Emergency Department Boarding of Psychiatric Patients in Oregon

Report Briefing
Executive summary

Across the country, individuals with mental illness are ending up in emergency departments (EDs) and staying for prolonged periods because there are few options for help within their communities or beds within hospitals are full. In an attempt to understand the extent of the problem and find solutions in Oregon, the 2015 Oregon Legislature directed the Oregon Health Authority (OHA) to conduct a study on the boarding of patients with mental illness in hospital emergency departments while they wait for a bed in an appropriate setting.

This study includes an analysis of the magnitude of the problem, the factors contributing to the problem and proposals for potential solutions. In fall 2015, OHA contracted with Oregon State University’s College of Public Health and Human Services (OSU) to conduct the study, which was completed in October 2016. This document summarizes the findings in the OSU “ED Boarding of Psychiatric Patients in Oregon” report, identifies areas for further investigation and describes strategies that OHA is implementing and planning to implement in response to the study.
Summary of findings

- The report highlights that Oregon's incidence of psychiatric boarding are similar to other states across the nation.

- Individuals with severe psychiatric disorders that visited an ED were boarded at a higher rate than individuals that visited for non-severe psychiatric disorders.

- More study is needed to identify treatment and service patterns for individuals who experience boarding. This would examine factors that lead to psychiatric ED boarding and inform strategies to prevent ED visits.
Study recommendations

Based on their quantitative and qualitative analyses and available research, the study recommended the following:

• Quantify and regularly monitor the extent of boarding
• Expand community mental health services
• Improve processes to restore individuals unable to aid and assist in their own defense
• Improve psychiatric services for individuals in EDs
• Provide alternatives to inpatient care
• Improve transitions for patients in community acute care and Oregon State Hospital
• Provide supportive services such as supported employment and substance use disorder treatment
• Promote insurance and health services reimbursement changes to incentivize community services
• Increase the transparency of waitlists for inpatient and Oregon State Hospital beds
Next steps

Oregon has 14.6% of ED visits due to psychiatric reasons. Many of those seeking psychiatric services could be helped through a community mental health service or their primary care provider working with behavioral health specialists.

The OHA is working to address these issues and help modernize Oregon’s behavioral health system into one that helps patients navigate the health care system to get the care they need. Key OHA actions in process to address the themes included in this report include:

- Use PreManage data to monitor ED boarding (see page 11 for description)
- Expand Assertive Community Treatment programs (see page 11 for description)
- Create a management plan for ED readmissions of individuals with a serious and persistent mental illness (SPMI)
- Continue to use the OHA acute care coordinator to address complicated individual issues and acute care systemic issues
- Expand mobile crisis services
- Decrease the reliance on Oregon State Hospital for aid and assist restorations
- Support the development of community crisis services
- Invested $1 million in psychiatric emergency services
- Expand child and adolescent ED diversion pilots
- Ask the Oregon Association of Hospitals and Health Systems (OAHHS) to consider the development of a bed registry
Background of study

Definition of emergency department (ED) boarding

There currently is not a standard national definition of ED boarding. As a result, researchers found two viable definitions that allowed them to compare Oregon’s ED boarding rates to other states. The first definition described ED boarding as a stay in an ED for longer than six hours. This definition was used in a national survey of hospitals regarding ED boarding. The second definition defined ED boarding as a stay in an ED longer than 24 hours. This definition was used in a survey of hospitals in Arizona. While the six-hour definition could be considered too broad of a definition and the 24-hour definition too restrictive, both were used to evaluate the magnitude of the problem in Oregon.

Data sources

Three data sources were used to conduct the analysis. The Medicaid Management Information System (MMIS), Oregon Association of Hospitals and Health Systems (OAHHS) hospital ED discharge data set, and data from the Emergency Department Information Exchange (EDIE). Through an agreement with OAHHS, the data from the three data sets were matched and certain identifiers were removed. The three data sets provided a more complete picture of the identified cases of boarding. This matching identified 690,245 ED visits from Oct. 1, 2014, through Sept. 30, 2015, identified in at least two of the data sets. This compares to approximately 1.4 million total ED visits in 2015. The researchers compared the characteristics of the matched group with the larger group and found that the two groups were comparable, although the matched group has a higher rate of psychiatric ED visits.

Incidence of boarding

The incidence of psychiatric ED boarding was calculated by examining the number of psychiatric ED visits and then determining which of those visits were incidence of psychiatric boarding. The following table summarizes the findings:
The incidence of psychiatric ED boarding in Oregon was then compared to data from other states. The incidence of psychiatric boarding using either definition is lower in Oregon compared with available data from other states. However, the national rate and Arizona’s rate included substance use disorder ED visits whereas Oregon did not. Since Oregon does not include visits for substance use, Oregon would be expected to have a lower count. The researchers concluded that Oregon’s rate is comparable to other states.

<table>
<thead>
<tr>
<th>Boarding definition</th>
<th>24-hour definition</th>
<th>6-hour definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Oregon ED visits (October 2014 – September 2015)</td>
<td>690,245</td>
<td>690,245</td>
</tr>
<tr>
<td>Psychiatric visits</td>
<td>100,809</td>
<td>14.6% of total ED visits</td>
</tr>
<tr>
<td>Psychiatric ED boarding</td>
<td>3,504</td>
<td>3.5% of psychiatric ED visits</td>
</tr>
</tbody>
</table>

To more fully understand the incidence of psychiatric ED boarding, the researchers identified psychiatric ED visits for a severe psychiatric disorder. Data indicate that, using the six-hour definition, 24% of individuals (3,753) going to an ED for a severe psychiatric disorder were boarded. Using the 24-hour definition, 9% of individuals (1,399) were boarded. For individuals going to an ED for a non-severe psychiatric disorder, 12.8% (six-hour definition) and 2.5% (24-hour definition) were boarded. In summary, individuals going to EDs for severe psychiatric disorders were more likely to be boarded than individuals visiting the ED for non-severe psychiatric disorders.
Length of boarding

The following graph from the study demonstrates the average boarding time. It shows the percentage of individuals visiting an ED for psychiatric purposes that remained in an ED for certain lengths of time between October 2014 and September 2015. There is a steady decline in the percentage of individuals compared to the length of time in an ED, although the percentage dropped more substantially between six and eight hours. This information will be used to identify a target for decreasing ED psychiatric boarding.

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</thead>
<tbody>
<tr>
<td>Total psychiatric ED visits</td>
<td>100,809</td>
<td>100,809</td>
</tr>
<tr>
<td>Severe psychiatric visits</td>
<td>15,394</td>
<td>15,394</td>
</tr>
<tr>
<td>15.4% of total psychiatric ED visits</td>
<td>15,394</td>
<td>24% of severe psychiatric ED visits</td>
</tr>
<tr>
<td>Severe psychiatric ED boarding</td>
<td>1,399</td>
<td>3,753</td>
</tr>
<tr>
<td>9% of severe psychiatric ED visits</td>
<td>3,753</td>
<td>24% of severe psychiatric ED visits</td>
</tr>
</tbody>
</table>

Figure 1

Percentage of psychiatric ED visits by time in ED, October 2014 through September 2015
Data summary

A summary of the matched data set for the period between October 2014 and September 2015 can be summed up as follows:

- The incidence of boarding in Oregon is comparable to a national study and a study conducted in Arizona. However, the number of individuals in the sample affected by psychiatric boarding is between 3,504 and 14,676, depending on the definition used. Oregon can do better by these individuals.

- Individuals with severe psychiatric disorders that visited an ED were boarded at a rate of 9% or 24%, depending on the ED boarding definition used. These rates are higher than the rates for individuals visiting for a non-severe psychiatric disorder.

Areas of further study

While this study was extensive, OHA will consider further analysis of the data used in the study and other available data to identify treatment and service patterns for individuals who experience boarding. This will help OHA develop even more targeted strategies to decrease the incidence of boarding for individuals with a mental illness. OHA will complete an analysis of this in 2017 and use this information to modify existing strategies and develop new ones.
OHA Director Lynne Saxton convened the Behavioral Health Collaborative in July 2016. Its goal is to chart a course for excellence and sustainability in behavioral health services for Oregonians across systems. With an emphasis on cross-system coordination and collaboration, the collaborative will recommend policy definitions, financing and infrastructure needs. The goal is to modernize and integrate Oregon’s health system with individuals and families at the center and quality client level outcomes as the goal. Emphasizing prevention, improved access and community-based solutions will allow individuals to receive timely and appropriate services. This planning will support the following actions that OHA is taking to address the issue of psychiatric boarding:

1. **Use new data sets to monitor ED boarding.**

   OHA is accessing ED boarding data located in the OAHHS ED discharge data set and the Emergency Department Information Exchange (EDIE) system. OHA will have access to data in EDIE associated with OHP members. OHA is involved in discussions with the Oregon Association of Hospitals and Health Systems (OAHHS) regarding the sharing of ED data in OAHHS’ discharge data system. OHA will develop regular reports on the incidence of ED boarding. An agreement on access to relevant data will be completed by July 31, 2017. This data will be regularly reported starting in October 2017.

2. **Expand ACT programs.**

   Assertive Community Treatment is an evidence-based program that reduces hospitalization for individuals with a serious mental illness. OHA, with investments from the Legislature, has expanded the number of ACT teams to 23 programs in 21 counties. OHA is currently reviewing 14 applications to develop additional ACT capacity.

   Most Oregon hospitals and many providers are enrolled in a health information exchange. Two of these exchanges are EDIE and PreManage. OHA is providing ACT providers with a subscription to PreManage that will notify ACT teams when an ACT consumer enters an ED. This will enable ACT teams and other behavioral health users to enter care guidelines and upload crisis plans to be available to EDs through EDIE. The EDIE utility is convening a behavioral health learning collaborative to help ACT teams and other behavioral health PreManage users effectively use this tool to coordinate and communicate with EDs.
3. Management plan for ED readmissions of individuals with a SPMI

The Oregon Performance Plan was developed through lengthy negotiations with the U.S. Department of Justice to improve health outcomes for Oregonians with a serious and persistent mental illness (SPMI). As required in the Oregon Performance Plan, OHA is developing a management strategy to quickly identify individuals with a SPMI. The plan will identify any individual with a SPMI who has had two or more readmissions in six months. Once identified, OHA will partner with community mental health programs and coordinated care organizations to develop a plan that provides resources to individuals in the community. This process will be in place by April 2017.

4. OHA acute care coordinator

In May 2016 OHA hired an acute care coordinator to work with hospitals and community providers to facilitate the discharge of patients with challenging needs. This will help acute care patients with significant discharge to lower levels of care. This will increase availability of acute care beds for individuals in the ED.

5. Expand mobile crisis services.

The Legislature provided funds to expand mobile crisis services in 2013 and 2015. The number of quarterly mobile crisis contacts has nearly doubled in two years. A survey of mobile crisis services was completed in November 2016 to assess the availability of these services across the state. A data analysis and recommendations will be completed February 2017. Mobile crisis services will improve the opportunity to arrange necessary services and supports in the community and avoid unnecessary ED visits.

In addition, OHA is exploring the value of a pilot for using EDIE in the field with mobile crisis services. EDIE is a valuable tool for an ED to coordinate care and provide the right service at the right time. This tool could help clinicians implement plans located in EDIE to avert hospitalizations. OHA will partner with stakeholders to further define an EDIE pilot.

6. Decrease the reliance on the state hospital for aid and assist restorations.

The report identified the increased use of the state hospital for individuals unable to aid and assist due to a mental illness as a contributing factor to ED boarding. The number of these individuals at the state hospital has increased 33% from 168 in July 2015 to 223 in January 2017. Patients at the state hospital for aid and assist take up beds that could be used for civil commitment patients. This results in more civilly committed individuals waiting in acute care for a state hospital bed to open up. This decreases the access to acute care beds, which causes a backup in the ED.
Multiple strategies have tried to reverse this trend with only minimal success. OHA is revitalizing planning and actions and will have a strategic action plan in place by February 2017.

7. **OHA supports the development of community crisis services.**

OHA has developed a fee-for-service rate and standards for psychiatric services such as those provided by the Unity Center for Behavioral Health. Other hospitals are also considering the development of psychiatric emergency services. Psychiatric emergency services provide active psychiatric treatment in an emergency hospital setting to divert individuals from acute care and provide improved linkage to community services.

OHA, with funding from the Legislature, is providing funding to develop crisis facilities. Jackson and Multnomah counties developed programs with the support of these funds. There is a current solicitation to award additional funds for crisis facilities.

8. **Investment in psychiatric emergency services**

Psychiatric emergency services is a model of services to provide specific psychiatric care to individuals and divert individuals from hospital care to community care. Oregon has invested $1 million to fund a new psychiatric emergency services code for individuals on fee-for-service Medicaid. With the funding for this service, a partnership between four health care systems in Portland formed to develop the Unity Center for Behavioral Health. This program opened January 2017. Other hospitals are considering developing this capability.

9. **Expand child and adolescent ED diversion pilots.**

In October 2015, OHA funded four child and adolescent ED diversion pilots to address the issue of psychiatric boarding of this population. The pilots focused on providing intensive transition services for youth and their families to resolve crisis and avoid unnecessary hospitalizations. This year four more pilot locations will be instituted and Oregon Health & Science University will develop a quality improvement process to standardize the model.

10. **OHA will approach OAHHS to consider the development of a bed registry.**

Currently ED staff have to call multiple hospitals to identify a vacancy that might be appropriate for a particular patient. A bed registry could help to quickly identify openings and facilitate a quicker transfer to an available bed. By March 2017, OHA and OAHHS will discuss the viability of developing a bed registry.
Conclusion

The Oregon State University study has quantified the extent of psychiatric ED boarding in Oregon. While the rates of boarding are comparable to national and Arizona rates, the study shows that Oregon needs to continue to address these issues and help individuals. OHA is taking actions that will have a positive impact on this issue by complying with the U.S. Department of Justice Oregon Performance Plan and other initiatives outlined herein. By October 2017, OHA will partner with OAHHS to identify a reasonable target for reducing ED boarding.