–1.61	-	-
Principal index offence				
Acts intended to cause injury	1		1	
Illicit drug offences	1.25	0.70–2.22	1.37	0.75–2.50
Theft and related offences	1.58***	1.13–2.20	1.85**	1.29–2.66
Other offences[3]	1.62***	1.25–2.09	1.73*	1.31–2.27
Mental health dismissal ever recorded in court records[a]	1.77*	1.38–2.28	1.79**	1.31–2.46
Principal index offence plea				
Not guilty	1		-	-
Guilty	0.89	0.61–1.29		
No plea entered/other/not known	1.04	0.70–1.55		
Principal index offence outcome				
Not guilty	1		1	
Guilty	0.26***	0.08–0.86	0.22***	0.06–0.75
Mental health dismissal	0.24***	0.07–0.84	0.15**	0.04–0.54
Otherwise disposed of/withdrawn/not known	0.35	0.10–1.30	0.35	0.09–1.34

[a]No is the reference group.

*$p < 0.0001$; **$p < 0.005$; ***$p < 0.05$.

Abbreviations: AOR, adjusted odds ratios; CI, confidence interval; ED, emergency department; OR, Odds ratios.

Mental Health and Drug Courts have been established in a number of jurisdictions in the United States, with the aim of trying to reduce criminal recidivism among offenders by providing supervised treatment and social services (Anestis & Carbonell, 2014; Burns, Hiday et al., 2013).

Three-quarters of the offender group reoffended within 24 months, a rate that is higher than the average of around 50% within 24 months for prisoners released from gaol (Fazel & Seewald, 2012) and may reflect the particularly high criminogenic loading of the homeless population. The current study shows that younger people in the homeless sector were more likely to reoffend, which has been reported elsewhere (Phillips, Gray et al., 2005; Smith & Trimboli, 2010; O'Driscoll, Larney et al., 2012; Albalawi, Chowdhury et al., 2019). That individuals diagnosed with personality disorder were more likely to reoffend is not surprising since antisocial behaviour can be part of the definition of that disorder, as is a pattern of impulsive and self-defeating behaviour, including substance abuse. Other mental disorders, especially psychotic illness, feature impaired social judgement and sometimes lack of forethought and impulse control, traits that are amplified by the disinhibiting effects of alcohol and other sedatives and also stimulant drugs. Substance abuse accounts for over 55% of arrests and incarceration among the homeless, particularly for those with a mental illness (Roy, Crocker et al., 2014), and offenders typically have more than one condition (O'Driscoll, Larney et al., 2012; Roy, Crocker et al., 2014). Substance use in people who are homeless may be more likely to come to the attention of the police than substance use in the privacy of a dwelling, especially in jurisdictions that use ‘pro-active policing’ of drug detection dogs and stop and search policies.

A prior history of a mental health dismissal in court records was associated with a higher likelihood of reoffending within 24 months. On the one hand, this underscores the perceived relationship between the mental disorder and the offending, but on the other, such intrusive disorder is likely to affect the ability to adhere to a treatment plan and other support and supervision. This suggests that the courts and other services need special options for enabling homeless offenders with mental disorder to turn their lives around. Diversionary programmes and Mental Health Courts have been effective in reducing criminal recidivism in the USA (Anestis & Carbonell, 2014; Burns, Hiday et al., 2013). Specific to Australia, during the period of the study, the duration of a community treatment order (i.e. legal order from a Magistrate or Mental Health Review Tribunal that indicates terms by which a person must accept medication, therapy and other related services while living in the community) was limited to 6 months. This has recently been increased to 12 months with the Mental Health and Cognitive Impairment Forensic Provisions Act 2020 (Lerace, 2021), but, within NSW, there is still no provision to supervise treatment orders, other than the threat of having the case reopened in the event of reoffending. This raises the question of the mental fitness to adhere to an order (Steadman, 1992) and also whether suitable mental health or substance use treatment programmes and other supportive community-based treatment services are sufficiently available (Smith & Trimboli, 2010). Within Australia, liaison and diversionary programmes are available at a magistrate's discretion for individuals with a mental illness, such as the NSW Statewide Community and Court Liaison Service that provides referrals to mental health services (Bradford & Smith, 2009), and the MERIT (Magistrates Early Referral Into Treatment) Programme which offers a pre-plea 12-week treatment programme for people who have a substance use disorder (Lulham, 2009). All diversionary schemes do, however, require a degree of cooperation, which may not be possible for intellectually disabled, brain injured or severely mentally ill offenders (Midgley, 2005).

An estimated 116,000 people were identified as homeless in the 2016 national census (Australian Institute of Health and Welfare, 2021), many of whom face barriers in accessing health services used by other Australians for preventive health care, such as general practitioners (Omerov, Craftman et al., 2020). Within the current study, the clinic attendees had an average of 13 contacts with ambulatory mental health services, presented to emergency departments on three occasions and were admitted to hospital at least once. Although contact with ambulatory mental health services may have prevented some hospital use, homeless people are heavy users of health services (Clements, Farooq et al., 2022; Lewer, Menezes et al., 2021; Saddichha, Fliers et al., 2014; Subedi, Acharya et al., 2022) at a high cost to the health system (Saddichha, Fliers et al., 2014). Thirteen percent of the homeless cohort died during the study period, consistent with high mortality reported in other studies of homeless people (Baggett, Hwang et al., 2013; Stenius-Ayoade, Haaramo et al., 2017). Life expectancy for homeless people is estimated to around 20 years lower than the general population (Nielsen, Hjorthøj et al., 2011).

4.1 | Clinical implications

Interventions aimed at reducing homelessness, improving the health of people who are homeless and reducing crime intersect. Criminal offending and incarceration disrupts social housing tenancy and may perpetuate a cycle of recidivism (Somers, Rezansoff et al., 2013), even if prison is one of the few opportunities to obtain health care (Zapf, Roesch et al., 1996). A systems perspective and intervention framework is likely to be of use when designing and trialling strategies to prevent offending and reoffending, rather than a focus only on individual needs (Steadman, 1992), and there is an obvious need for greater integration between the mental health, addiction treatment, housing and justice systems (Leclair, Deveaux et al., 2019; Zapf, Roesch et al., 1996). We found that almost all offenders had a mental disorder, 88% had a substance use disorder and 65% had been homeless for more than 1 year, suggesting that the long-term homeless, who also experience mental and substance use disorders, would be likely to benefit from combined treatment and housing initiatives. Programmes, such as *Housing First* in the United States, provide access to housing together with treatment and rehabilitation services in a community setting for homeless people (Aubry, Bloch et al., 2020; Ly & Latimer, 2015) but have failed to demonstrate a reduction in involvement with the justice system (Leclair, Deveaux et al., 2019) or in reducing substance abuse, addressing mental illness symptoms or increasing measures of social inclusion, such as workforce involvement (Aubry, Bloch et al., 2020; Bracketz, Fotheringham et al., 2016).

4.2 | Strengths and limitations

The main strengths of this study are the comprehensive examination of offences and reoffending and the large size of the cohort of people attending mental health clinics in homeless hostels. The study, inevitably, has some limitations too. Only crimes reported to, or identified by, NSW police were included, so will inevitably be an underestimate of true offending behaviour. We were not able to take into account the time spent in prison in the calculation of person-years at risk, which may also have the effect of underestimating offending rates, although the sensitivity analysis of potential incarceration periods for person-years at-risk and other research suggest that accounting for time spent incarcerated does not make a significant difference on the calculation of reoffending rates over long periods of time (Ferrante, Loh et al., 2009). Neither were we able to take into account the number of convictions prior to the index offence, which has previously been shown to be predictive of recidivism (Smith & Trimboli, 2010). The average cost of criminal court expenses per finalisation were applied to estimate court costs, and the figure does not take into account the costs of legal services or incarceration, which are likely to be far greater.

The homeless cohort was limited to attendees at three clinics in Sydney, Australia, two of which served men exclusively, and women were under-represented. Information on whether individuals became public housing tenants at any stage or remained homeless during the study period could not be obtained, and information was not available on the use of primary healthcare or prescribed medications. In terms of identification of health conditions, only health conditions that were relevant to the current hospital episode of care are reported in each hospital record. By using a diagnosis at the clinic and/or a 'if in any of the 50 hospital diagnoses codes during the study period' identification strategy, however, we probably obtained better estimates of the prevalence of mental illness. Studies that use record linkage are likely to be subject to some degree of error in the linkage process, but, for the current study, the CHeReL estimated the false positive rate to be 0.5%.

5 | CONCLUSIONS

We used a novel longitudinal design and record linkage of health and criminal justice data to examine rate of offending and reoffending by homeless people with mental disorders and found it to be high. The high reoffending rate was high in the cohort with an index court appearance suggesting a need for more comprehensive and system-based programmes to address the causes of that offending. Contact with the criminal justice system provides an opportunity for collaborative intervention by the housing, justice and health sectors that should include the provision of secure housing and the integration of treatment for mental illness and substance use.

ACKNOWLEDGEMENTS

The authors wish to acknowledge the homeless clinic clients and wish to thank the NSW Bureau of Crime Statistics and Research for providing access to ROD (ROD202103), the NSW Ministry of Health for providing access to the NSW ED, ambulatory mental health contact, hospitalisation and mortality data and the CHeReL for conducting the record linkage. This research was part-funded by Janssen.

Open access publishing facilitated by Macquarie University, as part of the Wiley - Macquarie University agreement via the Council of Australian University Librarians.

CONFLICT OF INTEREST STATEMENT

The author(s) declared no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the NSW Bureau of Crime Statistics and Research and the NSW Ministry of Health Department. Restrictions apply to the availability of these data, which were used under licence for the current study, so are not publicly available.

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REFERENCES

Albalawi, O., Chowdhury, N. Z., Wand, H., Allnutt, S., Greenberg, D., Adily, A., Kariminia, A., Schofield, P., Sara, G., Hanson, S., O'Driscoll, C., & Butler, T. (2019). Court diversion for those with psychosis and its impact on re-offending rates: Results from a longitudinal data-linkage study. *British Journal of Psychiatry Open*, *5*(1), e9. https://doi.org/10.1192/bjo.2018.71

Anestis, J. C., & Carbonell, J. L. (2014). Stopping the revolving door: Effectiveness of mental health court in reducing recidivism by mentally ill offenders. *Psychiatric Services*, *65*(9), 1105–1112. https://doi.org/10.1176/appi.ps.201300305

Aubry, T., Bloch, G., Brcic, V., Saad, A., Magwood, O., Abdalla, T., Alkhateeb, Q., Xie, E., Mathew, C., Hannigan, T., Costello, C., Thavorn, K., Stergiopoulos, V., Tugwell, P., & Pottie, K. (2020). Effectiveness of permanent supportive housing and income assistance interventions for homeless individuals in high-income countries: A systematic review. *The Lancet Public Health*, *5*(6), e342–e360. https://doi.org/10.1016/s2468-2667(20)30055-4

Australian Institute of Health and Welfare. (2021). *Homelessness and homelessness services*. Australian Institute of Health and Welfare.

Australian Bureau of Statistics. (2011). *Australian and New Zealand standard offence classification. Catalogue no: 1234.0 Canberra*. ABS.

Baggett, T. P., Hwang, S. W., O'Connell, J. J., Porneala, B. C., Stringfellow, E. J., Orav, E. J., Singer, D. E., & Rigotti, N. A. (2013). Mortality among homeless adults in Boston: Shifts in causes of death over a 15-year period. *JAMA Internal Medicine*, *173*(3), 189–195. https://doi.org/10.1001/jamainternmed.2013.1604

Bashir, A. Y., Moloney, N., Elzain, M. E., Delaunois, I., Sheikhi, A., O'Donnell, P., Dunne, C. P., Kelly, B. D., & Gulati, G. (2021). From nowhere to nowhere. Homelessness and incarceration: A systematic review and meta-analysis. *International Journal of Prisoner Health*, *17*(4), 452–461. https://doi.org/10.1108/ijph-01-2021-0010

Bracketz, N., Fotheringham, M., & Winter, I. (2016). *Effectiveness of the homelessness service system*. Australian Housing and Urban Research Institute Research Services.

Bradford, D., & Smith, N. (2009). *An evaluation of NSW court liaison services*. NSW Bureau of Crime Statistics and Research.

Burns, P. J., Hiday, V. A., & Ray, B. (2013). Effectiveness 2 years postexit of a recently established mental health court. *American Behavioral Scientist*, *57*(2), 189–208. https://doi.org/10.1177/0002764212465416

Caton, C. L., Dominguez, B., Schanzer, B., Hasin, D. S., Shrout, P. E., Felix, A., McQuistion, H., Opler, L. A., & Hsu, E. (2005). Risk factors for long-term homelessness: Findings from a longitudinal study of first-time homeless single adults. *American Journal of Public Health*, *95*(10), 1753–1759. https://doi.org/10.2105/ajph.2005.063321

Clements, C., Farooq, B., Hawton, K., Geulayov, G., Casey, D., Waters, K., Ness, J., Patel, A., Townsend, E., Appleby, L., & Kapur, N. (2022). Self-harm in people experiencing homelessness: Investigation of incidence, characteristics and outcomes using data from the multicentre study of self-harm in England. *British Journal of Psychiatry Open*, *8*(2), e74. https://doi.org/10.1192/bjo.2022.30

Culhane, D. P. (2008). The cost of homelessness: A perspective from the United States. *European Journal of Homelessness*, *97*.
Davidson, F., Heffernan, E., Greenberg, D., Butler, T., & Burgess, P. (2016). A critical review of mental health court liaison services in Australia: A first national survey. *Psychiatry, Psychology and Law*, *23*(6), 908–921. https://doi.org/10.1080/13218719.2016.1155509
Fazel, S., Geddes, J. R., & Kushel, M. (2014). The health of homeless people in high-income countries: Descriptive epidemiology, health consequences, and clinical and policy recommendations. *The Lancet*, *384*(9953), 1529–1540. https://doi.org/10.1016/s0140-6736(14)61132-6
Fazel, S., & Seewald, K. (2012). Severe mental illness in 33 588 prisoners worldwide: Systematic review and meta-regression analysis. *The British Journal of Psychiatry*, *200*(5), 364–373. https://doi.org/10.1192/bjp.bp.111.096370
Ferrante, A., Loh, N., & Maller, M. (2009). Assessing the impact of time spent in custody and mortality on the estimation of recidivism. *Current Issues in Criminal Justice*, *21*(2), 273–287. https://doi.org/10.1080/10345329.2009.12035845
Fischer, S. N., Shinn, M., Shrout, P., & Tsemberis, S. (2008). Homelessness, mental illness, and criminal activity: Examining patterns over time. *American Journal of Community Psychology*, *42*(3), 251–265. https://doi.org/10.1007/s10464-008-9210-z
Hosmer, D., & Lemeshow, S. (1999). *Applied survival analysis regression modeling of time to event data*. John Wiley and Sons.
Hosmer, D., & Lemeshow, S. (2000). *Applied logistic regression* (2nd ed.). John Wiley & Sons.
Jones, R. M., Manetsch, M., Gerritsen, C., & Simpson, A. I. (2021). Patterns and predictors of reincarceration among prisoners with serious mental illness: A cohort study: Modèles et prédicteurs de réincarcération chez les prisonniers souffrant de maladie mentale grave: Une étude de cohorte. *Canadian Journal of Psychiatry*, *66*(6), 560–568. https://doi.org/10.1177/0706743720970829
Large, M. M., & Nielssen, O. (2009). The Penrose hypothesis in 2004: Patient and prisoner numbers are positively correlated in low-and-middle income countries but are unrelated in high-income countries. *Psychology and Psychotherapy: Theory, Research and Practice*, *82*(1), 113–119. https://doi.org/10.1348/147608308x320099
Latimer, E. A., Rabouin, D., Cao, Z., Ly, A., Powell, G., Aubry, T., Distasio, J., Hwang, S. W., Somers, J. M., Stergiopoulos, V., Veldhuizen, S., Moodie, E. E., Lesage, A., & Goering, P. N. (2017). Costs of services for homeless people with mental illness in 5 Canadian cities: A large prospective follow-up study. *Canadian Medical Association Open Access Journal*, *5*(3), E576–E585. https://doi.org/10.9778/cmajo.20170018
Leclair, M. C., Deveaux, F., Roy, L., Goulet, M.-H., Latimer, E. A., & Crocker, A. G. (2019). The impact of Housing First on criminal justice outcomes among homeless people with mental illness: A systematic review. *Canadian Journal of Psychiatry*, *64*(8), 525–530. https://doi.org/10.1177/0706743718815902
Lerace, M. (2021). Introducing the new mental health and cognitive impairment forensic provisions act 2020. *Judicial Officers Bulletin*, *33*(2), 15–17.
Lewer, D., Menezes, D., Cornes, M., Blackburn, R. M., Byng, R., Clark, M., Denaxas, S., Evans, H., Fuller, J., Hewett, N., Kilmister, A., Luchenski, S. A., Manthorpe, J., McKee, M., Neale, J., Story, A., Tinelli, M., Whiteford, M., Wurie, F., …, & Aldridge, R. (2021). Hospital readmission among people experiencing homelessness in England: A cohort study of 2772 matched homeless and housed inpatients. *Journal of Epidemiology & Community Health*, *75*(7), 681–688. https://doi.org/10.1136/jech-2020-215204
Lulham, R. (2009). The Magistrates early referral into treatment program. *Crime and Justice Bulletin*(131), 1–20.
Ly, A., & Latimer, E. (2015). Housing First impact on costs and associated cost offsets: A review of the literature. *Canadian Journal of Psychiatry*, *60*(11), 475–487. https://doi.org/10.1177/070674371506001103
Mallett, S., Rosenthal, D., & Keys, D. (2005). Young people, drug use and family conflict: Pathways into homelessness. *Journal of Adolescence*, *28*(2), 185–199. https://doi.org/10.1016/j.adolescence.2005.02.002
McGuire, J. F., & Rosenheck, R. A. (2004). Criminal history as a prognostic indicator in the treatment of homeless people with severe mental illness. *Psychiatric Services*, *55*(1), 42–48. https://doi.org/10.1176/appi.ps.55.1.42
Midgley, B. (2005). Achieving just outcomes for homeless people through the court process. *Journal of Judicial Administration*, *15*(2), 82–106.
Nielsen, S. F., Hjorthøj, C. R., Erlangsen, A., & Nordentoft, M. (2011). Psychiatric disorders and mortality among people in homeless shelters in Denmark: A nationwide register-based cohort study. *The Lancet*, *377*(9784), 2205–2214. https://doi.org/10.1016/s0140-6736(11)60747-2
Nielssen, O., & Misrachi, S. (2005). Prevalence of psychoses on reception to male prisons in New South Wales. *Australian and New Zealand Journal of Psychiatry*, *39*(6), 453–459. https://doi.org/10.1080/j.1440-1614.2005.01603.x
Nielssen, O. B., Stone, W., Jones, N. M., Challis, S., Nielssen, A., Elliott, G., Burns, N., Rogoz, A., Cooper, L. E., & Large, M. M. (2018). Characteristics of people attending psychiatric clinics in inner Sydney homeless hostels. *Medical Journal of Australia*, *208*(4), 169–173. https://doi.org/10.5694/mja17.00858
O'Driscoll, C., Larney, S., Indig, D., & Basson, J. (2012). The impact of personality disorders, substance use and other mental illness on re-offending. *Journal of Forensic Psychiatry and Psychology*, *23*(3), 382–391. https://doi.org/10.1080/14789949.2012.686623

Omerov, P., Craftman, Å. G., Mattsson, E., & Klarare, A. (2020). Homeless persons' experiences of health-and social care: A systematic integrative review. *Health and Social Care in the Community*, *28*(1), 1–11. https://doi.org/10.1111/hsc.12857

Phillips, H. K., Gray, N. S., MacCulloch, S. I., Taylor, J., Moore, S. C., Huckle, P., & MacCulloch, M. J. (2005). Risk assessment in offenders with mental disorders: Relative efficacy of personal demographic, criminal history, and clinical variables. *Journal of Interpersonal Violence*, *20*(7), 833–847. https://doi.org/10.1177/0886260504272898

NSW Police. (2021). NSW Police Force cost recovery and user fees and charges. Retrieved 21/4/2022 from https://www.police.nsw.gov.au/__data/assets/pdf_file/0003/742530/USER_CHARGES_2020_21_February_2021.pdf

Productivity Commission. (2022). Report on government services 2022.

Roy, L., Crocker, A. G., Nicholls, T. L., Latimer, E. A., & Ayllon, A. R. (2014). Criminal behavior and victimization among homeless individuals with severe mental illness: A systematic review. *Psychiatric Services*, *65*(6), 739–750. https://doi.org/10.1176/appi.ps.201200515

Saddichha, S., Fliers, J. M., Frankish, J., Somers, J., Schuetz, C. G., & Krausz, M. R. (2014). Homeless and incarcerated: An epidemiological study from Canada. *International Journal of Social Psychiatry*, *60*(8), 795–800. https://doi.org/10.1177/0020764014522776

Shelton, K. H., Taylor, P. J., Bonner, A., & Van Den Bree, M. (2009). Risk factors for homelessness: Evidence from a population-based study. *Psychiatric Services*, *60*(4), 465–472. https://doi.org/10.1176/ps.2009.60.4.465

Smith, N., & Trimboli, L. (2010). Comorbid substance and non-substance mental health disorders and re-offending among NSW prisoners. *Crime and Justice Bulletin*, *140*, 1–16.

Somers, J. M., Rezansoff, S. N., Moniruzzaman, A., Palepu, A., & Patterson, M. (2013). Housing First reduces re-offending among formerly homeless adults with mental disorders: Results of a randomized controlled trial. *PLoS One*, *8*(9), e72946. https://doi.org/10.1371/journal.pone.0072946

Spicer, B., Smith, D. I., Conroy, E., Flatau, P. R., & Burns, L. (2015). Mental illness and housing outcomes among a sample of homeless men in an Australian urban centre. *Australian and New Zealand Journal of Psychiatry*, *49*(5), 471–480. https://doi.org/10.1177/0004867414563187

Steadman, H. J. (1992). Boundary spanners: A key component for the effective interactions of the justice and mental health systems. *Law and Human Behavior*, *16*(1), 75–87. https://doi.org/10.1007/bf02351050

Stenius-Ayoade, A., Haaramo, P., Kautiainen, H., Gissler, M., Wahlbeck, K., & Eriksson, J. G. (2017). Mortality and causes of death among homeless in Finland: A 10-year follow-up study. *Journal of Epidemiology & Community Health*, *71*(9), 841–848. https://doi.org/10.1136/jech-2017-209166

Subedi, K., Acharya, B., & Ghimire, S. (2022). Factors associated with hospital readmission among patients experiencing homelessness. *American Journal of Preventive Medicine*, *63*(3), 362–370. https://doi.org/10.1016/j.amepre.2022.02.004

Sullivan, G., Burnam, A., & Koegel, P. (2000). Pathways to homelessness among the mentally ill. *Social Psychiatry and Psychiatric Epidemiology*, *35*(10), 444–450. https://doi.org/10.1007/s001270050262

Ti, L., Wood, E., Shannon, K., Feng, C., & Kerr, T. (2013). Police confrontations among street-involved youth in a Canadian setting. *International Journal of Drug Policy*, *24*(1), 46–51. https://doi.org/10.1016/j.drugpo.2012.06.008

Vitelli, R. (1993). The homeless inmate in a maximum-security prison setting. *Canadian Journal of Criminology*, *35*(3), 323–331. https://doi.org/10.3138/cjcrim.35.3.323

Weatherburn, D., Jones, C., Snowball, L., & Hua, J. (2008). THE NSW drug court: A re-evaluation of its effectiveness. *Crime and Justice Bulletin*, *121*, 1–16.

Webber, A. (2012). *Youth justice conferences versus children's court: A comparison of cost-effectiveness*. NSW Bureau of Crime Statistics and Research.

Woodward, M. (2005). *Epidemiology: Study design and analysis*. Chapman & Hall CRC.

Zapf, P. A., Roesch, R., & Hart, S. D. (1996). An examination of the relationship of homelessness to mental disorder, criminal behaviour, and health care in a pretrial jail population. *Canadian Journal of Psychiatry*, *41*(7), 435–440. https://doi.org/10.1177/070674379604100708

SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

How to cite this article: Mitchell, R. J., Burns, N., Glozier, N., & Nielssen, O. (2023). Homelessness and predictors of criminal reoffending: A retrospective cohort study. *Criminal Behaviour & Mental Health*, *33*(4), 261–275. https://doi.org/10.1002/cbm.2298