Leaving Against Medical Advice: Characteristics Associated With Self-Discharge

Executive Summary

Each year, thousands of patients leave Canadian acute care hospitals earlier than their care team recommends. Research shows that such patients are at an increased risk of adverse health outcomes with respect to both morbidity and mortality.\(^1^-^4\) They are also more likely to return to hospital, often for the same or a related condition.\(^1^-^2,^4\)

Using hospital data from the Canadian Institute for Health Information (CIHI) to describe the magnitude of the issue in Canadian acute care and emergency department (ED) settings, this study provides a profile of common characteristics associated with patients who leave against medical advice. It also quantifies the impact of leaving against medical advice on the health care system and on patient outcomes in terms of admission and readmission rates.

The study’s main findings are the following:

- **In 2011–2012, more than 25,000 acute hospital admissions ended with patients leaving against medical advice.**

  In 2011–2012, a total of 25,137 admissions (or 1.3% of all admissions) to acute inpatient care across Canada—excluding Quebec—and nearly 60,000 visits (or close to 1% of all visits) to EDs (in Alberta and Ontario only) ended with patients leaving against medical advice. These rates are comparable to those found in other countries, and the acute inpatient care rate has been stable since 2007–2008.
• **Patients who leave against medical advice have common characteristics.**

  Compared with patients with routine discharges, those who left against medical advice were more likely to
  – Be younger males;
  – Have histories of leaving against medical advice;
  – Be diagnosed with mental health or substance use disorder problems;
  – Leave hospital between evening and early morning hours (7 p.m. to 7 a.m.); and
  – Live in lower-income neighbourhoods.

• **Leaving against medical advice has a significant impact on the health system and on patient outcomes.**

  Patients who left acute inpatient care against medical advice were more than twice as likely to be readmitted within a month (24% versus 9%) and more than three times as likely to visit the ED within a week (35% versus 11%), compared with those with routine discharges. They were also high users of hospital care overall, with an average of 2.3 inpatient admissions per year (versus 1.3 for other patients). In addition, nearly 13% of the patients who left acute inpatient care against medical advice also left the ED against medical advice.

Understanding more about patients who leave against medical advice can inform solutions to minimize the negative effects of these discharges. Some of the solutions may be related to improving continuity of care and access to community-based services. Other opportunities likely lie in taking a more patient-centred approach that includes both formal and informal care networks. Strategies aimed at decreasing the number of patients who leave against medical advice and reducing the risks and poor outcomes for those who do may be needed.
Leaving Against Medical Advice
Characteristics Associated With Self-Discharge

Each year, thousands of patients (more than 1%) leave Canadian acute care hospitals earlier than their physician and care team recommend. Research shows they are at increased risk of adverse health outcomes and are more likely to return to the hospital, often for the same diagnosis.

Common Characteristics

- Younger Male
- Lower-Income Neighbourhood
- History of Psychoactive Substance Use

System Implications

1/3
Patients Visiting Emergency Department
Within One Week of Self-Discharge From Acute Inpatient Care

1/4
Patients Readmitted
Within One Month of Self-Discharge From Acute Inpatient Care

Sources
Discharge Abstract Database, National Ambulatory Care Reporting System and Ontario Mental Health Reporting System, 2011–2012, Canadian Institute for Health Information.
Introduction

Patients leave against medical advice when they depart from the hospital earlier than their care team recommends. Research shows that such patients are at an increased risk of adverse health outcomes ranging from medical complications to death.¹,²,⁴ Such outcomes have a significant impact both on the overall cost of their care and on their care experience and quality of life.³ Understanding the nature of admissions where patients leave against medical advice is important to finding appropriate solutions, targeted to minimize the resulting effects of these discharges.⁴

Previous research has found that as many as 2% of general hospital patients leave against medical advice.⁴ This may point to challenges with patients’ experiences and their perceptions of the quality of their care, which can be exacerbated by their cognitive and emotional state. For example, many of these patients have mental health or substance use problems. The desire to leave against medical advice may also indicate challenges in the relationships and communication between health care providers and patients.⁴–⁶

Additionally, evidence suggests that patients who leave against medical advice are more likely to return to hospital (often for the same diagnosis).¹,² These patients present an ethical dilemma for their health care providers, who must balance respect for patients’ wishes to leave with ensuring that they receive the most appropriate care.⁷ With the recent increased focus on continuity of care, experts have also expressed concern about the professional—and in some cases legal—responsibility that may arise from patients leaving against medical advice.⁷,⁸

Much of the previous research on patients who leave against medical advice has focused on specific medical conditions (such as asthma, pneumonia and substance abuse).⁹–¹¹ Other studies were carried out for a given hospital or a defined area within a hospital (for example, an ED, psychiatric ward or pediatric unit).¹²–¹⁴ Only a few studies have examined the issue in Canada, and none to date have included comprehensive Canadian data.

Given the lack of comprehensive Canadian information, the current study uses CIHI’s administrative data to examine the extent of discharges against medical advice for both inpatient and ED settings. The study includes adults who were admitted to an acute care hospital bed (excluding Quebec) or who visited a hospital ED (Alberta and Ontario only) in 2011–2012. It focuses on common characteristics identified in previous research at the patient, hospital and community levels to understand whether they hold true in the Canadian context.

Although a search for specific strategies used to identify patients at higher risk of leaving against medical advice and/or to reduce the number of such discharges revealed that more work is needed in this area, the current study’s findings suggest a few areas where efforts could focus. These include improving patients’ continuity of care and access to community-based services. They also include adapting care and care settings to better meet patients’ individual needs by shifting toward a more patient-centred approach.
The Study Population

Acute Inpatient Care

All adult (age 18 and older) records for 2011–2012 were extracted from CIHI’s Discharge Abstract Database (DAD) and Ontario Mental Health Reporting System (OMHRS) to identify discharges against medical advice from acute inpatient care, excluding stand-alone psychiatric facilities.

Records from the DAD were identified as **Discharge Disposition = 06**: sign-out (patient left against medical advice) and absent without official leave (AWOL).

Records from OMHRS were identified as follows:
- **Discharge Reason = 5**: person was discharged due to being away without official leave
- **Discharge Reason = 7**: person was discharged against medical advice

Emergency Department

For the ED analyses, adult (age 18 and older) records for 2011–2012 from CIHI’s National Ambulatory Care Reporting System (NACRS) for Ontario and Alberta were selected to identify patients who left the ED against medical advice:
- **Visit Disposition = 04**: patient triaged, registered and assessed by a service provider (for example, physician) and left without treatment
- **Visit Disposition = 05**: patient triaged, registered and assessed by a service provider and treatment initiated; left against medical advice (LAMA) before treatment completed

Data from the DAD and OMHRS was combined for the study to profile acute inpatient care. Unless otherwise stated, the unit of analysis was the hospital discharge or ED visit, not the patient. This means that a person who was admitted to the hospital multiple times in one year was counted each time as a separate discharge from the hospital. The study used the most responsible diagnosis as the reason for admission or visit. Patient demographics and previous reasons for admissions or visits were examined. For previous admissions or visits, data from 2009–2010 to 2010–2011 was used. All-cause readmissions to acute inpatient care or returns to the ED (where applicable) were calculated by building episodes of care. Additional details on cohort selection and study methodology are available upon request.

Study Limitations

- Quebec elected to not participate in this study. As such, data on patients treated in Quebec facilities was excluded from the study.
- Information on the reasons patients left hospital against medical advice was not available for this study.
- The DAD does not distinguish between patients who leave against medical advice and those who are absent without official leave. Some experts have suggested that there are differences between these two groups. Leaving against medical advice typically involves official documentation that the patient either approves of or consents to, whereas being away or absent without official leave does not. As such, caution should be used in generalizing the findings from this study.

How Common Is Leaving Against Medical Advice?

The proportion of patients who leave hospital against medical advice varies internationally. American studies have found rates between 1% and 2%, and some European studies have reported rates as low as 0.3% and 0.4%. These estimates likely reflect many different factors, including how the studies defined hospitals.

Variations in rates have also been reported when discharges from specific hospital settings, such as the ED, were considered. In the U.S., for instance, an estimated 3 in 100 (2.7%) patients left the ED against medical advice. A U.K. study found that less than 1 in 100 (0.7%) left the ED against medical advice, and 3% did not wait to be seen for medical assessment.
In Canada in 2011–2012, a total of 25,137 inpatients left acute care against medical advice. This represents 1.3% of all discharges from acute inpatient care across the country (excluding Quebec), a percentage that has remained stable since 2007–2008. As well in 2011–2012, close to 200,000 visits (or 3.2% of all visits) to EDs in Ontario and Alberta (where comprehensive ED data was available) ended when patients left without being triaged or medically assessed. An additional 58,756 ED visits (or 1% of all ED visits) ended with patients leaving against medical advice. This study focuses on those who left inpatient care and the ED against medical advice, not those patients who left the ED without triage or medical assessment.

**Common Characteristics of Patients Who Self-Discharge**

Previous research has identified a wide variety of reasons patients leave against medical advice, from long ED wait times and perceived overcrowding, to family- or employment-related commitments or financial considerations, to simply feeling better. Research has also identified a number of factors at the patient, hospital and community levels that are common among these patients.\(^{17-20}\)

In line with previous research, the current study also found many shared characteristics among patients who left against medical advice, making them a unique population. When compared to patients with routine discharges, patients who left against medical advice were typically younger males, and many had histories of leaving against medical advice. Mental health or substance use problems were common diagnoses. Patients who left against medical advice were also more likely to leave hospital between evening and early morning hours and to live in low-income neighbourhoods.

In addition, these patients showed a pattern of service utilization that has a significant impact on the health care system and presents challenges for the continuity of their care, as they on average had considerably more admissions and more readmissions to acute inpatient care and more visits to the ED than those with routine discharges.

The following sections provide the detailed findings.

**Patient Characteristics**

Previous research has identified certain individual- or patient-level characteristics that differ consistently between patients who leave against medical advice and those who do not. Homelessness, younger age, male gender, history of leaving against medical advice, and mental health and/or substance abuse diagnoses have all been found to play a role.\(^{1,2,7}\) For example, even though they constitute a relatively small proportion of patients overall, homeless patients have been shown to be more likely to self-discharge.\(^{1,2}\) This may be due to their higher risks of mental health or substance use problems.\(^{21}\) In this study, patients were homeless in 3% of acute inpatient care discharges against medical advice, compared with 0.2% of routine discharges.

Detailed information related to the other patient-level factors is presented for both acute and ED care settings in Table 1. The findings for Canada are in line with the previous research.
Table 1: Profile of Discharges Against Medical Advice, 2011–2012

<table>
<thead>
<tr>
<th>Description</th>
<th>Acute Inpatient Care</th>
<th>Emergency Department</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Self-Discharges</td>
<td>Routine Discharges</td>
</tr>
<tr>
<td></td>
<td>(N = 25,137)</td>
<td>(N = 1,925,724)</td>
</tr>
<tr>
<td>Unique patients</td>
<td>21,773</td>
<td>1,407,664</td>
</tr>
<tr>
<td>Median age</td>
<td>46</td>
<td>59</td>
</tr>
<tr>
<td>Age group (%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18–24</td>
<td>11</td>
<td>6</td>
</tr>
<tr>
<td>25–44</td>
<td>36</td>
<td>26</td>
</tr>
<tr>
<td>45–64</td>
<td>36</td>
<td>27</td>
</tr>
<tr>
<td>65+</td>
<td>17</td>
<td>41</td>
</tr>
<tr>
<td>Male (%)</td>
<td>57</td>
<td>41</td>
</tr>
<tr>
<td>Homeless (%)</td>
<td>3</td>
<td>0.2</td>
</tr>
<tr>
<td>History of leaving against medical advice within two years of current discharge (%)</td>
<td>19</td>
<td>2</td>
</tr>
<tr>
<td>Mental illness or substance use disorder as MRDx (%)</td>
<td>27</td>
<td>6</td>
</tr>
<tr>
<td>Previous admission for substance use disorder within one year of current discharge (%)</td>
<td>7</td>
<td>1</td>
</tr>
</tbody>
</table>

Notes
MRDx: most responsible diagnosis.
Includes only acute care facilities. Excludes stand-alone psychiatric facilities. Based on discharges. As such, a patient who is admitted to the hospital multiple times in one year will be counted each time as a separate discharge from the hospital. The same patient may have both self-discharges and routine discharges. Percentages for age groups may not add to 100 due to rounding.

Sources

Patients’ Diagnoses and Clinical Conditions

Table 2 presents the top 10 diagnoses (representing almost 46% of the total) for inpatients who left acute inpatient care against medical advice in 2011–2012.

Taken together, mental illnesses or substance use disorders were the most responsible diagnoses for 27% of all inpatients who left against medical advice in 2011–2012. The most common of these diagnoses was mental and behavioural disorders due to psychoactive substance use. Relatedly, 1 in 10 (10.9%) of the total 23,832 discharges with mental and behavioural disorders due to psychoactive substance use diagnoses were against medical advice, a much higher rate even among the most commonly documented diagnoses. As such, psychoactive substance use may be particularly important in understanding this patient population. An in-focus section specific to mental health with additional information from OMHRS is provided on pages 16 and 17.
### Table 2: Top 10 Diagnoses Documented on Acute Inpatient Care Discharges Against Medical Advice, 2011–2012

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Number of Self-Discharges</th>
<th>Self-Discharge Rate (%)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental and behavioural disorders due to psychoactive substance use</td>
<td>2,587</td>
<td>10.9</td>
</tr>
<tr>
<td>Mood (affective) disorders</td>
<td>1,712</td>
<td>4.6</td>
</tr>
<tr>
<td>Schizophrenia, schizotypal and delusional disorders</td>
<td>1,335</td>
<td>5.0</td>
</tr>
<tr>
<td>Chronic lower respiratory diseases</td>
<td>918</td>
<td>1.6</td>
</tr>
<tr>
<td>Diabetes mellitus</td>
<td>909</td>
<td>3.3</td>
</tr>
<tr>
<td>Ischemic heart diseases</td>
<td>858</td>
<td>0.9</td>
</tr>
<tr>
<td>Symptoms and signs involving the digestive system and abdomen</td>
<td>815</td>
<td>3.1</td>
</tr>
<tr>
<td>Other forms of heart disease</td>
<td>797</td>
<td>0.9</td>
</tr>
<tr>
<td>Disorders of the gallbladder, biliary tract and pancreas</td>
<td>772</td>
<td>1.5</td>
</tr>
<tr>
<td>General symptoms and signs</td>
<td>729</td>
<td>2.0</td>
</tr>
<tr>
<td>All other conditions</td>
<td>13,705</td>
<td>0.9</td>
</tr>
</tbody>
</table>

**Notes**

* The percentage of self-discharges out of the total number of discharges with the diagnosis.
Includes only acute care facilities. Excludes stand-alone psychiatric facilities. Percentages may not add to 100 due to rounding.

**Sources**

Discharge Abstract Database and Ontario Mental Health Reporting System, 2011–2012, Canadian Institute for Health Information.

In addition to mental health or substance use disorder, diabetes and chronic lower respiratory diseases were two common diagnoses of note. Previous research has suggested that these are conditions for which hospitalizations may be avoided with effective symptom management in primary care and timely access to ambulatory care. However, experts have suggested that patients with existing chronic conditions may underestimate the severity of a given acute episode of a chronic illness, believing that their condition has been fully brought under control when in fact treatment is still required. This may contribute to the higher rate of readmissions this study found in this population—in line with previous research.

In addition to mental and behavioural disorders due to psychoactive substance use, the most common conditions documented as the reason for a visit to the ED among patients who left against medical advice were symptoms and signs of the circulatory, respiratory and digestive systems (see Figure 1). The most common reasons for ED visits were generally similar between those that ended against medical advice and those that did not.
Figure 1: Most Common Reasons for ED Visits That Ended Against Medical Advice, 2011–2012

Notes
Includes data from Alberta and Ontario only. Percentages may not add to 100 due to rounding.

Source

Hospital Characteristics

Hospital characteristics have also been identified in previous research as important to understanding discharges against medical advice. These include

- Length of hospital stay;
- Time of day of patient discharge;
- Hospital wait times; and
- Hospital type, size and location.

While this study identified little clear effect of hospital type, size or location, it did find differences related to patients’ length of stay (LOS) and discharge time. Smaller differences were found in the ED wait times that could be measured using CIHI’s data.

Because discharges against medical advice are by definition truncated, the finding that in 2011–2012 LOS was shorter for discharges against medical advice than for routine discharges was expected. Nearly half (44%) of acute inpatient care self-discharges had an LOS of less than one day, compared with only a quarter (23%) of routine discharges.

Time of day also mattered, with 27% of self-discharges occurring between 7 p.m. and 7 a.m., compared with just 7% of routine discharges (see Figure 2). Similarly, ED visits where patients left against medical advice were also more likely to end between 7 p.m. and 7 a.m. (53% versus 42%). The time of day when patients were more likely to leave against medical advice from this study could reflect the need to be out of hospital before the start of regular work or school hours.
Additionally, experts have suggested that for patients who visit the ED, wait times and perceived overcrowding are factors in decisions to leave without being seen or to leave against medical advice. However, analysis of two wait time measures using 2011–2012 data from Alberta and Ontario EDs did not show large differences between those who left against medical advice and those who did not.

Specifically, the current study found that the 58,756 ED visits that ended against medical advice had only a slightly longer median time to physician initial assessment (TPIA) than visits that did not end against medical advice (1.3 versus 1.2 hours). TPIA measures the time from patient registration or triage to the time a physician first assesses the patient. Similarly, the median time to disposition decision was longer: 2.9 hours compared with 2.6 hours for visits that did not end against medical advice. The time to disposition decision measures the time from patient registration or triage to the time the main service provider makes a decision about the patient’s care needs (that is, the decision to discharge or admit the patient).

Many factors contribute to length of time spent in the ED. These include the seriousness of a patient’s condition, time needed for patient monitoring, waiting for diagnostic or laboratory test results and waiting for specialist consultation, among others. It is possible that improved communication with patients to ensure that they understand these aspects of ED care could help reduce the likelihood of their leaving against medical advice.
Community Characteristics

The literature also suggests that there are differences in rates of discharge against medical advice related to community factors, including a patient’s place of residence (jurisdiction and rural or urban location) and neighbourhood income.\textsuperscript{20, 24} Although there was little difference between rural and urban settings for either acute care or ED patients, this study did find differences in the proportion of patients who left against medical advice across jurisdictions and income levels.

As shown in Figure 3, the proportion of acute inpatient care discharges against medical advice varied across provinces. British Columbia (1.6%) and Saskatchewan (1.6%) had the highest proportion, which was nearly twice that of Nova Scotia (0.9%) and Newfoundland and Labrador (0.9%). Such jurisdictional variations may reflect underlying differences in the socio-demographic characteristics and clinical conditions of the patients and/or differences in hospital characteristics, such as location and size.

Figure 3: Percentage of Discharges Against Medical Advice From Acute Inpatient Care, by Province, 2011–2012

Notes
Total excludes Quebec but includes the territories. Includes only acute care facilities. Excludes stand-alone psychiatric facilities. Based on patient’s province of residence.

Sources
Discharge Abstract Database and Ontario Mental Health Reporting System, 2011–2012, Canadian Institute for Health Information.

Overall, a higher proportion of discharges against medical advice were by patients from lower-income areas (see Figure 4). For example, patients from the lowest-income neighbourhoods accounted for 34% of acute inpatient care discharges against medical advice, compared with 22% of routine discharges. Findings were similar for the ED: patients who left the ED against medical advice were more likely to be from the lowest-income neighbourhoods (32% versus 24%).
Notes
Includes only acute care facilities. Excludes stand-alone psychiatric facilities.
Includes discharges with sufficient information for neighbourhood income level assignment only. Percentages may not add to 100 due to rounding.
Sources
Discharge Abstract Database and Ontario Mental Health Reporting System, 2011–2012, Canadian Institute for Health Information.

Impact on Patients and Health System Implications

One of the most commonly documented outcomes of discharges against medical advice is readmission to the hospital. Many studies have found that patients who leave against medical advice are more likely to be readmitted, often for the same or a related condition.¹, ², ⁹ These readmissions may be related to challenges with the quality or continuity of their care.¹, ²⁴ This study examined the effect of leaving acute inpatient care against medical advice on inpatient readmissions and returns to the ED.

The overall 30-day all-cause readmission rate after a self-discharge from acute inpatient care was more than twice the rate for routine discharges (see Figure 5). Similarly, the seven-day all-cause return to the ED rate following a self-discharge from acute inpatient care was more than triple the rate for routine discharges.
Research has also shown that patients who leave against medical advice are admitted to hospital more frequently than those with routine discharges.¹ ² Findings from both acute inpatient care and ED settings support this with Canadian data. In 2011–2012, those with at least one self-discharge had an overall average of 2.3 admissions, compared with 1.3 for patients without any self-discharges. Furthermore, the more discharges against medical advice patients had, the higher their overall number of admissions. For example, those with two or more discharges against medical advice had five admissions on average in one year.

Among the 21,773 unique patients who had acute inpatient care discharges against medical advice in 2011–2012, most (84%) had only one self-discharge and had no history of leaving against medical advice in the previous two years. However, those with a history of leaving against medical advice had a higher overall number of admissions, at 2.8 in 2011–2012. In that year, nearly 13% (1,612) of Alberta and Ontario patients who left acute inpatient care against medical advice also left the ED against medical advice.

Analysis of ED data similarly found higher visit rates on average among patients who left against medical advice (4.5 visits per patient) compared with those with routine discharges from the ED (1.8 visits per patient). Patients who left the ED against medical advice were far less likely to have only one ED visit in 2011–2012 than patients with routine discharges (29% versus 62%). They were also 1.5 times as likely to revisit an ED for any reason within seven days. Further, 62% of those who came back to an ED within seven days of leaving acute inpatient care against medical advice were admitted as inpatients from that ED visit.
The pattern of health care utilization common among patients who leave against medical advice is important
to the health care system overall. Acute care hospitals are the most expensive setting within the health system.
Frequent admissions and readmissions, as well as longer hospital stays overall, ultimately result in higher
costs of care.

Conclusion

In 2011–2012, a total of 1.3% (25,137) of all discharges from Canadian acute inpatient care hospitals
(excluding Quebec) and nearly 1% (58,756) of discharges from EDs in Alberta and Ontario were made
against medical advice. These rates are comparable with those found in other countries, and the acute
care rate has been stable since 2007–2008.

Previous research has found that patients who leave against medical advice are at increased risk of adverse
health outcomes with respect to both morbidity and mortality than those who do not.1–4 This study identified
some of the characteristics such patients share when compared to those with routine discharges. Specifically,
they are more likely to be younger and male and to have a history of leaving against medical advice. They are
also more likely to have mental health and psychoactive substance abuse diagnoses.

While the number of discharges (and associated characteristics of those who leave against medical advice)
by itself is substantial, the findings also highlight the important system-level impact these patients have.
Those who leave Canadian hospitals against medical advice show a pattern of health system use, with
higher admission and readmission rates; they are high users of the hospital sector (acute inpatient care and
ED settings) overall. This is the case regardless of the underlying conditions the patients have.

Gaining a better understanding of the needs of patients who leave against medical advice can inform targeted
solutions to help minimize the negative effects of these discharges. For example, the current study found that
patients were more likely to leave against medical advice between evening and early morning hours. Previous
research has identified that family, employment and financial commitments are among the common reasons
patients report leaving against medical advice.18, 25 The findings on time of discharge support this, as patients
may feel pressure to return home in time to relieve caregivers or make it to work on time. It is telling that
patients who leave against medical advice are also more likely to live in low-income neighbourhoods; they
likely have more restricted options for child care and less flexibility in their places of employment.

Strategies at both system and individual levels may be needed going forward to reduce the number of
discharges from Canadian hospitals that are made against medical advice. Some of the solutions may be
related to improving access to appropriate care in the appropriate setting. For example, improving patients’
continuity of care and access to community-based services may help reduce the rate of leaving against
medical advice among patients with diabetes and chronic lower respiratory disorders. While patients
may be feeling better or prefer to continue recuperating at home or in a different hospital, without clear
communication between care providers in different settings, important aspects of care may be missed
or miscommunicated.18 Experts believe that discharge planning with specific instructions and engaging
social services support before and after discharge can be beneficial.18, 23 Ensuring that the full course of
treatment is completed may also reduce these patients’ admission and readmission rates.

Another area for consideration in reducing discharges against medical advice is placing greater emphasis
on providing patient-centred care. Perceived overcrowding, long wait times and overall length of hospital stay
have all been found to contribute to patients leaving against medical advice.17, 19, 25 This can be compounded
when patients expect a shorter stay or feel dissatisfied with the care they are receiving. Ensuring that patients
are informed of the risks associated with early discharge, clearly communicating their expected course of care
and planning for individualized follow-up have all been found to help (see box on next page).
Taking a patient-centred approach that includes both formal and informal care networks outside of the traditional hospital setting may also help reduce the number of discharges against medical advice among those with mental health and substance use disorders. While in hospital, improving physician–patient communication, as well as involving other formal (such as social workers and nurses) and informal (such as family members) providers can help in understanding how patients make their decisions to self-discharge.\textsuperscript{23, 25} Information that more clearly represents a patient’s motivating behaviour will allow a physician to target counselling more appropriately, informing the patient’s choice or even negotiating a later discharge.\textsuperscript{4, 18, 25}

Despite these examples, a literature search revealed few proven and widely used strategies to reduce discharges against medical advice. It is hoped that this study will enable a better understanding of the magnitude of this issue in the Canadian health care system and aid in identifying the individuals who can be most helped through targeted interventions and innovative solutions.

### Preventing Self-Discharge

Many different approaches are in place to prevent self-discharges, ranging from addressing substance abuse to increasing family members’ involvement in care. Poor communication from health care providers and frustration over perceived lack of care are examples of common, preventable causes of self-discharge. One study reported a 32\% drop in discharges against medical advice from a private psychiatric hospital after a patient advocate position was implemented to orient new patients to the hospital and act as a staff–patient intermediary.\textsuperscript{26}

Another approach is to implement a specific protocol for patients at risk of leaving against medical advice. The list below summarizes some key considerations and points to important actions providers can take to try to prevent an early self-discharge:\textsuperscript{27}

1. **Assess the patient’s decision-making capacity.**
   - Document the capacity assessment in his or her chart.
   - Document the discussion with the patient regarding the severity of the illness and the potential consequences of leaving against medical advice.

2. **Ensure follow-up arrangements are in place.**
   - Discuss with the patient specific scenarios that should prompt an immediate return.
   - Arrange for telephone follow-up, if indicated.
   - Arrange for home care, if indicated.
   - Arrange for an outpatient follow-up appointment (preferably within the next seven days).
   - Provide prescriptions for any new medications (arrange for dispensing of medications to the patient, if possible).
   - Document the above in the patient’s chart.

3. **Communicate with the patient and his or her care network.**
   - Provide the patient with a brief written summary of his or her diagnoses, treatments, medications and follow-up plans.
   - Immediately inform the patient’s primary medical team of the discharge against medical advice and follow-up plan.
   - Communicate with the patient’s primary care provider (if different from the inpatient medical team) regarding the discharge against medical advice and follow-up plan.
   - With the patient’s consent, communicate with his or her next of kin regarding the discharge against medical advice and follow-up plan.

Adapted with permission from Hwang SW. Discharge against medical advice—the commentary. AHRQ WebM&M [serial online]. May 2005.
In Focus: The Role of Mental Health in Leaving Against Medical Advice

Previous research has shown that many patients who leave against medical advice suffer from mental illnesses and/or substance use problems, and it has underscored the additional challenges faced by both patients and care providers when such conditions play a role in discharge planning for patients.1, 7 These challenges include patients’ cognitive and emotional state, as well as their capacity to make decisions and understand the implications of a discharge against medical advice.4, 7, 25 The current study found that in 2011–2012, mental illness or substance use disorder was a documented diagnosis in close to half (45%) of all discharges against medical advice from acute inpatient care and was the most responsible diagnosis for more than one-quarter (27%) of these self-discharges. This section provides detailed information on discharges against medical advice for mental health patients and reinforces the unique challenges in preventing patients with mental illness from leaving against medical advice.

Acute Inpatient Care Discharges With Mental Disorder Diagnoses

In 2011–2012, there were 127,499 discharges from acute inpatient care with a recorded most responsible diagnosis of mental illness or substance use disorder in Canada (excluding Quebec). Of those, 6,896 (5%) were self-discharges. Mental health patients with self-discharges were more likely to be male (57% versus 50%) and were younger on average (age 40 versus 49) than those with routine discharges. Other factors that were more common among mental health patients who discharged against medical advice included being from a low-income neighbourhood (33% versus 28%), being homeless (6% versus 2%) and having a history of discharges against medical advice within the last two years (21% versus 6%).

The ranking and percentages of the top 5 specific mental health conditions for those who left against medical advice and those with routine discharges are shown in Figure 6. Diagnoses of substance-related disorders were more common (38% versus 18%) among self-discharges than routine discharges.

![Figure 6: Top Five Mental Health Categories Among Self-Discharges and Routine Discharges From Acute Inpatient Care, 2011–2012](chart)

**Notes**
Includes only acute care facilities. Excludes stand-alone psychiatric facilities. Based on most responsible or principal diagnosis only.

**Sources**
Discharge Abstract Database and Ontario Mental Health Reporting System, 2011–2012, Canadian Institute for Health Information.
In line with the overall study findings on patients who left against medical advice, mental health patients who self-discharged had a higher overall frequency of admissions than patients who did not. In 2011–2012, a total of 58% of patients who left against medical advice had two or more admissions and 20% had four or more. In comparison, only 37% of patients with routine discharges had two or more admissions and only 7% had four or more.

Similarly, the 30-day all-cause inpatient readmission rate for mental health patients who self-discharged was nearly double the rate of those who did not (27% versus 14%). As well, the seven-day all-cause return to the ED rate following a self-discharge was nearly triple the rate for routine discharges (32% versus 13%).

This study confirms the significance of self-discharge among the mental health population, in particular those affected by substance-related disorders. Experts have suggested that proactively addressing substance abuse issues early during the hospital admission can help prevent early discharges. Having access to this type of information in a patient’s history is critical to the timely evaluation and intervention needed to help.

**The Ontario Mental Health Reporting System**

CIHI’s OMHRS collects information about individuals admitted to designated adult mental health beds in Ontario. OMHRS incorporates the Resident Assessment Instrument–Mental Health (RAI-MH© version 2.0), a comprehensive, standardized instrument for evaluating the needs, strengths and preferences of adults who have been admitted to an inpatient mental health bed in a hospital. The wide range of additional data available through OMHRS allows for further exploration of factors that may be associated with a mental health patient leaving against medical advice.

In 2011–2012, a total of 6% of discharges (2,599 out of 42,317) from designated Ontario adult mental health beds in general hospitals were against medical advice. The OMHRS data allows for a distinction between true discharges against medical advice and those classified as away or absent without official leave (AWOL). Only about 12% of the 2,599 discharges against medical advice included in this study were AWOL discharges. Similar to the other findings from this study, patients who left against medical advice were on average younger (age 37 versus 42) and more likely to be male (55% versus 50%). They were also more likely to be in the lowest neighbourhood income quintile (33% versus 29%) or to be homeless (7% versus 3%). Patients who discharged against medical advice had a higher overall utilization of designated mental health beds in 2011–2012, with nearly half (48%) being admitted two or more times during the year, compared with one-fifth (21%) of those who did not.

Further investigation utilizing unique OMHRS data showed that patients who were discharged against medical advice, compared with those who were not, were more likely to have

- Never been married (63% versus 53%);
- Used a substance (inhalant, hallucinogen, cocaine and crack, stimulant, opiate or cannabis) in the past year (51% versus 30%);
- Had five or more drinks in a single sitting over the past 14 days (22% versus 15%);
- Been admitted as an inpatient for mental health care before the age of 25 (43% versus 35%);
- Committed a violent act toward another resulting in physical harm (24% versus 18%); and
- Had a control intervention (mechanical restraint, physical or manual restraint by staff, confinement to unit or room, etc.) used during the initial three days of their stay in a mental health bed (72% versus 67%).

These findings from OMHRS data support previous studies focused on mental health patients that found factors such as single marital status, substance use and aggressive and disruptive behaviour to be common predictors of discharges against medical advice. As well, previous studies have found that patients who leave against medical advice are more frequently hospitalized.

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Please note that the analyses and conclusions in the present document do not necessarily reflect those of the individuals or organizations mentioned above.

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