

Revisiting the Profile of Patients with No Fixed Abode Admitted to Psychiatric Inpatient Units, 2017-2021

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Abstract

Introduction

There is a well-documented relationship between homelessness and mental illness. This has been demonstrated in both an international context^{1,2} and in an Irish context³. This relationship is bidirectional⁴ and homelessness is both a contributing factor to and a result of mental illness. This perpetuates a vicious circle characterised by homelessness, mental health problems, social withdrawal and unemployment⁵. This relationship can be further complicated by alcohol and substance dependence, which are among the most prevalent health problems in people who are homeless^{1,2,3}.

Method

Data on admissions to psychiatric inpatient units in Ireland between 2017 and 2021 were obtained from The HRB's National Psychiatric Inpatient Reporting System (NPIRS). Data were analysed using SPSS. Admissions with 'no fixed abode' as the recorded accommodation status were subsequently extracted and explored. Trends in the data were examined, comparing NFA admissions with the national profile of admissions during this period.

Results

Demographic Profile

Between 2017 and 2021 there were a total of 81,567 admissions to psychiatric inpatient units in Ireland. There was a downward trend in the total number of admissions, from 16,743 in 2017 to 15,723 in 2021. With the exception of 2020, each year saw fewer admissions than the previous (Figure 1). 1,442 of these admissions had NFA as the recorded accommodation status, representing 1.8% of all admissions, an increase from 1.2% compared to the 2007-2016 period. The number of NFA admissions rose from 243 in 2017 to 284 in 2021 (Figure 2). A summary of the demographic profile of these admissions can be found in Table 1.

Introduction

Over 20 years ago, the 'institutional circuit' thesis was proposed⁶, which postulated that people who are homeless transverse through different forms of temporary accommodation, such as homeless shelters and other custodial institutions, in the absence of secure accommodation. This concept of the 'institutional circuit' is analogous with the 'Penrose hypothesis'⁷, which proposed that there is an inverse relationship between the number of psychiatric hospital beds and the prison population. While evidence for the Penrose hypothesis is mixed and it has been criticised for failing to account for other societal factors⁸, it is interesting to note how the phenomenon of transinstitutionalisation has been studied as far back as 1939. Homeless shelters and other custodial institutions are costly⁹ and so tackling homelessness could be economically beneficial.

In Ireland, data on the extent of homelessness nationally comes from the Pathway Accommodation and Support System (PASS) - an online shared system utilised by homeless service providers and local authorities. It captures data on individuals accessing emergency accommodation services. The Homeless Quarterly Progress Report for Quarter 3 2022¹⁰ showed that 10,975 individuals were homeless, an increase of 483 on the Quarter 2 total. This figure does not account for people who are sleeping rough or couch-surfing, and therefore it may underestimate the true extent of homelessness. The Health Research Board's (HRB) National Psychiatric Inpatient Reporting System (NPIRS) collects data on all admissions and discharges to inpatient psychiatric services in Ireland, including data on people who have no fixed abode (NFA). This provides an insight into the prevalence of mental illness among the homeless population in Ireland.

Hundreds of individuals with 'no fixed abode' are admitted to psychiatric inpatient units in Ireland each year. The demographic profile of psychiatric inpatient admissions recorded as NFA has been explored previously¹¹. In this previous study, it was found that the majority of NFA admissions were male, unemployed and single. Schizophrenia and drug/alcohol disorders were identified as the commonest diagnoses among the NFA cohort. This current study will revisit the NPIRS data and examine figures from more recent years, with the aim of identifying any changes in the profile of this cohort since the last publication. By establishing an insight into the demographics, diagnoses and service-use patterns of these individuals, there is a potential to improve service provision and inform government policy.

Figure 1:

Number of Total Admissions Yearly (2007-2021)

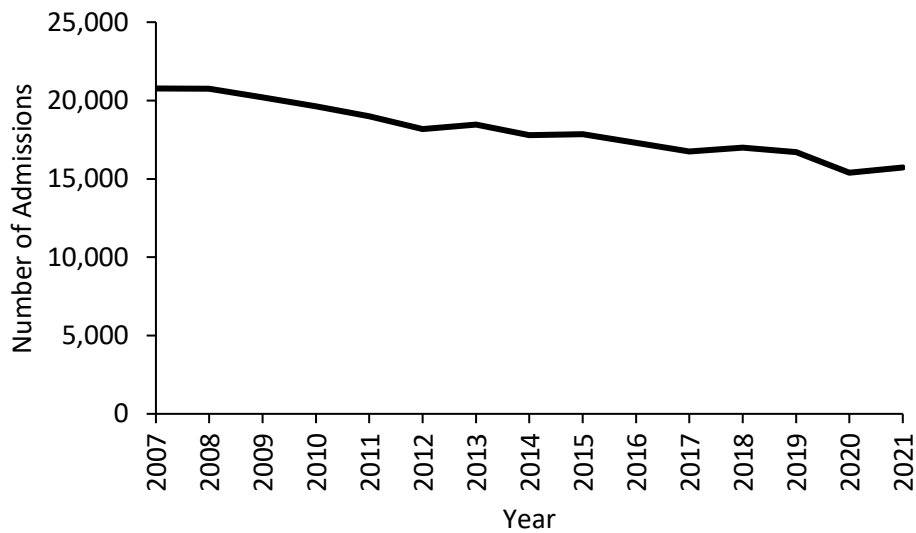


Figure 2:

Number of NFA Admissions Yearly (2007-2021)



Table 1:

Demographic Profile of NFA and Total Admissions Recorded between 2017 and 2021

	NFA admissions		Overall admissions	
	n	%	n	%
Total	1,442	100	81,567	100.00
Gender				
Male	1,002	69.49	40,754	49.96
Female	440	30.51	40,813	50.04
Marital status				
Single	1,147	79.54	48,334	59.25
Married	53	3.68	19,672	24.11
Widowed	21	1.46	3,259	4.00
Divorced	45	3.12	2,631	3.23
Other/ unspecified	176	12.21	7,671	9.40
Age Group				
Under 18	1	0.07	280	0.34
18-19	33	2.29	2,833	3.47
20-24	168	11.65	7,920	9.71
25-34	471	32.66	15,100	18.51
35-44	441	30.58	16,477	20.20
45-54	206	14.29	14,032	17.20
55-64	88	6.10	11,470	14.06
65 and over	33	2.29	13,445	16.49
Unspecified	1	0.07	10	0.01
Employment Status				
Employed	114	7.91	18,567	22.76
Unemployed	1,067	73.99	31,259	38.32
Retired	28	1.94	8,183	10.03
Student	20	1.39	4,655	5.71
Other/ Unknown	213	14.77	18,903	23.17

Gender

Of NFA admissions during the period 2017-2021, 69.49% ($n=1,002$) were male. By contrast, males accounted for 49.96% ($n=40,754$) of overall admissions.

Age

Compared with the overall profile of admissions, NFA admissions were younger. For instance, almost half of NFA admissions were aged less than 35 (46.67%, $n= 673$), while only 32.04% of overall admissions fell within this age range ($n= 21,133$).

Marital Status

The majority of NFA admissions recorded between 2017 and 2021 were single (79.54%, $n=1,147$). The majority of overall admissions were also single, but to a significantly lesser extent than the NFA cohort (59.25%; $n=48,334$).

Employment Status

Unemployment was far more prevalent among the NFA cohort 73.99% ($n=1,067$) compared with the overall profile of admissions 38.32% ($n=31,259$).

Admissions Profile

A summary of the admissions profile for NFA admissions recorded between 2017 and 2021 can be found in Table 2.

Table 2:

Admissions Profile of NFA and Total Admissions Recorded between 2017 and 2021

	NFA Admissions		Overall Admissions	
	n	%	n	%
Total	1,442	100.00	81,567	100.00
Primary Admission Diagnosis				
Schizophrenia, Schizotypal and Delusional Disorders	506	35.09	17,057	20.91
Other Drug Disorders	225	15.60	4,930	6.04
Personality and Behavioural Disorders	140	9.71	7,159	8.78
Mania	131	9.08	8,379	10.27
Alcoholic Disorders	110	7.63	5,039	6.18
Depressive Disorders	98	6.80	19,731	24.19
Neuroses	69	4.79	7,807	9.57
Other and Unspecified	163	11.30	11,465	14.06
Order of Admission				
First Ever	603	41.82	28,673	35.15
Readmission	838	58.11	51,546	63.19
Unknown	1	0.07	1,348	1.65
Legal Category				
Voluntary	993	68.86	69,670	85.41
Involuntary	449	31.14	11,897	14.59
Length of Stay ^a				
Under 1 week	565	39.18	24,322	29.82
1-< 2 weeks	264	18.31	14,460	17.73
2-< 4 weeks	211	14.63	16,131	19.76
1-< 3 months	272	18.86	21,778	26.70
3 months-< 1 year	92	6.38	3,745	4.59
1 year and over	8	0.55	669	0.82

Missing/ deaths	not discharged/ 30	2.08	462	0.57
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^a'Length of Stay' refers to the length of stay at the time of discharge. It does not account for deaths or those not discharged.

Diagnostic Category

The most common diagnoses for the NFA cohort between 2017 and 2021 were 'Schizophrenia, Schizotypal and Delusional Disorders' (35.09%, $n=506$), and 'Other Drug Disorders' (15.60%, $n=225$). By contrast, 'Depressive Disorders' was the most common diagnostic category overall (24.19%, $n=19,731$), followed by 'Schizophrenia, Schizotypal and Delusional Disorders' (20.91%, $n=17,057$). 'Other Drug Disorders' were less common among the national profile of admissions compared with the NFA cohort (6.04%, $n=4,930$).

Length of Stay

The NFA cohort saw shorter admission lengths compared with the national profile. For instance, 39.18% ($n=565$) of NFA admissions stayed for less than one week, while admissions lasting less than one week accounted for 29.82% of total admissions.

Order of Admission

The majority of NFA admissions during this period were readmissions (58.11%, $n=838$). This is consistent with the 2007-2016 period where 66.2% of NFA admissions were readmissions. The national profile of admissions saw a steady decline in the proportion of readmissions in recent years, from 72% in 2007 to 63% in 2021.

Legal Category

Involuntary admission was more common among the NFA cohort (31.14%; $n=449$) compared with the national profile of admissions (14.59%; $n=11,897$). Recent years have seen an increase in the proportion of involuntary admissions among the NFA cohort – involuntary admissions accounted for 16.2% of NFA admissions during the 2007-2016 period.

Discussion

The number of inpatient admissions to psychiatric units with NFA as the recorded accommodation status has increased in recent years. The profile of NFA admissions remains largely unchanged - the majority were male, unemployed and single. Most NFA admissions were readmissions, admitted voluntarily, with schizophrenia and disorders relating to alcohol and drug misuse being the most common diagnoses on admission. This differs significantly to the national profile of inpatient admissions to psychiatric units during this period.

While the number of NFA admissions continues to rise in recent years, there has been a downward trend in overall admissions. There are a number of possible reasons for this. It may

reflect a shift from institutional care to community mental health services, with the disproportionate number of NFA admissions reflecting the barriers that people who are homeless experience when accessing community mental health services. Moloney et al.⁴ call attention to how an inability to access some services without a permanent address, as well as stigma surrounding homelessness, can serve as barriers to accessing mental health services. 'Sharing the Vision'¹², the current government policy document governing the provision of mental health services in Ireland, calls for a dedicated mental health service operating on an outreach model in urban areas which would involve working with individuals in their own environment, with the aim of eventually linking people back in with their local Community Mental Health Team¹³.

It is also possible that people who are homeless experience more severe mental health problems which warrant admission to psychiatric inpatient units. Indeed, assuming that people who are homeless are less likely to access community mental health services, and therefore do not access care until they are in serious crisis, it is more likely that they will require inpatient care. It is also worth noting that the proportion of involuntary admissions has increased among the NFA cohort in recent years, in contrast to an overall decrease in the proportion of involuntary admissions nationally. It is possible that involuntary admission is a proxy indicator of severity of mental illness, thereby supporting the hypothesis that people who are homeless experience more severe mental health problems.

The year 2020 saw the lowest number of psychiatric inpatient admissions since the NPIRS began collecting data in 1965. While there has been a downward trend in admissions nationally, it would be remiss to overlook the potential impact of the COVID-19 pandemic on admission rates. Public health measures, including capacity restraints, almost certainly impacted admission rates. Further, 2020 was the only year during the examined period which saw more discharges ($n=15,593$) than admissions ($n=15,391$). Examining trends in admission rates in future years will provide a clearer insight into the impact of the COVID-19 pandemic on psychiatric hospitalisation rates.

Unemployment was almost twice as high among the NFA cohort compared with the national profile of admissions. This highlights an important problem which must be considered when tackling homelessness and mental health. A paper published by The College of Psychiatry of Ireland in 2011⁵ noted how there was a vicious cycle between homelessness and mental health problems, with unemployment being an important facet of this vicious cycle. Homelessness, mental illness and unemployment are all complex social problems which need to be considered in the context of one another.

The NPIRS data from 2017-2021 show that the majority of NFA admissions were readmissions, suggesting that people who are homeless frequent these services on a recurring basis. This supports the 'institutional circuit' theory⁶. However, there is no data available on the number

of readmissions each individual has had. The implementation of a unique health identifier as part of the NPIRS would facilitate improved monitoring of the number of readmissions for each individual.

The NPIRS data show that disorders relating to alcohol and drug misuse were more common among the NFA cohort compared to the national profile. This is concerning as it creates a further barrier for people who are homeless who wish to access mental health services since many of these services require sobriety as a prerequisite⁴. Fortunately, recent years have seen improvements in this area - 'Sharing the Vision'¹⁰ notes how "individuals with co-existing mental health difficulties and addiction to either alcohol or drugs should not be prevented from accessing mental health services" and recommends that specialist mental health teams should support those with a dual-diagnosis of mental health problems and substance misuse problems. However, in the context of the current study, homelessness is another important social problem which is closely related to both mental health problems and substance misuse problems. When considering mental health, the wider social context, including an individual's living situation, needs to be considered.

The findings of this study should be interpreted in light of some limitations. Individual practices and coding limitations within the NPIRS may skew the profile of admissions. Furthermore, it is possible that the NPIRS does not capture the full extent of homelessness. The requirement to provide an address in order to be discharged from hospital may result in individuals reporting different forms of insecure accommodation. As a result, the prevalence of homelessness may be underestimated. Notwithstanding these limitations, the NPIRS provides an excellent insight into psychiatric inpatient admissions in Ireland.

A review of the NPIRS data from recent years demonstrates a rising trend in NFA admissions to psychiatric inpatient units, despite a decreasing trend in overall admissions nationally. This raises important questions both in relation to homelessness and mental health in Ireland. While the profile of these admissions remains largely unchanged compared to previous years, regularly monitoring these trends improves our understanding of homeless pathways and indeed, the relationship between homelessness and mental health. Notwithstanding the limitations of this study, exploring the demographic and admissions profile of NFA admissions to psychiatric inpatient units helps to identify the needs of these subgroups. Furthermore, routine monitoring of the NPIRS data and early identification of emerging trends has the potential to inform public health policy and expenditure in the areas of both housing and mental health.

Declarations of Conflict of Interests:

None declared.

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References:

1. Schreiter S, Bempohl F, Krausz M, Leucht S, Rössler W, Schouler-Ocak M, Gutwinski S. The prevalence of mental illness in homeless people in Germany: a systematic review and meta-analysis. *Deutsches Aerzteblatt International*. 2017 Oct;114(40):665.
2. Fazel S, Khosla V, Doll H, Geddes J. The prevalence of mental disorders among the homeless in western countries: systematic review and meta-regression analysis. *PLoS medicine*. 2008 Dec;5(12):e225.
3. O'Reilly F, Barror S, Hanigan A, Scriver S, Ruane L, MacFarlane A, et al. [Internet]. Homelessness: An unhealthy state. Health status, risk behaviours and service utilisation among homeless people in two Irish cities. *The Partnership for Health Equity*; 2015 [cited 2022Dec8]. Available from: <https://www.drugsandalcohol.ie/24541/1/Homelessness.pdf>
4. Moloney N, O'Donnell P, Elzain M, Bashir A, Dunne CP, Kelly BD, Gulati G. Homelessness amongst psychiatric inpatients: a cross-sectional study in the mid-west of Ireland. *Irish Journal of Medical Science (1971-)*. 2022 Feb;191(1):321-6.
5. Specialist Mental Health Services for Homeless People. The College of Psychiatry of Ireland; 2011 [cited 2022Dec8]. Available from: <https://www.irishpsychiatry.ie/wp-content/uploads/2016/12/Position-Paper-of-College-of-Psychiatry-of-Ireland-on-the-Specialist-Mental-Health-Services-for-Homeless-Peopl.pdf>
6. Hopper K, Jost J, Hay T, Welber S, Haughland G. Homelessness, severe mental illness, and the institutional circuit. *Psychiatric Services*. 1997;48(5):659-665.
7. Penrose LS. Mental disease and crime: Outline of a comparative study of European statistics. *British Journal of Medical Psychology*. 1939;18(1):1-15.
8. Winkler P, Barrett B, McCrone P, Csémy L, Janousková M, Höschl C. Deinstitutionalised patients, homelessness and imprisonment: Systematic review. *British Journal of Psychiatry*. 2016;208(5):421-8.
9. Pleace N, Culhane D. [Internet]. Better than cure? Testing the case for enhancing prevention of single homelessness in England. *Crisis*; 2016 [cited 2022Dec8]. Available from: https://eprints.whiterose.ac.uk/106641/1/Better_than_cure_Testing_the_case_for_

enhancing_prevention_of_single_homelessness_in_England_FINAL_FULL_REPORT_2.pdf

10. Homeless Quarterly Progress Report Quarter 3 2022. Department of Housing, Local Government and Heritage; 2022 Oct [cited 2022Dec8]. Available from: <https://assets.gov.ie/238438/d9441966-0ff5-486f-a1fb-981690801d84.pdf>
11. Daly A, Craig S, O'Sullivan E. A Profile of Psychiatric In-Patient Admissions With No Fixed Abode (NFA) 2007–2016. Irish Medical Journal. 2022;112(1).
12. Sharing the Vision A Mental Health Policy for Everyone. Department of Health; 2020 [cited 2022Dec8]. Available from: <https://assets.gov.ie/76770/b142b216-f2ca-48e6-a551-79c208f1a247.pdf>
13. ACCES - Assertive Outreach Model [Internet]. HSE. [cited 2022Dec8]. Available from: <https://www.hse.ie/eng/services/list/4/mental-health-services/dsc/south/acces-team-homelessness-mental-health-services-/acces-assertive-outreach-model.html>