

## Five-year review of absconding in three acute psychiatric inpatient wards in Australia

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Running title: Absconding from acute inpatient wards

Five-year review of absconding in three acute psychiatric inpatient wards in Australia

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## Abstract

Absconding, where patients under an involuntary mental health order leave hospital without permission, can result in patient harm and emotional and professional implications for nursing staff. However, Australian data to drive nursing interventions remains sparse. The purpose of this retrospective study was to investigate absconding in three acute care wards from January 2006-June 2010, in order to determine absconding rates, compare patients who did and did not abscond, and to examine incidents. The absconding rate was 17.22 incidents per 100 involuntary admissions (12.09% of patients), with no significant change over time. Being male, young, diagnosed with a schizophrenia or substance-use disorder, and having a longer hospital stay were predictive of absconding. Aboriginal and Torres Strait Islander patients had higher odds of absconding than Caucasian Australians. Over 25% of absconding patients did so multiple times. Patients absconded early in admission. More incidents occurred earlier in the year, during summer and autumn, later in the week, and few incidents occurred early in the morning. Almost 60% of incidents lasted  $\leq 24$  hours. Formulation of prospective interventions considering population demographic factors and person-specific concerns are required for evidence-based nursing management of the risks of absconding and effective incident handling when they do occur.

Key words: absconding, acute care, inpatients

## Introduction

Absconding from acute care inpatient psychiatric wards can have serious consequences. A study in England and Wales over a 10-year period found that a quarter of inpatient suicides involved a patient who had absconded (Hunt *et al.* 2010). Australian studies have reported that over a 21-year period, 36% of patients who had committed suicide did so after absconding (Shah & Ganesvaran 1997, 2000), and that in a 10-year study of patients admitted to a medical facility for self-poisoning, four of 24 who had absconded during an admission subsequently died within two years (Reith *et al.* 2004). Other serious outcomes include self-harm and violence/harm to others (Bowers *et al.* 1999a). Even in cases where there are no serious outcomes and patients return, patient treatment is interrupted. Nurses experience negative emotional (e.g. fear) and, indeed, professional outcomes (e.g. blame by colleagues and management, punitive measures) when patients abscond (Clark *et al.* 1999). Nursing staff and other personnel such as police are also then involved in time-consuming paperwork and procedures that detract from nursing care of other patients on the ward (Martin & Thomas 2014; Muir-Cochrane *et al.* 2012).

Given potential deleterious outcomes it is important to have an in-depth understanding of absconding. This will inform interventions to reduce rates of absconding from inpatient services. To date few recent nursing-focused interventions (and none Australian) have been reported (see Bowers *et al.* 2003, 2005), nor validated risk assessment tools published. Although nurses have been found to accurately assess risk (Lewis & Webster 2004) this largely takes the form of informal assessment (Clark *et al.* 1999). Indeed, even when risk assessment measures are used in the clinical setting, absconding risk is often not included (Gerace *et al.* 2013a). Reliable and valid data should drive any risk profile formulation and evidenced-based nursing interventions to reduce absconding (Mosel *et al.* 2010a; Fisher 2003).

Two literature reviews, together covering the period 1950 to 2008 (Bowers *et al.* 1998; Muir-Cochrane & Mosel 2008), indicate characteristics of absconders being young, male, single, from disadvantaged groups, involuntarily hospitalized or from police/court referral, and with a diagnosis of schizophrenia. Absconding is likely to occur in an earlier part of admission and in warmer seasons, with mixed findings regarding specific days/times. Methodological issues were identified by the reviews, including whether patients not under a mental health treatment order who leave without telling staff should be included in absconding rates. For the purposes of the present study, absconding was defined as a patient on an involuntary order under mental health legislation leaving the ward without permission. Unfortunately, Australian literature is relatively sparse and several years old. In a 6-month study on an acute psychiatric ward (Meehan *et al.* 1999) 13.1% of patients absconded at least once, with 31.4% of these patients doing so repeatedly. Absconding patients were predominantly male, under 40 years of age, with diagnoses of schizophrenia or acute psychosis, and admitted under mental health legislation. Almost 50% of incidents occurred within a week of admission and over a third occurred in the morning.

In a 12-month study of aggression and absconding incidents in 11 mental health wards, Carr *et al.* (2008) reported an estimated 15.7% of admissions involved an absconding incident. Multivariate analysis revealed that older (55+) patients were less likely to abscond, and those with a diagnosis of a drug and alcohol disorder more likely to abscond. While schizophrenia or related conditions (more likely), bipolar disorder (more likely), and depression or an adjustment disorder (both less likely) were associated with absconding they were not statistically significant when other variables were taken into account. In a recent study investigating absconding from acute care wards over a 12-month period, 10.21% of patients absconded at least once, gender was not associated with absconding, and while almost 70% of

patients who absconded had a diagnosis of schizophrenia this was not significant when compared to the total hospital population with this disorder (Mosel *et al.* 2010a).

While these Australian studies provide a local perspective, they are hampered by failure to separate characteristics of absconding patients from other patients when absconding is not the main focus (Reith *et al.* 2004; Shah & Ganesvaran 1997, 2000), short data collection periods (Meehan *et al.* 1999; Mosel *et al.* 2010a) and the lack of a non-absconding comparison group (Meehan *et al.* 1999). In-depth examination, utilizing multiple methods of rate calculation and clear description of which patients and incidents are included, is needed to inform prediction and nurse management (Bowers *et al.* 1998). This aids in benchmarking for services and takes account of changes over time in factors affecting rates such as service configuration, patient demographics, and ward structures (e.g. locked doors) that may not be picked up with shorter data collection periods (Meehan *et al.* 2007). In addition, providing Australian data is likely to take account of factors more useful from a local perspective (e.g. presence of an Aboriginal and Torres Strait Islander [ATSI] population).

The potential for serious outcomes and the lack of adequate recent analysis in the Australian context indicates the need for a more detailed understanding of absconding from acute care wards. This is particularly important for nurses, who are responsible for much of the hands-on, regular care of patients and for providing information to consultants and doctors to guide patient treatment (Bishop & Ford-Bruins 2003), as well as implementing interventions such as increased observation as needed (Clark *et al.* 1999). The purpose of this study was to determine rates of absconding, compare characteristics of patients who did and did not abscond from the wards, and to examine the characteristics of absconding incidents. This information will inform the formulation of interventions to reduce or prevent absconding.

## Materials and methods

## Design

The study was retrospective and comparative, providing an analysis of absconding between January 2006 and June 2010 across three acute care wards.

## Data

Data on all inpatients who stayed on the included wards during the 54-month period, and absconding incidents by involuntary hospitalized persons, were extracted from the inpatient discharge database maintained by the institution. Staff managing the database system extracted the data and provided it to the researchers in deidentified form. This database contains patient identification numbers, admission and discharge dates, ward changes, demographic details of patients (e.g. sex, age), and primary diagnosis (classified using the International Statistical Classification of Diseases and Related Health Problems, 10th revision [ICD-10]). For absconding incidents, patient identification numbers, involuntary hospitalization status at the time the patient absconded (e.g. 3 day involuntary hospitalization order, 21 day involuntary hospitalization order), absconding date/time and return date/time, and the ward from which the patient absconded are recorded. Voluntary patients who left without telling staff were inconsistently recorded in the electronic database from which data was drawn; this data was not included in the study. Details of how patients returned/were returned to hospital and any incidents that occurred while they were away were not available to the researchers.

Data was imported from Microsoft Excel spreadsheets to IBM SPSS Statistics for Windows version 22 (IBM Corp., Armonk, NY, USA) and examined for missing values and outliers (e.g. a particularly long admission). Clarification of such data with systems staff (e.g. to verify that admission durations were correct) was undertaken.



A subset of the data (a 12-month period from 2006-2007) has been reported previously (Mosel *et al.* 2010a). The study was approved by the University research ethics committee and hospital senior managers.

#### Setting and procedures following an abscond incident

Three acute psychiatric wards were included. The wards provided all general adult acute care at an Australian metropolitan psychiatric hospital, with two wards providing care for metropolitan patients and one ward providing services for rural and remote patients. The ward providing care for rural and remote patients and one of the wards providing care to metropolitan patients operated during the entire data collection period (54 months), while the other ward was closed in October 2006 (10 months) due to a relocation of services. All wards have been included to provide a complete data set of absconding in the hospital over the 54-month period. Wards had high occupancy (95% or higher) over the data collection period, and between 18 and 23 beds.

Although some procedures differed between wards and over time, wards were open from approximately 6am-11pm. Doors were locked at night and for short time periods if there was a safety issue. Strategies for reducing absconding focused on increased visual observations and providing 1:1 observation based on risk assessment, rather than other methods such as transferral to a secure ward. Wards were staffed by mental health nurses, registered nurses (some of whom are completing mental health studies), and enrolled nurses.

Specific training was not provided on prevention of absconding, but training was provided on risk assessment and several training packages existed regarding patient engagement. According to hospital procedure, when a patient is missing from a ward a search of the patient's room/ward and grounds is undertaken, and other patients may be interviewed. Senior clinicians and coordinators are notified within 30 minutes, and next of kin contacted.

Police are notified and, depending on level of judged risk, the patient is deemed as on unapproved leave (low risk) or a missing person (moderate or serious risk) on a Notification of Missing Person/Unapproved Leave form. When patients return to the ward, strategies to minimise further absconding include increased observations, changes in medication, discussion with the patient regarding their absconding and treatment orders, and other methods based on specific need (e.g. restricting access to bank cards).

### Data analysis

Rates of absconding were calculated per 100 admissions: number of incidents or patients absconding per month divided by number of involuntary hospitalized patients in the ward per month, multiplied by 100 (Bowers 2000). Multiple admissions for one person were treated separately (e.g. a patient with multiple separate admissions would be counted for each of those admissions in the numerator and/or denominator).

Data were analysed using IBM SPSS Statistics for Windows version 22 (IBM Corp., Armonk, NY, USA). Binary logistic regression was used to analyse predictors of absconding. Descriptive statistics, two-sample *t*-tests, Pearson's  $\chi^2$  (both tests of independence and goodness of fit), Kruskal-Wallis and Mann-Whitney tests were used to analyse characteristics of absconding patients and incidents, as well as overall patient and ward demographics.

## Results

### Characteristics of involuntary hospitalized patients

There were 2184 admissions involving an involuntary mental health order (66.52% of all admissions). Of these admissions, there were 1474 male and 710 female admissions. Individual patients had a mean of 1.33 (*SD* = .83, *Range* = 1-11) separate admissions involving an involuntary order; 78.64% of patients had one admission during the data collection period.

Of all admissions, 2172 (99.45%) involved a stay in one of the included wards; the remaining 12 admissions involved a stay in two included wards. Mean age of patients on admission was 37.33 ( $SD = 11.78$ ,  $Range = 17-84$ ), and mean ages between wards were similar. Over 70% of patients were recorded as Caucasian ( $N = 1547$ ) and over 75% born in Australia ( $N = 1654$ ).

In over 60% of admissions there was a primary ICD-10 diagnosis involving “schizophrenia, schizotypal and delusional disorders” ( $N = 1430$ , 65.48%), followed by “mood [affective] disorders” ( $N = 471$ , 21.57%), “neurotic, stress-related and somatoform disorders” ( $N = 129$ , 5.91%), “mental and behavioural disorders due to psychoactive substance use” ( $N = 107$ , 4.90%), “disorders of adult personality and behaviour” ( $N = 24$ , 1.10%), and other ICD-10 diagnoses not in these blocks ( $N = 23$ , 1.05%).

The majority of the 2184 admissions ( $N = 2111$ , 96.66%) occurred from 1 January 2006 onward, with the remaining admissions occurring before this date (but the patient was on the ward as of 1 January 2006). The median length of stay (LOS) in the hospital was 21.83 days ( $Range = 0.08-2032.72$  days), with no significant sex difference. For total hospital stay, patients under involuntary orders ( $N = 2184$ ) had significantly longer admissions ( $Mdn = 21.83$ ) than those under voluntary admission ( $N = 1099$ ;  $Mdn = 15.64$ ),  $U = 973,089.50$ ,  $z = -8.86$ ,  $p < .001$ ,  $r = -.15$ .

### Absconding rates

Over the four-and-a-half-year period, 264 patients absconded a total of 376 times from the three wards. The absconding rate was 17.22 incidents per 100 involuntary admissions, with a patient based rate of 12.09 patients per 100 involuntary admissions (i.e. 12.09% of patients absconded). There was not a significant decrease between proportions of patients absconding in 2006 and 2010 (12.07% vs. 9.75%),  $t(905) = .96$ ,  $p > .05$ .

## Profile of absconding patients

### Comparing patients who did and did not abscond

Table 1 presents a comparison of absconding and non-absconding patients. Binary logistic regression was conducted to determine significant predictors of absconding, with patients classified as having not absconded ( $N = 1913$ ) or having absconded *at least once* ( $N = 271$ ) during their admission. Seven of the 271 patients had part of their admission in a ward not studied and absconded from that ward. These patients were coded as having absconded (but were not included in the rate above).

The odds of a patient absconding were 1.37 times higher if they were male and 0.53 times lower if the patient was in hospital for  $\leq 22$  days (Table 2). For diagnosis, the odds of a patient absconding were 1.59 (mood disorders) and 4 (neurotic, stress-related and somatoform disorders) times higher if they had a principal diagnosis in the schizophrenia, schizotypal and delusional disorders diagnostic category.

The result for mood disorders seems largely to be the result of depressive disorders, with the odds of a patient absconding 3.83 times higher if they had a schizophrenia disorder compared to a depressive disorder (depressive episode or recurrent depressive disorder diagnosis;  $N = 8/182$  of these patients absconded),  $\chi^2(1, N = 1612) = 15.19, p < .001$ , but a non-significant result for bipolar affective disorder,  $\chi^2(1, N = 1702) = 2.88, p = .09$ .

There was not a statistically significant association between being born in Australia or overseas and absconding. For patients born in Australia, 1263 patients were recorded as Caucasian, 168 as ATSI Australians, 8 as Other, and 4 as Asian (missing data,  $N = 211$ ). The association between absconding and whether the patient was Caucasian (145 Caucasian Australian-born absconders) or ATSI (31 ATSI Australian-born absconders) was statically significant,  $\chi^2(1, N = 1431) = 6.68, p = .01$ . The odds of a patient absconding were 1.74 times higher if they were ATSI than Caucasian.

[Tables 1 and 2]

#### Further analyses of absconding patients

Of the 271 absconding patients who absconded 399 times, 72 absconded more than once. Almost 80% of patients who absconded more than once did so two (61.76%) or three (17.65%) times, with 20.59% of repeat patients absconding between 4-11 times. Patients absconding multiple times during their admission had a longer LOS ( $Mdn = 43.04$  days) than those who absconded once ( $Mdn = 24.54$ ,  $U = 4728.50$ ,  $z = -4.27$ ,  $p < .001$ ,  $r = -.26$ ), but there were no statistically significant differences on sex or age. Examination of cross tabulations of diagnoses revealed few differences between observed and expected frequencies for the groups.

Patients (data on 153/271 patients was available) had been in the hospital a median of 11.85 days ( $Range = .14-745.47$ ) prior to their first (or only) absconding incident, and on the ward from which they absconded a median of 8.07 days ( $Range = .02-537.68$ ). Patients were predominantly on their first 21 day involuntary hospitalization order ( $N = 163/271$ , 60.15%) when they absconded the first/only time. Table 3 provides further information on when in their hospitalization patients absconded.

[Table 3]

#### Absconding incidents

##### Seasons/months/days/times

Numbers of absconding incidents were not evenly distributed between seasons (expected values based on  $N > 2184$  since some patients' admissions spanned more than one season). There were more absconding incidents in summer ( $N = 119$ ) and autumn ( $N = 120$ ),

and less in winter ( $N = 90$ ) and spring ( $N = 70$ ),  $\chi^2(3, N = 399) = 10.95, p = .01$ . When including patients' first (or sole) incidents only, these differences were not significant.

More absconding events occurred early in the December-June period, with the lowest number of incidents occurring in July ( $N = 13$ ). This trend was evident regardless of whether all incidents were considered, or incidents from 2006-09 since 2010 data only included January-June. The trend remained similar when considering first/only absconding incident to address the impact of high numbers of repeat absconding incidents, although there are dips in May and August.

The lowest numbers of incidents across years and wards occurred earlier in the week (Sunday-Tuesday), followed by a rise for the remainder of the week. Comparing absconding incidents to when ward rounds occurred revealed no discernible patterns. Absconding events were recorded as having occurred with the most frequency on the hour (likely due to observation times/reporting ease). The largest numbers of incidents recorded were 28 at 15:00, 26 at 16:00 and 24 at 20:00. Very few absconding incidents occurred in the early hours of the morning (from midnight to before 9:00). The highest numbers of absconding incidents in 59-minute blocks (15:00-15:59,  $N = 35$ ; 16:00-16:59,  $N = 40$ ; 21:00-21:59,  $N = 38$ ) were not associated with meal breaks/handovers. There were, however, 27 incidents during the evening patient meal break (17:30-18:00), and 24 incidents (20:00) shortly after the final handover at 19:28-19:41.

#### Absconding duration

Median duration away from hospital during an individual incident was 19.25 hours, but with wide variation ( $Range = 0.75$ -2806 hours). Almost 60% (59.45%,  $N = 236/397$ ) of incidents lasted for  $\leq 24$  hours. Table 4 presents an analysis of absconding duration by grouping incidents into approximate quarters based on time away from hospital. Over half of the

incidents (51.04%) with the longest time away from hospital ( $\geq 49$  hours) had an absconding return rate and hospital discharge date of the same date, which may indicate that they did not return or were discharged on return to the ward.

[Table 4]

## Discussion

The study examined absconding over a four-and-a-half-year period from acute inpatient services of one psychiatric hospital. The results are on the lower end of the range reported by Bowers *et al.* (1998), similar to one previous Australian report (Meehan *et al.* 1999) but lower than another (Carr *et al.* 2008). Findings regarding characteristics of absconding patients largely confirm those of similar studies, but the present study went beyond some limitations in previous designs. The study included a non-absconding comparison group and a longer period of data collection, which is less prone to reflecting fluctuations in absconding due to temporary issues, such as the presence of patients with complex needs at particular times during the collection period (Bowers 2000). Although most patients returned relatively soon to the hospital, even short periods of time away from treatment at an early stage of hospitalization are of concern.

The rate of absconding changed little over time and, indeed, is similar to earlier Australian work (Meehan *et al.* 1999). This is in spite of increased importance placed on risk assessment and management in this time (Cleary *et al.* 2009) and increased attention to recovery-oriented practice (Meehan *et al.* 2008). Several factors may make reduction of absconding a particularly challenging task. It has been proposed that moves toward community-based treatment have led to changes in the characteristics of those patients admitted for inpatient treatment, including increased illness severity and likelihood of involuntary

hospitalization (Foster *et al.* 2007; Sly *et al.* 2009). Indeed, Carr *et al.* (2008) reported that risk of absconding was recorded as moderate in 18.9% of risk assessments, and as high/extreme in 12.0% of assessments. However, the results of the present study suggest several areas that can help to manage, if not significantly, reduce absconding.

Characteristics of patients and incidents documented here provide useful risk management information for nurses. Absconding patients were more likely to be male, younger, and to have a schizophrenia or substance use-related disorder. Risk among younger patients may relate to a first-time diagnosis or admission (Manchester *et al.* 1997), while particular diagnoses likely involve different symptoms/concerns driving absconding (Khisty *et al.* 2008). However, this should not preclude nurses assessing absconding risk for all patients. Sex differences, for example, are inconsistently found (e.g. Carr *et al.* 2008; Dickens & Campbell 2001), and the potential of patients with affective disorders suiciding while away from the hospital (Hunt *et al.* 2013; Shah & Ganesvaran 2000) is caution against complacency.

Absconding patients were more likely to have a longer hospitalization. This may be due to continued risk of harm to self/others, of which absconding is an indicator (Carr *et al.* 2008). However, absconding occurred early in admissions and demonstrated some relationship with ward change. Other types of conflict and containment (e.g. seclusion/restraint) occur early in hospitalization, suggesting patients admitted involuntarily may lack information or understanding of the circumstances surrounding their admission (Gerace *et al.* 2013b; McGuinness *et al.* 2013). They may have also been brought to the hospital by ambulance or police, which could be a traumatic experience (McGuinness *et al.* 2013). Likewise, ward change could cause disorientation similar to that of initial admission. Once in the hospital, patients may be made aware that they are to be in hospital for a minimum amount of time, such as if a detention order had been enacted/renewed (Bowers *et al.* 2005). The need for nurses to focus on the circumstances surrounding the patient's admission (including potential trauma),



and to be aware that nursing procedures, detention orders and ward structure may be new to the patient is important to their adjustment (Muir-Cochrane *et al.* 2011).

There was an increased likelihood of ATSI patients absconding. Mental health systems operate largely within Western ideas of illness and therapy approach, and may not meet the health needs of Australian ATSI patients (Brown 2001; Vicary & Westerman 2004; Zeldenryk & Yalmambirra 2006). The elevated absconding rate in the present study underscores the importance of cultural safety in health care (Mosel *et al.* 2010b), although Williamson and Harrison (2010) argue that nurse training may overly focus on learning stereotyped knowledge of values and beliefs and that this concept “is in danger of becoming rhetoric only” (p. 767). These authors stress that for ATSI clients “any approach to culture and practice which incorporates the history of contact provides a more meaningful insight into the reasons for their poor health status than can be achieved with a focus on traditional beliefs and values” (p. 767). How such an approach would apply to absconding requires further study, however consideration of the meaning of hospitalization within the history of social and institutional practices with ATSI clients would likely be an important component.

Over a quarter of patients absconded repeatedly and were responsible for approximately 50% of all incidents. This supports previous research (Carr *et al.* 2008; Meehan *et al.* 1999) and the increased risk of further absconding once a patient returns (Bowers *et al.* 2000). It also highlights the need for analysis of reasons through debriefing with the patient and revised risk assessment by the multidisciplinary team (Bowers *et al.* 1999a, 2000), particularly since there were few profile differences between repeat and non-repeat absconders. Bowers *et al.* (2003) suggest daily “targeted nursing time” (p. 412) for such patients, addressing concerns that may be driving their absconding (e.g. home responsibilities).

There were subtle differences in timing of incidents. Lack of differences related to ward round, involving decisions such as continuation of an involuntary order, may reflect effects

obscured by multiple ward rounds (see Bowers *et al.* 2007). However, Bowers *et al.* (1999c) did not find differences when considering consultants who held one ward round per week. The extent to which present findings regarding seasonal variation reflect real differences due solely to season, rather than a complex interaction of factors including temperature and holiday periods (Ali & Maharajh 2003), as well as the impact of repeat absconding on rates, requires local analyses.

Decreased absconding incidents at night/early morning may reflect a combination of locked ward doors, lesser ward activity and greater accountability of patient whereabouts or, indeed, increased use of pro re nata (as needed) medication (Hilton & Whiteford 2008). There appeared to be some relationship with evening meal breaks and handovers, which is also when doctors move to on-call rosters and the majority of multidisciplinary staff other than nurses are finishing their day. These distractions could signal absconding opportunity (Moore 2000). However, other increases throughout the day suggest a range of factors may be at play, including activities being run, patient appointments, visiting hours, and nurses being involved in emergency admissions. Times when absconding occurs are likely amenable to some change, although not necessarily through increased security measures. Locking doors does not eliminate absconding (Lang *et al.* 2010; Stewart & Bowers 2011), and it can still occur when the patient is on medium or high levels of observation (Hunt *et al.* 2010). In addition, while nurses do report feeling anxious about patients absconding when a ward door is open, locking of doors – particularly where locking of exits is intermittent – is accompanied by nurse perceptions that there is increased potential for conflict and disturbed patient behaviours on the ward (Muir-Cochrane *et al.* 2012). This underscores the importance of therapeutic engagement (Bowers *et al.* 2009) and nurses providing structure on the ward (Bowers 2009) rather than solely increased security.

It is likely that characteristics such as diagnosis and age interact with person and ward-specific factors. These person- and ward-specific factors have been identified as including illness acuity; boredom or lack of activities; conflict with staff and patients; safety concerns; the symbolic importance of home (particularly for ATSI patients); and issues of disempowerment, self-determination and resistance (Bowers *et al.* 1999b; Bowers *et al.* 2000; Bowers *et al.* 2003, Meehan *et al.* 1999; Muir-Cochrane *et al.* 2013; Nurjannah *et al.* 2009; O'Driscoll & Walmlsey 2010). While reasons for absconding may be best understood through debriefing once it has occurred, assessment of these factors may usefully inform nurses' approaches to patient care.

### Limitations

Retrospective data may be prone to underreporting, and collection methods may have changed over the time period (Shah & Ganesvaran 1997). Stricter reporting requirements and procedures followed when an involuntary-hospitalized patient is missing would reduce this potential issue (Bowers *et al.* 1998). Unfortunately, voluntary patients leaving the ward are not recorded in a similar way since they are able to leave the hospital, meaning that the full extent of the problem of patients leaving against medical advice and associated issues for the ward/organization (e.g. paperwork, contacting relatives) is unable to be determined. Another limitation was the unavailability of data on other potential risk and protective factors, including symptomatology, additional diagnoses, treatment response, and social/family support (see Doyle & Dolan 2002). Finally, data on how patients returned to the hospital and any harm to the patient or others during or subsequent to absconding was not provided. Australian studies in both unlocked wards (Meehan *et al.* 1999) and high security inpatient services (Scott *et al.* 2014) have found that patients who abscond return to hospital a number of ways, including by themselves, assisted by family and friends, and through police involvement. These studies and

others (e.g. Bowers *et al.* 1999a) reported that while a small number of patients caused harm to others or themselves, serious incidents did occur such as self-harm and attempted suicide.

#### Recommendations and conclusions

This study provides a comprehensive Australian picture of absconding. That absconding remains an issue in acute mental health nursing care requires a number of approaches. Nurses have a key role to play in preventing absconding through developing an understanding of the patient's hospitalization experience. Nursing interventions with core elements involving attention to both population (e.g. risk assessment based on research) and person-specific (discussion of concerns, careful breaking of bad news, and multidisciplinary review of repeat absconding patients) factors have led to absconding reductions in wards with similar rates to those presented here (Bowers *et al.* 2005). Such interventions, along with the construction of specific absconding risk measures, would seem promising (Hearn *et al.* 2012) and is a logical next step. Consideration of the problem of absconding through studies documenting prevalence and associated characteristics, as well as analysis of individual reasons and precipitating factors, allows a complex consideration of these breaks in inpatient hospitalization to inform nursing management plans.

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Table 1. Comparison of absconding and non-absconding patients

	Absconding	Non-absconding	Total
Sex ( <i>N</i> )			
Male	204	1270	1474
Female	67	643	710
Age ( <i>M</i> ( <i>SD</i> ))	35.01 (11.25)	37.66 (11.82)	-
Length of stay ( <i>N</i> )			
<= 22 days	95	1016	1111
> 22 days	176	897	1073
Diagnosis ( <i>N</i> )			
Schizophrenia, schizotypal and delusional disorders	214	1216	1430
Mood (affective disorders)	40	431	471
Neurotic, stress-related and somatoform disorders	4	125	129
Mental and behavioural disorders due to psychoactive substance use	11	96	107
Other	2	45	47
Country of birth			
Australia	203	1451	1654
Overseas	33	186	219
Unknown	35	276	311
Ethnicity			
ATSI	31	140	171
Asian	4	22	26
Caucasian	187	1360	1547
Other	4	33	37
Unknown	45	358	403

Table 2 Binary logistic regression for the prediction of absconding

	B (SE)	Wald's $\chi^2$	Odds ratio	95% CI for Odds ratio	
				Lower	Upper
Constant	-1.12 (.27)				
Sex	.32 (.15)	4.23*	1.37	1.02	1.86
Age	-.02 (.01)	8.08**	.98	.97	1.00
Length of stay	-.63 (.14)	19.99***	.53	.40	.70
Mood [affective disorders]	-.46 (.19)	6.27*	.63	.44	.90
Neurotic, stress-related and somatoform disorders	-1.39 (.52)	7.16**	.25	.09	.69
Mental and behavioural disorders due to psychoactive substance use	-.24 (.34)	.50	.79	.41	1.52
Other	-1.12 (.73)	2.34	.33	.08	1.37

Note: Hosmer & Lemeshow  $\chi^2(8) = 2.96, p > .05$ .  $R^2 = .03$  (Cox & Snell), .06 (Nagelkerke). Model  $\chi^2(7) = 69.17, p < .001$

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

Reference categories: for sex = female; principal condition = Schizophrenia, schizotypal and delusional disorders; length of stay = >22 days.

Table 3. Length of stay in hospital and hospitalization order of patients for first/only absconding incident

Period of treatment	<i>N (%)</i>
Length of stay in hospital	
Within 3 days	22 (14.38)
Within 7 days	54 (35.29)
Within 21 days	108 (70.59)
Length of stay on absconding ward	
Within 3 days	39 (25.49)
Within 7 days	71 (46.41)
Within 21 days	122 (79.74)
Hospitalization order	
3 day involuntary hospitalization order	38 (14.02)
First 21 day involuntary hospitalization order	163 (60.15)
Second 21 day involuntary hospitalization order	30 (11.07)
Continued involuntary hospitalization order	32 (11.81)
Forensic patient order	1 (0.37)
Missing	7 (2.58)
<i>Total</i>	271 (100)

Table 4. Duration of absconding incidents in approximate quarters

Absconding duration hours	<i>N</i> (%)
<8	97 (24.31)
8-<19	100 (25.06)
19-<49	100 (25.06)
≥49	100 (25.06)
Missing	2 (0.50)
Total	399 (100)